# \&2018 12019 college catalog 




66 I learned way more than I expected. You just have to have open ears and know what to listen to and be honest at your craft, and you'll succeed.

- Karlos Russell, Automotive Collision Student



## Redefine Education at Clover Park



COLLEGE CATALOG

At Clover Park Technical College, we have a long tradition of educating tomorrow's workforce. In fact, more than 75 years, we've focused on providing a practical, relevant education to build the skills necessary for students to succeed in their chosen career field. Our hands-on learning approach effectively simulates a real-world working environment so students enter the workforce ready to apply what they learned in their program, and our shift to the Guided Pathways approach to education provides more support to students along the way. With more than 40 programs in seven different school groups, we offer the skills to achieve a career that's both fulfilling and in demand.

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## Welcome to

## Clover Park Technical College

Dear Student, Welcome to Clover Park Technical College!

Whether you're entering college for the first time or returning to college to prepare yourself for a career change, we're excited to have you here and want you to know that CPTC is the place for you. As a college committed to "educating tomorrow's workforce," our program areas focus on the specific training and handson experience you'll need to embark on a challenging and rewarding career.

Were here to support you every step of the way. Our Foundation offers quarterly scholarships for financial support, our Entry Services team provides assistance through the enrollment process, and our counselors and advisers are eager to help keep you on track and see you succeed. The faculty members in our more than 40 programs are all experts in their fields who maintain strong bonds with business and industry and who are always looking at ways to improve their students' experience and training to keep pace with current trends. As a result, CPTC graduates are regarded highly by
 employers for their relevant knowledge and technical skills.

We take a great deal of pride in our long history of providing excellent, affordable education to the Lakewood and South Hill communities. As we celebrated our 75th anniversary last year, we continue to look ahead to the future to ensure our students the best possible experience and training. Were in the process of building a state-of-the-art Center for Advanced Manufacturing Technology and are transitioning to the Guided Pathways approach to education, which will help simplify and streamline the process for students to pursue a degree or certificate.

CPTC also has much to offer students beyond the classroom, from the Associated Student Government to campus organizations, professional associations, community work-based learning, and more. I encourage you to take advantage of these opportunities to enrich your education and development.

Don't wait! Get started today working toward your educational goals by contacting one of our friendly and helpful Entry Services staff members. They will answer your questions and help you through our enrollment and entry process. We are excited about our future and honored that you have chosen to be a part of it.

-Dr. Joyce Loveday, President

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## Who, Where, and What We Are

As a vital member of Washington's higher education system, Clover Park Technical College offers more than 40 programs grouped into seven schools: Advanced Manufacturing; Aerospace and Aviation; Automotive and Trades; Business and Personal Services; Health and Human Development; Nursing; and Science, Technology, Engineering, and Design. Clover Park Technical College has two campuses: our main campus in Lakewood and our South Hill Campus just south of Puyallup (adjacent to Thun Field), where our aviation programs are located.

CPTC is here to help students redefine education to meet their needs. The college offers courses online and on campus for students getting ready for their first career, their next step within their career, or a new career. While the college has been part of the Pierce County community since the 1940s, its program and course offerings are consistently reevaluated to provide the most relevant and innovative training for indemand career areas.

## Our Vision, Themes, Mission, and Values

## VISION

Strengthening our community through responsive education and services

## CORE THEMES

Workforce Preparation
Student Success
Institutional Sustainability

## MISSION

Educating tomorrow's workforce.
VALUES
Equity
Access
Inclusion
Collaboration
Respect
Excellence
Innovation

## ACCREDITATION

Clover Park Technical College is accredited by the Northwest Commission on Colleges and Universities.

Accreditation of an institution of higher education by the Northwest Commission on Colleges and Universities indicates that it meets or exceeds criteria for the assessment of institutional quality evaluated through a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the Northwest Commission on Colleges and Universities is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.
Inquiries regarding an institution's accredited status by the Northwest Commission on Colleges and Universities should be directed to the administrative staff of the institution. Individuals may also contact:

Northwest Commission on Colleges and Universities 8060 165th Avenue N.E., Suite 100 Redmond, WA 98052 (425) 558-4224 www.nwccu.org

Accreditation by the Northwest Commission on Colleges and Universities refers to the institution as a whole. Therefore, statements like "fully accredited" or "this program is accredited by the Northwest Commission on Colleges and Universities" or "this degree is accredited by the Northwest Commission on Colleges and Universities" are incorrect and should not be used.
NWCCU is an independent, non-profit organization recognized by the U.S. Department of Education and the Council for Higher Education Accreditation. It is the regional authority on educational quality and institutional effectiveness of higher education institutions in the seven-state Northwest region of Alaska, Idaho, Montana, Nevada, Oregon, Utah, and Washington. It fulfills its mission by establishing accreditation criteria and evaluation procedures by which institutions are reviewed. Clover Park Technical College first received accreditation through NWCCU in December 1999.

## PROGRAM ACCREDITATIONS AND CERTIFICATIONS

Accreditation and certification has been granted to specific programs at Clover Park Technical College by:
AdvancedEd Accreditation Commission
American Dental Association
American Society of Health Systems Pharmacists
Commission on the Accreditation of Allied Health Education Programs
National Accrediting Agency for Clinical Laboratory Sciences

National Automotive Technicians Educational Foundation

## ADVISORY COMMITTEES

Each career program at CPTC is guided by an advisory committee composed of employers and employees in the field. These committees meet at least two times each year to provide recommendations about methods, procedures, equipment, and curriculum and to ensure that each program meets or exceeds the industry standards of that particular occupation.

## Board of Trustees

The Clover Park Technical College Board of Trustees is composed of five community college district residents who are appointed by the governor to a five-year term. The board sets policy for the institution and delegates administrative authority to the president of the college.
Wayne Withrow, Chair
Mark Martinez, Vice Chair
Bruce Lachney
Mary Moss
Lua Pritchard

## College Advisory Council

The College Advisory Council provides advice and approves the college's annual Worker Retraining Plan. It serves as a liaison between Clover Park Technical College and the business community, government, public agencies, organized labor, military installations, community-based organizations, and other educational institutions, advocating on behalf of the college. It also makes recommendations to the president to strengthen the college's effectiveness in providing quality educational opportunities and services to the community.

## Clover Park Technical College Foundation

The Clover Park Technical College Foundation is a 501(c) (3) non-profit organization dedicated to the needs of CPTC students and programs. Established in 1992, the Foundation is overseen by a volunteer board of up to 24 members. Board membership reflects the diversity of the community and the industries served by the college.

## CHANGING LIVES

The Foundation changes lives by:

- Raising funds for students, programs, equipment, technology, and capital projects.
- Introducing new friends and future supporters to the college.
- Helping students through difficult times, empowering them to stay in school with scholarships and emergency assistance funds.
- Supporting employee growth, development, and appreciation.
- Contributing to college-wide programs and initiatives.


## CPTC Foundation Board of Directors

The Clover Park Technical College Foundation Board of Directors is composed of local business and community leaders who volunteer their time and donate their talents and resources to raise friends and funds for the college. The funds raised through their efforts support the college and students through student scholarships and emergency grants, allow the college to acquire state-of-the-art equipment and technology, and offer faculty and staff professional development awards.

## OFFICERS

Melissa Missall, President
Matt Lane, Past President
Shelia Winston, Secretary
Mary Green, Treasurer
David Harkness, Director at Large
Kathryn Smith, Director at Large

## DIRECTORS

Laurie Banaszak
Dr. Kimberly Bell
Steve Brewer
Ty Cordova
Steven Crosby
Caroline Henry
Joe Lydic
Harley Moberg
Joyce Oubré
Danielle Perkins

## EX OFFICIO DIRECTORS

Dr. Tawny Dotson, Foundation Executive Director, CPTC Vice President for Strategic Development
Mary Moss, CPTC Trustee Liaison
Dr. Joyce Loveday, CPTC President
Larry Clark, CPTC Vice President for Finance and Administration


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## Getling Started at CPTC

## 1 CONNECT WITH AN ENTRY SPECIALIST

- All new students must meet with an Entry Specialist in the Welcome Center (Bldg. 17).
- Explore career pathways and college services and discuss entry requirements.


## APPLY FOR ADMISSION \& FINANCIAL AID

- Apply for admission online at www.cptc.edu/apply.
- Complete your Free Application for Federal Student Aid (FAFSA) online at fafsa.ed.gov (college code 015984).
- Check FAFSA status on the financial aid portal at www.cptc.edu/financial-aid/portal and submit all additional documents to the Financial Aid Office (Bldg. 17).
- Select a program, review education plan, and choose your classes.


# REGISTER FOR CLASSES, PAY TUITION, \& BUY BOOKS <br> - Register for classes online at www.cptc.edu/register. <br> - Pay tuition and fees, purchase your books, and get started! 

Clover Park Technical College is committed to providing equitable access to College events, programs, trainings and services to individuals with disabilities. If you need any disability related accommodation in order to access programs, trainings and/or services offered by CPTC, please contact the Disability Resources for Students (DRS) at disabilityresources@cptc.edu. Please be aware that some accommodations require several days to arrange and providing as much advance notice as possible of your need for accommodations will increase the probability that we will be able to provide the accommodation when needed.


\author{

- Bryan Som, Advanced Composites Student
}


## Our staff is here to help you succeed at Clover Park Technical College.

## ASSESSMENT

Students entering technical programs that have academic courses may be required to take the Accuplacer assessment or equivalent test. Assessment results are used to place students in the appropriate academic courses. The assessment test is untimed but generally takes approximately two hours to complete. There is no fee for the Accuplacer if the student is admitted to Clover Park Technical College; however, only the first two attempts are at no charge. For students not admitted to CPTC or students taking the Accuplacer for the third (or more) time, the non-refundable fee is $\$ 19$.

Assessment testing is not required prior to being admitted to the college unless the technical program selected requires that a minimum level score be obtained for admission. Do not delay. Allow ample time for assessment, educational planning and registration prior to the beginning of a quarter.
Assessment testing is available on a drop-in basis. No appointment is necessary. See Enrollment Services to obtain a student ID number. If necessary, pay the testing fee in the cashier's office and then present the receipt and picture ID to the Assessment Center staff. To see office/testing hours go to: www.cptc.edu/accuplacer.
If an assessment test has been taken within the past 24 months at another college or special agency, the test results can be evaluated in the Enrollment Services Office and posted to student record.

## COLLEGE ENTRY

Students are eligible for entry to full-time programs at Clover Park Technical College as follows:
In accordance with WAC 131-12-010, any applicant for admission to Clover Park Technical College shall be admitted when, as determined by the chief administrative office or his/ her designee, such applicant:

1. Is competent to profit from the curricular offerings of the college.
2. Is 18 years of age or older; or
3. Is a high school graduate (diploma or GED certificate); or
4. Has applied for admission under the provisions of a student enrollment options program, such as Running Start, Elective High School, or other local enrollment option program.
Some programs have additional entry requirements, including mandatory advising or additional fees. This information may be found in the program description section of the college catalog or on the program page of the CPTC website.

Clover Park Technical College entry applications are available online at www.cptc.edu/apply, through the Welcome Center in Building 17, the Advising \& Counseling Office in Building 17, or at a Program Information Session. Program Information Sessions occur every second and fourth Wednesday of each month when classes are in session.

Visit www.cptc.edu/info-sessions for details.

## EXCEPTIONS

Students age 16 and over who meet the provisions of "Title IIIAdult Education Programs" may enroll in certain adult basic education classes. Individuals admitted into such classes will be allowed to continue as long as they are able to demonstrate, through measurable academic progress, an ability to benefit.
Individuals who don't meet the eligibility criteria for entry may appeal for special admission on a course-by-course basis. Criteria for granting an appeal are competency at an appropriate academic level and/or artistic or technical skill level, as well as the ability to participate in an adult learning environment. The college does not desire to replace or duplicate the functions of the local public schools. Appeals may be filed with the vice president for instruction or designee.

## PAYING FOR COLLEGE/APPLYING FOR FINANCIAL AID

- Create a financial plan on how to pay for college, and apply early for possible financial aid, including scholarships, grants, and loans. See if you are eligible for additional funding on the Start Next Quarter website at www. startnextquarter.org.
- Submit a Free Application for Federal Student Aid (FAFSA) application at www.fafsa.ed.gov or a Washington Application for State Financial Aid (WASFA) application at www.readysetgrad.org/wasfa.
- If you apply for financial aid, you must complete all steps of the Financial Aid Application Process by posted deadlines at www.cptc.edu/financial-aid/steps.
- Financial aid information and deadlines are available on the Financial Aid page at www.cptc.edu/financial-aid.
- Opportunity Grant and Basic Food Employment and Training (BFET) funding information is available at www. cptc.edu/opportunity-grant or www.cptc.edu/bfet.
- Using veteran benefits? Visit our veterans page at www. cptc.edu/veterans.
GI Bill ${ }^{\circledR}$ is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at https://www.benefits.va.gov/ gibill.
- Explore WorkFirst and Worker Retraining Funding on our Workforce Development page at www.cptc.edu/workforcedevelopment.
- Receive assistance with FAFSA, WASFA, loan applications and document fee by contacting the EOC Advisor at eocadvisor@cptc.edu.


## AGENCY-FUNDED STUDENTS

Persons who qualify for assistance from the Division of Vocational Rehabilitation of the State of Washington or neighboring states, the Department of Labor and Industries, the Washington State Department of Social and Health Services, WorkSource, or the Employment Security Department may attend programs at Clover Park Technical College. Enrollment qualifications for training will be determined by the college. Agency-funded students must have their contracts approved and mailed or faxed to

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the funding coordinator at CPTC before starting class. If an agency is paying the assessment fee, the student should take their contract to the funding coordinator prior to testing. The funding coordinator is available to answer your questions 7:30 a.m.-4:30 p.m., Monday-Friday, in Bldg. 17, Rm. 103E, or can be reached at 253-589-5663 or agencyfunding@cptc.edu.

## TITLE IV STUDENT COMPLAINT PROCESS

The Higher Education Act (HEA) prohibits an institution of higher education from engaging in a "substantial misrepresentation of the nature of its educational program, its financial charges, or the employability of its graduates." 20 U.S.C. §1094(c)(3)(A). Further, each state must have "a process to review and appropriately act on complaints concerning the institution including enforcing applicable State laws." 34 C.F.R. § 600.9. The Washington State Board for Community and Technical Colleges (SBCTC) maintains a process to investigate complaints of this nature brought by community and technical college students in the state of Washington. For more information, contact the SBCTC Student Services Office at 360-704-4315.

## CONTINUING EDUCATION

The Workforce Development \& Continuing Education Department at Clover Park Technical College offers seminars, workshops and credit and non-credit courses. We invite Pierce County residents of all ages to explore opportunities for lifelong learning for personal, professional, and community development. Seminars, workshops, and courses are offered in face-to-face, fully-online, and hybrid modes. For a copy of the department's most current offerings and possible funding sources, please call 253-589-5575 or visit the Continuing Education page at www.cptc.edu/workforce-development/ continuing-ed. The office is open 8 a.m. -5 p.m., MondayFriday, in Bldg. 19, Rm. 109, on the Lakewood Campus.

## DUAL CREDIT FOR HIGH SCHOOL STUDENTS

Dual credit may be accepted for high school learning experiences where formal articulation agreements are in place. Contact Enrollment Services at 253-589-6003 or Pierce County Careers Connection at 253-583-8803. Courses that have Dual Credit Articulation agreements with the Pierce County Careers Connection are marked with an asterisk (*) in both the program and course description.

## NORTHWEST CAREER \& TECHNICAL HIGH SCHOOL

## 253-589-5770

Northwest Career \& Technical High School is a school of choice on the Clover Park Technical College campus that provides a rigorous educational program combined with career guidance and high-quality career and technical education. Students:

- Earn a high school diploma from Northwest Career \& Technical High School.
- Earn a certificate of initial competencies in their chosen career path.
- Are prepared to articulate into postsecondary education
and training opportunities.
- Can earn a certificate or a degree if they enroll in the Elective High School option.


## ADULT HIGH SCHOOL COMPLETION 253-589-5770

Adult High School classes are offered for persons 20 years of age or older who are not enrolled in a regular high school and want to earn an Adult High School diploma. These classes are academic in nature and meet Washington State requirements for High School Completion. Students enrolled in a regular high school may take Adult High School classes with the permission of their high school counselor; however, they must pay all class costs, including full tuition. More information is available from Northwest Career \& Technical High School at 253-589-5770 or in Building 14.

## RUNNING START

## 253-589-5701

CPTC works closely with area high school counselors to plan appropriate educational experiences. Running Start is a statewide community and technical college program that was developed for academically qualified high school juniors and seniors who wish to enroll in courses that fulfill high school graduation requirements. If you have chosen a career direction and can benefit from college instruction, Running Start at Clover Park Technical College may be right for you.
Please note that Running Start students are held to the same expectations as all other college students. Attendance, participation, behaviors, and quality of work are to meet college standards.
The Running Start program is designed for high school students who are ready for college-level work, want to get a start on their career training, and want to receive both college and high school credit while attending high school.
Qualified students may enroll in programs, tuition-free, up to a maximum of 15 credits per quarter. This is determined by the combined high school and college enrollment on their Running Start Enrollment Verification Form obtained from their high school counselor.
Additionally, Running Start students will pay for all fees associated with their college enrollment including laboratory fees, security \& safety fees, books, tools, consumables, transportation, etc. Running Start students may obtain a waiver for additional credits; please see the Running Start adviser for more information.
High school students who attend during the summer quarter will pay adult tuition and fees. Interested students must meet with the Running Start adviser to receive appropriate paperwork prior to enrolling.
If you meet the following criteria, you may be eligible for Running Start:

- Be between the ages of 16 and 21 .
- Be identified as a high school junior or senior.
- Meet minimum assessment testing scores.
- Be identified as eligible by your school.


## VETERANS EDUCATION BENEFITS <br> 253-589-5581

In compliance with the Harry W. Colmery Veterans Educational Assistance Act of 2017 and RCW 28B.15.624 Early Course Registration for Eligible Veterans and National Guard Members, Clover Park Technical College provides early course registration for eligible veterans and spouses using VA education benefits. Visit www.cptc.edu/veterans for more information; scroll to the bottom of the page. Please see the academic calendar at the end of this catalog for priority registration for veterans and spouses using VA education benefits.

Most programs offered by Clover Park Technical College are fully approved for benefits under the following Veterans Administration regulations:
Chapter 30-Montgomery GI Bill ${ }^{\text {R }}$
Chapter 31-VA Rehab (pre-approved by VA)
Chapter 32-VEAP
Chapter 33-Post 9/11 GI Bill®
Chapter 35-Dependents
Chapter 1606-Reserves
Chapter 1607-Reserves Active
Selected programs of study at Clover Park Technical College are approved by the Workforce Training and Education Coordinating Board's State Approving Agency (WTECB/SAA) for enrollment of those eligible to receive benefits under Title 38 and Title 10, USC.
Clover Park Technical College does not and will not provide any commission, bonus, or other incentive payment based directly or indirectly on success in securing enrollment or financial aid to any persons or entities engaged in any student recruiting or admissions activities or in making decisions regarding the award of student financial assistance.
Schools should limit student enrollment to 85 percent veteran enrollment per cohort. In the event that a veteran wishes to enroll in a class that has already reached the 85 percent cap, he or she may do that but will not be eligible for VA funding. Chapter 35 and 31 students may still enroll even if the 85 percent has been realized.
GI Bill ${ }^{\circledR}$ is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at https://www.benefits.va.gov/gibill.

## WORKSOURCE CO-LOCATED STAFF

WorkForce Innovation and Opportunity Act (WIOA) funding for Pierce County residents is available to assist dislocated workers and low-income adults with their educational costs. Options for additional funds may also be available for students who are currently on unemployment benefits or who have drawn unemployment benefits in the past. In addition to providing funding information, the WorkSource co-located staff member can direct students to jobs found in the statewide

WorkSource system and other websites, as well as provide tips for job searching, resume writing, and interviewing.
For more information, contact the CPTC co-located WorkSource counselor at 253-589-5781.

## Getting Support

## ADVISING \& COUNSELING OFFICE 253-589-5548

The Advising \& Counseling Office provides several resources to support student success. Students can meet with a counselor by appointment or at designated walk-in times for academic advising, to review educational goals, or to check in about academic progress. Students can also access information regarding disability support, running start, entry services, and veterans services, all within the office. Limited personal counseling services are available for students struggling with a personal issue interfering with a student's ability to be successful in school. The Advising \& Counseling Office is located in Bldg. 17, Rm. 150, on the Lakewood Campus, or call 253-589-5548.

## DISABILITIES ACCOMMODATIONS 253-589-5767

Clover Park Technical College wants to help all students succeed. The college is committed to providing reasonable accommodations to qualified students with disabilities. Reasonable accommodations will be provided to qualified students with disabilities for recruitment, the application process, enrollment, registration, financial aid, course/ module work, counseling, programs, and services. A request for accommodations must be made, and documentation of disability is required.

To arrange accommodations, students should contact the Disability Resources for Students Office at 253-589-5767 or disabilityresources@cptc.edu. Requests for accommodations should be made as far in advance as possible. Lack of advance notice may delay the availability of an accommodation. The complete Clover Park Technical College Policies and Procedures for Reasonable Accommodations for Students with Disabilities under ADA/504 is available in Bldg. 17, Rm. 150.

## TUTORING CENTER

## 253-589-5591 or 253-589-5702

The Tutoring Center is located in Bldg. 15, Rm. 113K, and is open 8 a.m.-4:30 p.m., Mondays, Tuesdays, Thursdays, and Fridays (closed Fridays during Summer Quarter only), and 8 a.m.-6 p.m. Wednesdays, for current CPTC students. The center is open during the quarter and closed over breaks and holidays.
The tutors in the center specialize in a variety of math and English skills and possess a diverse knowledge in other areas. The Tutoring Center is a drop-in environment where students can come in as they need assistance. There is limited availability for one-on-one appointment tutoring. These appointments are scheduled with a peer tutor one at a time and last for 30 minutes. Students are encouraged to visit the center

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early in the quarter to receive the maximum benefits.
Extended hours for math assistance are offered in Bldg. 15, Rm. 111. Hours vary by quarter for Room 111. CPTC students also have access to eTutoring's free 24/7 online tutoring services at www.etutoring.org.

## ADULT BASIC SKILLS/ENGLISH AS A SECOND LANGUAGE (TRANSITIONAL STUDIES)

## 253-589-5702 or 253-589-5760

The Adult Basic Education program offers day and evening classes in Adult Basic Education, English as a Second Language, and high school credential testing preparation. Classes offered enhance career, educational, and personal opportunities for individuals. The program offers integrated math, reading, writing, communication, digital literacy, and employment skills toward High School Completion credentials, college admission, and/or career changes. The curriculum is based on Career and College Readiness Standards. Students are placed in classes based on their current skill level. Students are served on a first-come, first-served basis. More information is available in the Basic Skills Office in Bldg. 10, Rm. 102, or call 253-589-5702 for more details. There is a $\$ 25$ program fee for each student enrolled in Basic Skills classes.

## HIGH SCHOOL EQUIVALENCY TESTING (GED®) <br> 253-589-6035 or 253-589-5702

For the most current information on high school Equivalency testing, please contact the Transitional Studies department at 253-589-5702 or 253-589-5744. In order to sign up for testing, please create an account at www.ged.com. From the site, students can schedule exams, access study materials, learn about the testing experience, and access additional information. GED®Test scores completed prior to Jan. 1, 2014, are no longer valid.
Testing is computer-based, and the testing software is easy to navigate. Testers between 16-18 years of age need to bring a signed release from their district high school to the testing center before scheduling exams (homeschoolers will need a signed affidavit). Debit or credit card users may pay online. For other forms of payment, please call 253-589-6035 for assistance.
All testers must present valid, government-issued, Photo ID in order to test. If the ID is not issued by Washington State, testers must show proof of residency. Testing times vary; please visit www.cptc.edu/pearson-vue for current hours.

## Test Appointment Lengths:

- Reasoning through Language Arts (155 minutes)
- Social Studies (75 minutes)
- Science (90 minutes)
- Mathematical Reasoning (120 minutes)


## REFUND POLICY

1. The Assessment Test fee is non-refundable.
2. For state-funded classes, the tuition and laboratory/ supply/computer use fee will be refunded for a payment
period upon official withdrawal according to the following schedule:

- 100\% Prior to the sixth day of instruction.
$-50 \%$ The sixth through 20th day of instruction.
- o\% Twenty-first calendar day through the end of the payment period.
Financial aid recipients are subject to the Title IV Return of Funds policy stated in this catalog.

3. For self-support classes, the following schedule will apply: $-100 \%$ If the college cancels the class.

- 100\% When a student withdraws from the class on or before one business day prior to the first day of class. To officially withdraw from the class, students may come to the college in person at the Continuing Education Office located in Building 19.
- o\% When a student registers but does not attend the class. No refunds are available after the class has started.

4. Programs canceled by the college will be refunded at 100 percent of the fees paid but unused as of the cancellation date.
5. Refunds will not be granted for students withdrawn for disciplinary reasons.
6. Students called for military active duty will be granted a refund of tuition and fees paid for the current payment period, subject to the rules and regulations of their respective funding sources and payment methods. Presentation of written confirmation (orders) is required.
7. Students who do not attend the first two class sessions and/or comply with the established attendance policy for the class or program may forfeit the right to continue and may be subject to administrative withdrawal without refund.
8. Upon official withdrawal, refunds will be made by mail to the student or his or her respective funding agencies.

## REFUND EXCEPTION

Exceptions to the refund policy must be requested in writing to the Director of Enrollment Services before the last day of the quarter in which payment was made. The petition form is available in the Enrollment Services Office in Building 17. Eligible requests must have detailed information and supporting documentation attached when the request is submitted.

## Financial Aid

Clover Park Technical College believes that every individual should have the opportunity to achieve their educational goals. The Student Aid \& Scholarships Office is located in Building 17 on the Lakewood Campus and provides financial assistance to students who would otherwise not be able to attend school.

Financial assistance may be available to students from various sources in the form of grants, scholarships, loans, and employment. Aid is awarded according to federal, state, and institutional guidelines. No student will be denied aid on the

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basis of race, color, national origin, sex, sexual orientation, disability, or age.
All prospective students are encouraged to apply for aid. Student Aid \& Scholarships staff will discuss opportunities with you and help you with the application process. Eligibility is determined through a careful assessment of the student's financial situation, taking into account their and/or their family's income, assets, debts, number of dependents, and the estimated cost of attending Clover Park Technical College.

## ELIGIBILITY

The following programs are NOT eligible for traditional financial aid: Adult Basic Education (ABE), High School Equivalent Exam prep, Quick Start programs, personal enrichment continuing education, Running Start, and High School Completion.
To qualify for financial aid, a student must:

- Be admitted to the college in an eligible degree or certificate program;
- Have a high school diploma or High School Equivalency;
- Be a U.S. citizen or an eligible non-citizen;
- Be registered with the Selective Service (if required to do so);
- Not owe any repayments on previous Title IV assistance and not be in default on any federal student loans;
- Demonstrate a need for financial assistance.

Financial aid is normally awarded based on full-time enrollment ( 12 credits or more). If students plan to enroll in fewer than 12 credits for any quarter, they must give the Student Aid \& Scholarships Office advance written notification to allow for their award to be revised.

## HOW TO APPLY/APPLICATION DEADLINES

We strongly recommend that students submit their Free Application for Federal Student Aid (FAFSA) to the Federal Processor THREE MONTHS PRIOR TO OUR DEADLINE DATES or, at a minimum, two weeks before the deadline dates below. Most funds are available on a first-come, first-served basis, so apply early.
To apply for all available federal, state, and institutional financial assistance, students must complete the CPTC financial aid application process. Read the instructions carefully. Students who complete the application process prior to the deadline for a quarter will have their applications reviewed prior to the start of the quarter. The application instructions are available at the Student Aid \& Scholarships Office and at www.cptc.edu/financial-aid.

1. New students must apply for admission to the college and declare an eligible degree or certificate program.
2. Create a Federal Student Aid ID. You must do this by visiting https://fsaid.ed.gov/npas/index.htm. The FSA ID allows you to sign the FAFSA or renewal FAFSA online as well as access other Federal Student Aid secure websites. If you are required to provide your parents' information on the FAFSA, one of your parents will also need to create a Federal Student Aid ID.
3. Complete one of the following and submit it to the Federal Processor on the web: FAFSA or Renewal FAFSA at https://fafsa.ed.gov/.

After your FAFSA is processed, the Federal Processor will send you a paper Student Aid Report (SAR), an electronic SAR, or a SAR Information Acknowledgement, depending on how you submitted your FAFSA and whether or not you provided a valid email address on your FAFSA. If you do not receive your SAR within two weeks of submitting your application, call the Federal Processor at 1-800-4FED-AID to check on the status of your application.
Remember you can always check the status of your file at the student portal by clicking on the link to the Financial Aid Student Portal at www.cptc.edu/financial-aid/portal.
4. Both continuing and new students must submit all additional required documents by the deadline.
After the Federal Processor sends the Student Aid \& Scholarships Office a copy of your processed FAFSA data, we will post information to the Financial Aid Student Portal explaining what additional documents we need to complete your file and/or what actions you must take (e.g. CPTC data sheet, IRS Tax Transcript, Verification Worksheets). If you don't see that the Student Aid \& Scholarships Office has received your FAFSA information, come to the Student Aid \& Scholarships Office. Please make sure to update your mailing address with both Enrollment Services and Student Aid \& Scholarships.

Submit all additional required documents and take care of all required actions as instructed by the following deadline dates to ensure your application is reviewed prior to the start of the quarter you begin classes. If all required documentation is not submitted by the deadline dates below, your financial aid may be delayed, and you may be required to pay your tuition, fees, books, and supplies until your file is reviewed.

## Fall Quarter 2018 <br> Winter Quarter 2019 Spring Quarter 2019 Summer Quarter 2019

5. Complete Direct Stafford Loan Master Promissory Note and required counseling.

## First-Time Borrower

If you are new to the college, or have not received a Federal Direct Stafford Loan from Clover Park Technical College in the last year, you are required to complete Entrance Counseling and a Master Promissory Note (MPN). To complete these steps, go to www.studentloans.gov. The school will be notified electronically within three to five business days from the time of completion. You can check your student portal to see when Clover Park has received notification that this requirement has been completed.

Please Note: Students who are first-time borrowers at CPTC must serve a 30-day waiting period and will not receive the first disbursement of their loans until approximately the 35th day of the quarter. This applies only to the first quarter of attendance that student receives loan funds.

## Returning Borrower

Continuing students must complete Financial Awareness

Counseling every academic year by visiting https:// studentloans.gov/myDirectLoan/index.action. The school will be notified electronically within three to five business days from the time of completion. You can check your student portal to see when Clover Park has received notification that this requirement has been completed.
If you previously received a direct loan for a prior year, you do not need to complete an entrance counseling and Master Promissory Note. The Department of Education allows a borrower to receive additional direct loans on a single Master Promissory Note for up to 10 years.

## Federal Direct Parent Plus Loans:

To read more information about the Stafford Loans, please visit www.cptc.edu/financial-aid/stafford. Parent Plus Loans are federal loans to help you pay for the cost of your child's education expenses. Parent Plus Loans are only available for Dependent Students. To apply for a Federal Parent Plus Loan, go to https://studentloans.gov/ myDirectLoan/index.action and complete a Parent Plus Application and Parent Plus Master Promissory Note. The school will be notified electronically within three to five business days from the time of completion.
Click "read more" under the "Apply for Federal Direct Stafford Loan" link.
Students who are taking nursing (LPN or RN) academic prerequisites do not qualify for grant assistance. They qualify for student loans only, and only for a period of 12 consecutive months. (Nursing Assistant program is not eligible for federal student loans.)
Student Aid \& Scholarships Office:
4500 Steilacoom Blvd SW
Lakewood WA 98499-4004
Building 17, Room 130
253-589-5660, Fax: 253-589-5618
School code: 015984

## COST OF ATTENDING COLLEGE

The following budget figures have been approved by the Washington Financial Aid Association and Clover Park Technical College. They are provided as a guide to estimate what it would cost to attend Clover Park Technical College for nine months (three quarters) and average 20 credits per quarter.

|  | DEPENDENT <br> Living with <br> Parent/Relative | INDEPENDENT <br> Living with <br> Parent/Relative | RESIDENT <br> Not Living with <br> Parent/Relative |
| :--- | :---: | :---: | :---: |
| TUITION | $\$ 5,142$ | $\$ 5,142$ | $\$ 5,142$ |
| BOOKS \& SUPPLIES | $\$ 870$ | $\$ 870$ | $\$ 870$ |
| ROOM \& BOARD | $\$ 3,270$ | $\$ 7,860$ | $\$ 9,870$ |
| TRANSPORTATION | $\$ 1,170$ | $\$ 1,530$ | $\$ 1,170$ |
| PERSONAL | $\$ 1,860$ | $\$ 1,920$ | $\$ 2,100$ |
| TOTAL | $\$ 12,312$ | $\$ 17,322$ | $\$ 19,152$ |

## DETERMINING FINANCIAL NEED

The amount of assistance students receive is based on the
student's demonstrated need.
Cost of attending college - Expected family contribution $=$ Need
Financial need is defined as the difference between educational expenses (tuition, fees, books, tools, supplies, room and board, personal, and transportation) and the amount the student and his/her family can afford to pay as determined by the information on the Free Application for Federal Student Aid (FAFSA).

## YEARLY FAFSA TIMELINES

Students must apply for financial aid once every academic year. For financial aid purposes, the year starts July 1 and ends June 30 (Summer Quarter through Spring Quarter). The FAFSA application will be available starting October 1 for the following academic year. If a student starts classes in Winter or Spring Quarters, two FAFSAs must be completed: one for the current school year and one for the upcoming school year.

## DESCRIPTION OF AID PROGRAMS

## FEDERAL AND STATE GRANTS

CPTC offers both federal grants (Pell Grant, Supplemental, and Educational Opportunity Grant) and state grants (Washington State Need Grant). Grants are considered a form of gift aid because they do not have to be repaid, provided students attend their classes, do not reduce their enrollment on or before the 10th business day of the quarter, do not make a 100-percent withdrawal, do not stop attending their classes, and do not complete zero credits for a quarter.

## WORK-STUDY

Federal and state work-study programs offer students the opportunity to gain valuable work experience while earning money for college. Both on-campus and off-campus positions are available.
Students receive their work-study funds in the form of a paycheck from the employer based on their hourly wage and the number of hours worked in any given pay period. Because work-study funds must be earned, they are not available at the beginning of the quarter to help students pay their tuition and fees or purchase their books.

## STUDENT LOANS

Federal Direct Subsidized Stafford Loans are needbased loans. The term "subsidized" means the federal government pays interest on the loan on the student's behalf until the student enters repayment.

## Maximum Eligibility Period to Receive Direct Subsidized Loans

There is a limit on the maximum period of time (measured in academic years) you can receive Direct Subsidized Loans. In general, you may not receive Direct Subsidized Loans for more than 150 percent of the published length of your program. This is called your "maximum eligibility period." You can usually find the published length of any program of study in the catalog.
For example, if you are enrolled in a 4-year bachelor's degree program, the maximum period for which you can receive Direct Subsidized Loans is 6 years ( $150 \%$ of 4 years $=6$ years).

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If you are enrolled in a 2-year associate degree program, the maximum period for which you can receive Direct Subsidized Loans is 3 years ( $150 \%$ of 2 years $=3$ years).

Your maximum eligibility period is based on the published length of your current program. This means that your maximum eligibility period can change if you change programs. Also, if you receive Direct Subsidized Loans for one program and then change to another program, the Direct Subsidized Loans you received for the earlier program will generally count against your new maximum eligibility period.

## Federal Direct Unsubsidized Stafford Loans are

 non-need based loans. The term "unsubsidized" means the federal government does not pay interest on the loan until the student enters repayment; students are responsible for paying all accrued interest. Interest can be paid while the student is in school, or it can be deferred until the student enters repayment. If deferred, the unpaid interest that accrues is added to the loan amount the student borrowed, a process known as capitalization.
## SCHOLARSHIPS

Many businesses, services, and professional organizations, as well as individuals in the community, contribute funds to be used as grants (awards based on need) or as scholarships (awards based on merit, need, or other criteria). Applications are accepted at various times throughout the year. Eligibility criteria and application procedures are posted on the Scholarship Board located outside the Student Aid \& Scholarships Office in Building 17 and at www.thewashboard. org and www.fastweb.com.
Scholarships are also available from the Clover Park Technical College Foundation. For more information, visit the Foundation website at http://friendsofcloverpark.org/cptc-foundation-scholarships/.

## AGENCY FUNDING

Persons who qualify for assistance from the Division of Vocational Rehabilitation of the State of Washington or neighboring states, the Department of Labor and Industries, WorkSource, the Washington State Department of Social and Health Services, or the Employment Security Department should contact and work with their funding agencies before and throughout the enrollment process.

## OPPORTUNITY GRANT

253-589-5513

## www.cptc.edu/opportunity-grant

Clover Park Technical College's Opportunity Grant may assist eligible students with educational expenses such as tuition, fees and books, for a maximum of 45 credits over a threeyear period. Awards are based on student need and grant availability and, thus, may vary from quarter to quarter.
Eligible programs:
Accounting
Advanced Composites
Aviation Maintenance Technician
Computer Networking \& Information Systems Security
Computer Programming
Construction Technologies
Dental Assistant
Early Care \& Education

Environmental Sciences \& Technology
Health Unit Coordinator
Hemodialysis
Heating \& Air Conditioning/Refrigeration Service Technician Mechatronics
Medical Assistant
Medical Histology Technician
Medical Laboratory Technician
Nondestructive Testing
Nursing
Pharmacy Technician
Surgical Technology
Welding Technology

## BASIC FOOD EMPLOYMENT AND TRAINING (BFET) 253-589-5513 www.cptc.edu/bfet

BFET provides employment training, funding, and services to individuals who receive federal Supplemental Nutrition Assistance Program (SNAP) benefits or who are eligible to apply for SNAP. Clover Park BFET participants may receive:

- Financial assistance for tuition, books, required educational expenses, and emergencies (Financial assistance is determined on a case-by-case basis and may be limited by grant requirements, financial aid status, and grant fund availability).
- Ability to apply for child care subsidies through DSHS, connection with other college and community resources, and ongoing mentoring and support.
All CPTC programs are eligible, including High School Completion, Running Start, and Adult Basic Education programs. Individuals who receive TANF cash benefits from DSHS are not eligible for BFET.


## WORKFIRST

253-589-4311
www.cptc.edu/workforce-development/workfirst
The WorkFirst Program serves families receiving Temporary Assistance for Needy Families (TANF) through the Department of Social and Health Services (DSHS), helping them start, continue, or finish their education and training, leading to employment and self-sufficiency.

WorkFirst can assist with tuition and books for eligible participants in the following:

- High School Equivalency (prep and exam).
- High School Completion.
- Vocational Education in any of CPTC's full- or part-time programs as well as Continuing Education.
- High-wage, high-demand career training.

For more information, please call or visit the Workforce Development Office in Bldg. 16, Rm. 105, 8 a.m.-5 p.m., Monday-Friday.

## WORKER RETRAINING

## 253-589-4311

www.cptc.edu/workforce-development/worker-retraining
The Washington Worker Retraining Program provides training and funding for unemployed workers who want to upgrade their skills or train for a new career. Worker Retraining support

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may be available if you meet any of the following:

- Facing a layoff and eligible to collect unemployment benefits.
- Currently collecting unemployment benefits.
- Exhausted unemployment benefits within the past 48 months.
- Displaced homemaker within the past 24 months.
- Self-employed and now unemployed with the past 24 months.
- Honorably discharged veteran within the past 48 months.
- Stop-gap employments.
- Active-duty military with an official order of separation.

Worker Retraining funds can be applied to tuition, books, and transportation.
For more information, please call or visit the Workforce
Development Office in Bldg. 16, Rm. 105, 8 a.m. -5 p.m., Monday-Friday.

## What programs are covered?

- Any of CPTC's High Wage/High Demand professional/ technical programs
- Programs funded by Worker Retraining
- Bachelor degrees will be reviewed on a case-by-case basis
- Maintain satisfactory academic progress according to CPTC's financial aid policies. (Students must not be in financial aid suspension or in student loan default.)


## What does the funding cover?

Tuition/fees, funding for books, and possible transportation assistance may be awarded for the first quarter. WRT funding is typically awarded for one quarter; you should have a funding plan for subsequent quarters. You are welcome to submit a WRT application even if you have already been awarded for one quarter; additional funding may be available to you on a case-by-case basis.

## To Apply:

Contact the Workforce Development Office in Bldg. 16, Rm. 105, or at 253-589-4311.

## EARLY ACHIEVERS GRANT (EAG) <br> 253-589-6088 <br> www.cptc.edu/eag

Early Achievers Grant (EAG) is a student financial aid resource that allows for funding priority to students who are employed by Early Achievers facilities. The grant's goal is to help employed child care providers and early learning educators complete stackable certificates that build into an associate degree in Early Childhood Education (ECE). Clover Park EAG recipients may receive:

- Financial assistance for tuition, books, and wrap-around student services (financial assistance is determined on a case-by-case basis and may be limited by grant requirements, financial aid status, and grant fund availability).
- Ability to receive one-on-one academic supports through Workforce Development and the ECE faculty instructor.

The CPTC Early Childhood Education stackable state certifications and degree are eligible for EAG funding.

## To Apply:

Contact the Workforce Development Office in Bldg. 16, Rm. 105, or at 253-589-6088.

## FINANCIAL AID STUDENT PORTAL

Students must use the portal to view the status of financial aid file and award amounts.
Visit www.cptc.edu/financial-aid/portal.

## RIGHTS \& RESPONSIBILITIES

As a financial aid recipient, students have the following rights:

1. Access to accurate and timely information on financial aid deadlines and procedures.
2. Access to personal financial aid records and information as defined by the Buckley Amendment of 1974.
3. The choice of accepting all or only part of the assistance offered.
4. Access to a review of the award package should the student's financial situation change. Included in this right is the opportunity to appeal.
Along with these rights, students have the following responsibilities:
5. To provide accurate information to be used in the aid process. Misrepresenting information is a violation of the law and could result in indictment under the U.S. Criminal Code.
6. To inform the Student Aid \& Scholarships Office of any significant changes to a student's financial situation (scholarships, gifts, earnings, funding, etc.) in excess of $\$ 200$ that were not listed in the application or any other change in circumstances, such as a change in student status or marital status, that may influence the award. Failure to report these changes can result in federal legal action to recover aid funds.
7. To understand the loan obligation. With a loan as part of the student's package, future earnings are pledged to pay present school costs. Loan conditions should be read carefully; ask questions.
8. To maintain satisfactory academic progress toward the completion of the degree/certificate program.
9. To repay any financial aid received when students were not eligible.
10. To continue receiving financial aid, students must reapply each academic year.

## SATISFACTORY ACADEMIC PROGRESS

Federal and state financial aid regulations require schools to set minimum standards for satisfactory academic progress and to hold students accountable for meeting the standards. Satisfactory Academic Progress is checked prior to awarding aid, even if students did not receive financial aid in past quarters. It is also checked at the end of every quarter aid is received.

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The Satisfactory Academic Progress policy includes the following:

1. Cumulative pace of progression towards degree or certificate must be at least 66.67 percent.
2. Cumulative Grade Point Average requirement of 2.0 or greater.
3. Credit limit requirement.

Copies of the complete Satisfactory Academic Progress policy are available on the Student Aid \& Scholarships Office website at www.cptc.edu/financial-aid as well as at the Student Aid \& Scholarships Office front counter.

## WITHDRAWAL \& REPAYMENT POLICIES

Students who withdraw from all classes, stop attending all classes, or a combination of both before completing 61 percent of the quarter (measured in calendar days), or students who complete zero credits, may be required to repay a portion of the financial aid they received for that quarter. This applies to grant funds as well as student loans. Repayments are computed in accordance with federal and state regulations. Repayments can be owed to the college, the U.S. Department of Education, and/or the Washington Student Achievement Council. Students who owe a repayment are notified in writing. The complete repayment policy can be found on the Student Aid \& Scholarships Office website at www.cptc.edu/financial-aid.
The first days that students can drop to zero (withdraw from all classes, stop attending all classes, or a combination of both) without owing a repayment as a result are:
Summer 2018 August 7, 2018
Fall $2018 \quad$ November 13, 2018
Winter 2019 February 19, 2019
Spring 2019 May 20, 2019

## International Students

We welcome students from around the world to Clover Park Technical College. We provide personalized assistance to our international students every step of the way, from entry to graduation. We also offer airport pickup, free internet access, and free tutoring.

## ENTRY

To start your application process, please contact us and take the first step toward a bright future. Join other domestic and international students who have discovered the outstanding programs at Clover Park Technical College.

You can become an international student at Clover Park Technical College by following these easy steps:

1. Fill out the Admission Application and the Financial Responsibility forms:
a. Available online at www.cptc.edu/international, or
b. Request an application packet by email at international@cptc.edu. We will send you digital copies of the documents.
c. Request an application packet by phone at

253-589-6089.
2 Send the Admission Application and the Financial Responsibility forms, along with other required documents, by mail with your $\$ 50$ non-refundable application fee, payable by personal check, money order (in U.S. dollars), or credit card.
3. Attach a passport-size color photo to the top right corner of the application.
No Test of English as a Foreign Language (TOEFL)/ International English Language Testing System (IELTS) is required for entry if you study and successfully complete the highest level of an accredited ESL program at another college or language school. Please contact us for more information about our English language requirements.
Once we receive the above items and you meet all the entry criteria, we will mail your Form I-20 to you. Take the Form I-20 with you to the U.S. Consulate in your country and apply for a student visa. If you have questions about the application process, please contact our office at international@cptc.edu or 253-589-6089.

## ENGLISH LANGUAGE TRAINING AT CPTC

Intensive English program and ESL Pathway program are expected to start in 2019. No Test of English as a Foreign Language (TOEFL)/International English Language Testing System (IELTS) score is required for admission if you apply for the Intensive English program, and successful completion of the ESL Pathway program guarantees admission into one of the many professional technical programs offered at CPTC. Please visit www.cptc.edu/international for updates or contact the International Education Programs Office at international@ cptc.edu for more information.

## TRANSFER OF CPTC CREDITS

Credits earned at Clover Park Technical College may transfer to other two-year colleges and to some four-year colleges and universities. Please discuss your educational goals with the International Education Programs Office staff.

## DATES TO REMEMBER

- Fall Quarter begins September 24, 2018
- Winter Quarter begins January 2, 2019
- Spring Quarter begins April 1, 2019
- Summer Quarter begins July 1, 2019
- Graduation is June 18, 2019

Please note that some programs have fall and/or spring start dates only.

## COST OF TUITION \& FEES

International students pay non-resident tuition. Visit www. cptc.edu/tuition for 2018-19 rates.

- International Student Health Insurance is $\$ 338.97$ per quarter (3 months) - subject to change.
- Some programs require additional quarterly fee(s). Please visit www.cptc.edu/tuition for more information.
- Additional fees may be charged for a specific class and are


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listed at the end of the course descriptions in the Quarterly Class Schedule.

Tuition and fees may change based on State of Washington legislative guidelines.

- Housing and other college fees are not inclusive.
- Non-refundable Clover Park Technical College international admission application fee is $\$ 50$.
- Books and supplies vary by program.


## HOUSING SERVICES

There are two housing options for international students:

1. Homestay (recommended for all new students)

You may live with an American host family who will provide you with a furnished, private room. They will also pick you up from the airport and help with your initial settling-in needs (banking, WA ID/license, orientation to community, etc.).
There is a $\$ 275$ placement fee. The traditional homestay is $\$ 650$ per month for 2 meals per day (subject to change).
Contact the International Office staff when you wish to apply for homestay.
2. Independent living in apartments near the college (NOT recommended for newly arrived students)
The average rent ranges from \$750 per month to \$1,200 per month, depending on number of bedrooms, size, location, and amenities.
Additionally, students have to pay for food and utilities. Assistance is available for students who pay the International Housing Application Fee (currently \$150, non-refundable, subject to change). Housing and other college fees are not inclusive. Costs are subject to change based on the local housing market.

## FOR ADDITIONAL INTERNATIONAL INFORMATION

Contact the International Education Programs Office at:
Tel: 253-589-6089
Fax: 253-589-6056
Email: international@cptc.edu
Mail: Clover Park Technical College
International Education Program
4500 Steilacoom Blvd SW
Lakewood, WA 98499-4004
Website: www.cptc.edu/international

## Campus Life \& Services

ASSOCIATED STUDENT GOVERNMENT
STUDENT COUNCIL

This council is an advocate of the student voice and a partner with other governing units. The Student Council oversees the administration of the Associated Student Government (ASG). Council meetings, which are open to the public, are held on a regular basis while CPTC is in session during the fall, winter, and spring quarters.

## OFFICE OF STUDENT LIFE

## 253-589-5780

The Office of Student Life is the administrative entity that advises and directs the efforts of student leadership development, the student center facilities, and the Associated Student Government (ASG). Serving on ASG gives students the opportunity to maximize their involvement in campus life. ASG employment opportunities are filled each spring through an annual hiring process. Other employment and/or involvement opportunities with the department include:

## PEER AMBASSADORS

Peer Ambassadors increase student success, retention, and completion by providing students with opportunities to engage with fellow students in meaningful ways that offer support, encouragement, and the resources they need to achieve their social, financial, and academic goals.

## CLUBS \& ORGANIZATIONS

The ASG coordinates the management of student clubs, which operate specifically to promote individual programs with respective industries, special interest groups, and related professional organizations within the community.
For more information about the Office of Student Life and ASG, call 253-589-5780, stop by the Student Leadership \& Service Center, Bldg. 23, Rm. 211, or visit us online at www.cptc.edu/ involvement.

## STUDENT LEADERSHIP \& SERVICE CENTER 253-589-5780

The Student Leadership \& Service Center (SLSC) is your portal to the campus, whether you are a student or a community member. The student staff members know what's happening on campus, provide maps to locate particular campus locations or services, and administer the many service features and activities of the SLSC.

For more information about the Office of Student Life and ASG, call 253-589-5780, stop by the Student Leadership \& Service Center, Bldg. 23, Rm. 211, or visit us online at www.cptc.edu/ involvement.

## STUDENT IDENTIFICATION CARDS

## 253-589-5780

Student Identification Cards are available in Building 23 at the Student Leadership \& Service Center during the regular scheduled hours of the center. The first ID is complimentary. Replacement ID's cost $\$ 5$ and should be paid at the cashier's window in Building 17. Picture ID and CPTC Student ID number are required to be issued a Student Identification Card.

## BOOKSTORE

253-589-5614

## (CONTINUED FROM PREVIOUS PAGE)

The bookstore carries textbooks, school supplies, courserequired tools and kits, medical supplies and scrubs, auto and welding supplies, chef supplies, calculators, reference materials, and assorted imprinted items. The bookstore also carries snack, beverage, and lunch items. The bookstore can order most books and supplies not available in the store. The bookstore gladly offers refunds and exchanges on textbooks (with receipt and in the condition sold) bought and returned within the first week of the current quarter

## RENTALS

Rentals are one of several cost-saving options offered to students. Customers can rent selected textbooks in store or online and save up to 80 percent off the new book selling price. Students simply rent the book through the bookstore website or in the bookstore and then check the book in at the end of the term. Visit the bookstore website at cptc.bncollege.com for more details.

## USED BOOK BUY BACK

A Book Buy Back service is offered for students who do not wish to keep their textbooks. The value of a book is determined by the demand for that title nationally. Students can receive up to half the current value. The bookstore does buyback on a daily basis, but the best time is during the last 2-3 weeks of each quarter. The prices paid back to students and the selected titles are based on a number of criteria. See the bookstore for details.
The bookstore is located in Building 23

## CAMPUS ACTIVITIES

The programming board promotes and coordinates wellbalanced program of student-initiated activities that enhance health and wellness, cultural, social, and recreational needs of the students outside the classroom aimed at enhancing student life.

## FOOD SERVICES

The Clover Park Technical College Culinary Arts students offer lunch in the Rainier Room in Building 31, Wednesday-Friday, 11 a.m.-12:45 p.m. (offered periodically during the quarter). Food is also available at Bon Sucre Bistro, Divine Decadence Coffee Shop, food trucks on campus, vending machines, and the bookstore. Visit tacomaculinary.com for more information.

## HEALTH SERVICES

CPTC does not offer direct health services on campus. Information about community services is available in the resource book housed in the Advising \& Counseling Office at the Lakewood Campus, Bldg. 17, Rm. 150.

## INSURANCE

Clover Park Technical College provides information regarding accident and health insurance to interested students. Contact your program faculty or the Advising \& Counseling Office in Building 17 for a brochure.

## PARKING \& TRANSPORTATION

Pierce County transit buses make regular stops at CPTC. To see specific routes, visit www.piercetransit.org. All CPTC students are eligible to receive a CPTC ORCA Card for each quarter they are enrolled at the college. For more information, visit the Student Leadership and Service Center in Building 23 or visit www.cptc.edu/involvement/buspass.
White-striped areas are designated for student parking. Yellow-striped areas are restricted to the following: carpool, disabled, authorized staff, and visitors. The campus speed limit is 10 miles per hour, unless otherwise posted. Vehicles improperly parked on campus are subject to a $\$ 10$ fine for each offense and/or will be towed at the owner's expense. Students are also subject to a $\$ 10$ fine for each offense for parking in unauthorized areas, blocking or obstructing traffic, and parking in fire lanes or tow-away zones. Parking in a designated handicapped space without a state-issued handicapped parking permit carries a campus fine of $\$ 75$ or $\$ 280$ if cited by the Lakewood Police Department.

Students who violate driving or parking rules may be required to leave their vehicles off campus. Clover Park Technical College is not responsible for damage to or loss of vehicles parked on campus.

## LIBRARY \& COMPUTER LABS <br> 253-589-5544, 253-589-5628 or 253-589-6067 for Library instructional classes or orientations

The Clover Park Technical College Library and Technology Commons Lab are located in the Learning Resource Center, Building 15. The library/computer lab is open 8 a.m.-6 p.m. on Wednesdays and 8 a.m.-4:30 p.m. all other weekdays. The library is closed Saturdays and Sundays.
The library provides access to a wide variety of materials, such as electronic databases for journal articles, books for assignments, multimedia equipment, and other resources that support instructional and academic efforts of students, faculty, and staff.
All currently enrolled students are eligible to use the library/ computer lab spaces and services for college-related activities. A variety of software and hardware is available to help students with assignments and to accommodate students with special needs. Besides the collection, the library has a wide range of study areas to meet student needs - large, small, and quiet study rooms, and tables for individual study. Library/computer staff are available to give individual or group assistance.
Printing/copying/scanning services are available to current students through their WiFi account. The library provides a fee-based fax machine service. And for after-hours convenience, there is an outside book return on the east end of Building 15 .

## SECURITY <br> 253-589-5682 (emergency) or 253-589-5557 (nonemergency)

The CPTC Security Department places students and staff at the center of all we do. We are committed to providing a safe and secure environment through the following services: campus patrol, parking/traffic enforcement, emergency response, incident investigation, lost and found management, basic first aid, escort services to or from your vehicle, battery
boosts, building access, and the assignment of keys and alarm codes. Our officers are non-commissioned, and the Lakewood Police Department has jurisdiction on our Main Campus in Lakewood, while the Pierce County Sheriff's Office has jurisdiction at the South Hill Campus.

## Early Care \& Education

## AFFILIATED CHILD CARE CENTER PROGRAM 253-589-4516

Early Care and Education offers on-site instruction and customized courses focusing on Early Childhood Education to affiliated child care centers.
Staff at child care centers are eligible to combine on-site training, attendance at on-campus classes, workshops, and courses to earn college credit or meet STARS continuing education requirements. These services are currently provided to more than 50 child care centers.

Clover Park Technical College is authorized by the Council for Early Childhood Professional Recognition to provide instruction for the Child Development Associate (CDA) Professional Preparatory Program and Direct Assessment Program. Students interested in the process for earning a CDA from the National Credentialing Program can call the council at 1-800-424-4310.

## ON-CAMPUS CHILD CARE 253-589-5531 or 253-589-5511

The Hayes Child Development Center at Clover Park Technical College's Lakewood Campus provides services for children ranging in age from four weeks to five years. We are here to support CPTC students and staff needing child care. We accept DSHS, GSA, and cash payments.
We are proud to be a National Association for the Education of Young Children (NAEYC)-accredited facility that also offers a Head Start program. NAEYC-accredited centers are high-quality programs that provide a safe and nurturing environment while promoting the development of young children. NAEYC-accredited programs show their quality by meeting the 10 NAEYC Early Childhood Program Standards, which are based on the latest research on education and development of young children.

If you have questions about Hayes Child Development Center, please call 253-589-5531 or email angela.johnson@cptc.edu.

## PROJECT HEAD START \& ECEAP <br> 253-589-5721

CPTC offers a full-day Head Start and Early Childhood Education and Assistance Program (ECEAP) program to eligible families with children three and four years old.
The four major components of this locally administered program are education, health, parent involvement, and social services.

Parents are involved in parent education and program planning/operating activities. They also may serve as members of the policy council and committees. These early learning programs seek to provide comprehensive developmental services for children from low-income families. Registration information is available from the head start family advocate.



# CLOVER PARK 

TECHNICALCOLLEGE

## PROGRAM DESCRIPTIONS

Prerequisite(s): Some programs have unique prerequisites. If prerequisites are required, they are listed with each program in the pages that follow and are in addition to college entrance requirements.
A core of academic classes is an integral part of all CPTC preparatory programs. Students may waive classes below the 100 level by meeting the Prerequisite Accuplacer score or equivalent. Course descriptions are in the next section. Listed for each program are college quarter credit hour equivalents.

Program completion is dependent on satisfactory progress and successful achievement of all course requirements and student outcomes with an overall GPA of 2.0 or greater. It should be recognized that the number of quarters and hours identified for each program on the following pages is approximate; some students may need additional quarters to meet graduation requirements.

## CERTIFICATES AT CPTC

Program certificates are a great way to get your foot in the door in a new industry or to advance your skill levels and stay current with industry standards. Most of our programs offer short-term certificates, many of which can be completed in one year or less

## DEGREES AT CPTC

The Bachelor of Applied Science in Operations Management (BAS-OPM) degree is awarded for completion of at least 90 credits of appropriate 300- and 400-level coursework. An applied associate degree, AAS-T, Direct Transfer Associate degree or equivalent with a required distribution of academic course work is a prerequisite for program admission. A detailed list of program admission requirements can be found online.
The Associate of Applied Technology (AAT) degree is awarded to students who complete programs that are 90 credits or more in length and include a core of 15 college-level academic credits. The bulk of the credits are in specific career/technical fields. The required general education courses in communication, quantitative reasoning and social sciences are designed to prepare students for work.
The Associate in Applied Science - T (AAS-T) degree is also a workforce degree with a core of general education courses. The difference is that the AAS-T degree requires a minimum of 20 credits of general education courses commonly accepted in transfer, including a minimum of five credits in English composition (ENGL\& 101), five credits in quantitative reasoning, five credits in social science, and five additional credits in social science, humanities, or science.
The Associate in Pre-Nursing (DTA/MRP) degree is awarded by Clover Park Technical College to students who have completed specified curriculum with the intent of transferring to one of Washington's four-year institutions.
Direct Transfer Agreement/Major Related Program (DTA/MRP) degrees prepare students with general education requirements necessary to pursue further study. They do not alter the admission criteria established by the baccalaureate institution, nor do they guarantee admission to the institution. Students should contact an advisor at the potential transfer institution regarding their interests and specific course choices.

If specific licensure or other eligibility requirements are necessary for employment in a career field offered by Clover Park Technical College, the program description provided in this section of the catalog will identify those requirements. Unique requirements for employment and advancement within the profession or occupation are also described. Certification obtained through the completion of all program requirements does not guarantee job attainment or reciprocity of credentials in another state or country.

## OPERATIONS MANAGEMENT BACHELOR OF APPLIED SCIENCE IN OPERATIONS MANAGEMENT

## BACHELOR OF APPLIED SCIENCE DEGREE

CPTC's Bachelor of Applied Science in Operations Management (BAS-OPM) degree has been designed to meet the needs of students who want to move into supervisory and management roles in industry.

In the BAS-OPM program, students will learn about operations management tools and techniques, develop core business skills, and apply them to solve problems in industry. Focused-study courses and individual and group capstones help develop the critical thinking skills required for a successful career in an operations management role.
This degree has been designed to meet the educational needs of working adults. It is based on a combination of web-based instruction with study groups meeting at times convenient to students.

## Student Learning Outcomes:

Upon successful completion of the Bachelor of Applied Science in Operations Management degree, students will:

- Demonstrate a mastery of the mathematical tools required for operations management.
- Apply qualitative and quantitative forecasting techniques to the selection of processes and facility layouts that will optimize production.
- Describe how to plan, implement and manage a comprehensive quality management program within an organization.
- Apply mathematical approaches to solve typical make/buy and outsourcing problems.
- Explain the meaning of Lean terminology and concepts, including Value Stream Mapping, Workplace Organization and Standardization, 5-S and Cellular Flow, Kan Ban and Total Production Maintenance.
- Develop a written proposal for a newly designed or modified facility, including a financial justification for the project, and carry out a verbal presentation of the results.
- Explain key terms used in statistical process control (SPC) including control charts, continuous improvement, acceptance sampling, and the design of experiments.
- Demonstrate the application of project management techniques to develop realistic and comprehensive project plans, identify risk areas, monitor the plans, and deal with problems.
- Develop clear and coherent technical reports, proposals, memoranda,


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and e-mails, and deliver presentations to groups.

- Analyze projects, compare alternatives, and make sound business decisions based on economic principles, such as time value of money, internal rate of return, and cost-benefit ratios.
- Demonstrate the ability to identify and then develop acceptable resolution of ethical dilemmas that might occur in the workplace.
- Discuss how these leadership skills can affect the behavior and interaction of people at work: good recruitment and retention practices, motivation and team building, the management of change, and conflict resolution.
- Explain how efficient work design and ergonomics can increase operator effectiveness and reduce production costs.
- Demonstrate a level of critical thinking, teamwork, communication, and technical and information literacy commensurate with a management position in industry.
Program Length: The program is approximately six-to-eight quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters or by instructor's permission.


## Prerequisite(s):

## Admission to the Program

Admission to the program may occur when the following can be documented:

- Successful completion of an earned Applied Associate degree, AAS-T, Direct Transfer Associate degree or equivalent from a regionally accredited institution with an overall minimum 2.3 GPA in all coursework.
- Intermediate algebra or higher (minimum 2.3 GPA); or equivalent Accuplacer math scores or equivalent (within the past two years).
- 5 college-level credits in English Composition (ENGL\& 101 or higher).
- 5 college-level credits in a social science.
- A minimum grade of 2.3 is required in all coursework.


## Admission to the Junior Year

Once admitted to the program, the following must be documented before students can move on to the junior year of the program:

- 5 credits of MATH\& 146 or another higher-level statistics class
- 5 credits in a humanities subject - CMST\&220 recommended
- 10 credits in a natural science with a lab component - ENVS\& 101 and CHEM\& 121 recommended
- 5 credits in any college-level lower division General Education courses: English Composition, Social Science, Humanities, or Natural Science
A minimum grade of 2.3 is required in all coursework. These requirements can be satisfied by coursework completed before admission to the BAS-OPM program, or during a "bridge" quarter included within the BAS-OPM program. The bridge quarter can include up to 25 credits as required. Bridge courses may be taken concurrently with upper-level BAS classes.


## PROGRAM COURSE LIST

MAT 311
MAT 413
Mathematical Techniques for Operations Management.
OPM 312 Forecasting and System Design - .... 5
OPM 314 Quality Management..................................................
OPM 315 Lean Concepts and Applications .................................................................................... 5
OPM 411 Facility Layout and Materials Handling ................................................................. 5
OPM 412 Workplace Health and Safety Management....................................................... 5
OPM 491 Focused Study I.......................................................................................................... 5


OPM 493
OPM 498 ${ }^{\text {CAP }}$
OPM 499CAP
BUS 310
ECON 310
ENG 310
PHIL $310^{\text {DIV }}$
PSYC $311^{\mathrm{DIV}}$

Focused Study III .......................................................................................................... 5
 Group Capstone Project.............................................................................................. 5 Project Management ............................................................................................... 5 Managerial Economics.............................................................................................. 5 Business Communications.......................................................................................... 5 Professional Ethics........................................................................................................ 5 Industrial \& Organizational Psychology ................................................................. 5 .90**

* With instructor's permission, OPM 495 - Internship - can be substituted for OPM 498.
** Total credits for the degree do not include the bridge quarter (if needed).


## NURSING

# ASSOCIATE IN PRE-NURSING DEGREE 

## ASSOCIATE OF ARTS AND SCIENCE DEGREE <br> DIRECT TRANSFER AGREEMENT/ <br> MAJOR RELATED PROGRAM (DTA/MRP)

Designed for the student who wishes to transfer to a Bachelor of Science in Nursing (BSN) program at a four-year university, the Associate in Pre-Nursing offers a broad spectrum of academic courses that prepare students for upper-division coursework leading to the Bachelor of Science, Nursing degree (entry-to-practice/basic BSN). Pre-nursing graduates are prepared to apply to BSN programs at various institutions across Washington state, including the following baccalaureate institutions that are participants in this agreement with the community and technical college system: University of Washington, Seattle;
Washington State University; Northwest University; Seattle University; Seattle Pacific University; Pacific Lutheran University; Walla Walla University; and the Washington State University Intercollegiate College of Nursing (WSU-ICN), a consortium whose members include Eastern Washington University, Gonzaga, and Whitworth. Associate degree transfers to WSU-ICN are admitted through WSU, not through the other consortium institutions.
This degree program streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive, with many qualified applicants finding themselves on waiting lists for admission.
CPTC does not offer every course each quarter. It is the student's responsibility to discuss sequencing and work out their individual schedule with a counselor or advisor. Any developmental coursework a student may be required to complete may increase the program length.
It is recommended that students pursuing the Pre-Nursing degree contact their potential transfer institutions early in their program regarding specific course choices in each area where electives are listed.
To receive the DTA degree, students must have earned a minimum of a 2.0 cumulative college-level GPA and have completed at least 90 quarter hours of transferable credit, including a minimum of 60 quarter hours of general education courses as shown below.
Program Length: This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Students are required to be proficient in intermediate algebra, which is a prerequisite to the math courses included in this program. Individual courses may have prerequisites.

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## PROGRAM COURSE LIST

${ }^{1}$ Communication ( 10 Cr .)

ENGL\& 235 Technical Writing ........................................................................................... 5
²Quantitative \& Symbolic Reasoning (5 Cr.)
MATH\& 146 Introduction to Stats...................................................................................... 5
${ }^{3,6}$ Humanities ( 15 Cr .)
CMST\& 220 Public Speaking.........................................................................................................
Humanities Elective 5
Humanities Elective 5
${ }^{4}$ Social Sciences ( 15 Cr .)
PSYC\& 100IV General Psychology................................................................................................. 5
PSYC\& 200 Lifespan Psychology..................................................................................................
SOC\& 101 IVV Introduction to Sociology................................................................................... 5
${ }^{5}$ Natural Sciences ( 35 Cr .)
BIOL\& 160 General Biology W/Lab............................................................................... 5
BIOL\& 241 Human A \& P 1 ...................................................................................... 5
BIOL\& 242 Human A \& P 2 .......................................................................................... 5

CHEM\& 121 Intro to Chemistry ............................................................................................... 5
CHEM\& 131 Introduction to Organic/Biochemistry................................................................ 5

${ }^{6}$ Electives ( 10 Cr .)
5-Credit Elective .5

College Success Course (3 Cr.)
COLL 102 College Success for All...
Computer Literacy Course (3 Cr.)
Complete an approved computer literacy course or successfully pass
the computer literacy exam.
TOTAL CREDITS FOR COMPLETION

## Elective note

A specific elective course may be credited toward no more than one distribution or skill area requirement. A maximum of 10 elective credits may be in college-level courses as defined by CPTC, and the remainder shall be fully transferable as defined by the receiving institution. Select courses appropriate for intended major and intended bachelor's institution. Students should contact an advisor at the potential transfer institution regarding their interests and specific course choices.
Northwest University and Walla Walla University require that the second English composition class be a research writing class.
UW Seattle and Seattle University require 10 credits in quantitative/ symbolic reasoning, with the additional class in college algebra or precalculus (at UW Seattle, a class in logic also serves for the additional class).
A curriculum that provides students with an understanding of and sensitivity to human diversity is encouraged (required by WSU). The credits gained in sociology and humanities courses provide opportunities for such a curriculum.
Northwest University requires cultural anthropology and does not accept a course in the sociology discipline as a substitute. Students may be admitted to the BSN without cultural anthropology if they agree to complete the course at NU in the summer prior to their junior year.
Introductory survey courses or review courses do not meet the content level expectations for these natural science requirements.
UW Seattle requires a minimum GPA of 3.0 for three out of the seven natural sciences courses (or 2.8 for four out of the seven) at the time of application when some of the coursework may not yet be completed.
Northwest University requires two credits of genetics as well. Students may be admitted to the BSN without genetics if they agree to complete the course at NU in the summer prior to their junior year.

In order to better prepare for successful transfer, students are encouraged to consult with the institution(s) to which they wish to transfer regarding the humanities courses and other electives that best support or may be required as prerequisites to their nursing curriculum.

## Humanities Electives available through CPTC:

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ART\& 100 Art Appreciation...
```


(Note: Only one 100-level language course may be used to meet the humanities requirement.)

## Notes:

1. Admission application deadlines vary. Students must meet the deadline for the university or universities to which they plan to apply for admission to transfer.
2. For admission to nursing as a major, it is critical to note that grade point average requirements vary and admission is competitive across the several programs in nursing. Although some nursing programs note minimum GPA requirements for nursing prerequisites and other required courses, meeting the minimum requirements does not guarantee nursing admission. It is strongly recommended that students check with their transferring institution for GPA requirements.
3. Certain schools may have additional "university-specific" requirements that are not prerequisites to admission to the nursing major but will need to be completed prior to graduation or, as noted above for NU, prior to commencement of nursing courses. Contact with advisors from individual schools for institutional requirements is highly recommended, since this DTA may not meet every institution-specific graduation requirement. NU, for example, requires Old Testament and New Testament in the summer prior to beginning nursing classes.
4. Certain schools may have additional "university-specific" requirements for admission to the institution that are not prerequisites specifically identified in the DTA requirements. UW Seattle, for example, requires 10 credits of a world language if the applicant has not completed two years of a single language in high school; PLU requires a year of a foreign language at the college level if two years of high school foreign language has not been completed.
5. Introductory survey courses or review courses do not meet the content-level expectations for these natural science requirements. UW Seattle requires a minimum GPA of 3.0 for three out of seven natural sciences courses (or 2.8 for four out of the seven) at the time of application when some of the course work may not yet be completed. Northwest University requires 2 credits of genetics as well. Students may be admitted to the BSN without genetics if they agree to complete the course at NU in the summer prior to junior year.
6. In order to better prepare for successful transfer, students are encouraged to consult with the institution(s) to which they wish to transfer regarding the humanities courses and other electives that best support or may be required as prerequisites to their nursing curriculum.

## ACCOUNTING

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

## ASSOCIATE IN APPLIED SCIENCE - T DEGREE

Prepares students for careers in accounting with starting positions such as a junior-level accountant, entry-level accounting supervisor, full-charge bookkeeper, fiscal technician, accounting assistant, or other entry-level accounting clerks. Positions may also include specialty areas

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such as payroll, income taxes, and QuickBooks applications.
Participate in realistic training through internships. Technical course curriculum is based on current industry standards. Course delivery varies between live, hybrid and online methods.

## Student Learning Outcomes:

Upon successful completion of the Accounting degree, students will:

- Demonstrate competent, knowledgeable, and resourceful application of industry standards.
- Communicate effectively.
- Access information, analyze source documents, and record accounting transactions using common practices.
- Identify and plan a career path.
- Demonstrate organizational skills.
- Prepare financial statements and required reports.

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science Transfer (AAS-T). The different requirements for each degree are listed below.

## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- Any 100-level math class
- PSYC\& $100^{\mathrm{DVV}}$ General Psychology (PSY $112^{\mathrm{DVV}}$, SOC\& $101^{\mathrm{DVv}}$, or other humanities course that meets the diversity requirement)
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements ( 23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142, MATH\& 146 or MATH\& 151
- 5 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ or SOC\& $101^{\text {DIV }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100 , ASL\& 121, ASL\& 122, BIOL\& 160 , BIOL\& 175, BIOL\& 241, BIOL\& 242, BIOL\& 260, CHEM\& 110, CHEM\& 121, CHEM\& 131, GEOL\& 110, HIST\& 146, HIST\& 147, HIST\& 148, HUM\& 101, MUSC\& 105 , PHYS\& 114, POLS\& 202, PSYC\& 100, PSYC\& 200, PSYC\& 220, SOC\& 101
- 3 credits in College Success: COLL 102

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.
Program Length: This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements. All courses must be completed with a minimum "C" grade to graduate.
Admission Dates: Recommended fall and spring quarters or by instructor's permission. Students with prior learning or experience should contact the instructor prior to enrolling for individual start dates, class schedule and options.
Prerequisite(s): Successful completion of MAT 094 and ENG 091 or equivalent or instructor's permission.
ACTG 115* Bookkeeping II............................................................................................... 4
ACTG 120* Electronic Business Math ........................................................................... 2
ACTG 135 Accounting Spreadsheets I .......................................................................... 5


ACTG 160 Payroll \& Business Taxes ..................................................................................... 5
ACCT\& 201 Principles of Accounting I.......................................................................... 5
BUS\& 201 Business Law............................................................................................ 5
ACCT\& 202 Principles of Accounting II ......................................................................... 5
ACTG 222 Fundamentals of Individual Income Tax Accounting.......................................... 4
ACCT\& 203 Principles of Accounting III................................................................................. 5
ACTG 224 Fundamentals of Governmental/Nonprofit Accounting ................................. 5
ACTG 211 Principles of Accounting I Lab................................................................... 2
ACTG 212 Principles of Accounting II Lab ......................................................................... 3
ACTG 213 Principles of Accounting III Lab........................................................................ 3
ACTG 236 Accounting Spreadsheets II................................................................................ 3
ACTG 241 QuickBooks III ............................................................................................ 4
ACTG 260 Business Office I..................................................................................... 5
ACTG $262^{\text {CAP }}$ Business Office II..................................................................................... 5
ACTG 291 Individual Income Tax Accounting ................................................................ 5
ACTG 293 Individual Income Tax Accounting Lab........................................................ 5
CAS $121^{c l}$ Word I...................................................................................................... 3
CAS 141 PowerPoint.................................................................................................................. 3


Plus select 5 credits from options (below)

ACTG 295 Individual Income Tax Preparation ............................................................... 5
TECHNICAL COURSE REQUIREMENTS ............................................................ 103
AAT REQUIREMENTS Credits
Technical Course Requirements ............................................................................ 103
AAT General Education Requirements (See list above)....................................... 18

TOTAL CREDITS FOR AAT COMPLETION..................................................... 121
AAS-T REQUIREMENTS
Technical Course Requirements ...................................................................... 103
AAS-T Degree General Education Requirements (See list above)......................... 23

TOTAL CREDITS FOR AAS-T COMPLETION................................................... 126
*Courses are articulated with high schools for dual credit.

## ACCOUNTING

## BOOKKEEPING CLERK

## CERTIFICATE

Prepares students for employment as accounts receivable, accounts payable, payroll clerks, or other bookkeeping clerk positions. Introduces bookkeeping and accounting theory complemented with Microsoft Office applications and automated accounting software. Enhances the skills of an office clerk. Technical course curriculum is based on current industry standards. Course delivery varies between live, hybrid and online methods.

Program Length: This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements. All courses must be completed with a minimum "C" grade to graduate.
Admission Dates: Recommended fall and spring quarters or by instructor's permission. Students with prior learning or experience should contact the instructor prior to enrolling for individual start dates.
Prerequisite(s): Successful completion of MAT 094 and ENG 091 or equivalent or instructor's permission.

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| ACTG 110* |  |
| :---: | :---: |
| ACTG 115* | Bookkeeping II.................................................................................... 4 |
| ACTG 120* | Electronic Business Math ................................................................................. |
| ACTG 135 | Accounting Spreadsheets I ................................................................. 5 |
| ACTG 141 |  |
| ACTG 143 | QuickBooks II................................................................................... 3 |
| ACTG 160 | Payroll \& Business Taxes .................................................................... 5 |
| ACCT\& 201 | Principles of Accounting I.............................................................................. 5 |
| ACTG 211 |  |
| ACTG 236 |  |
| CAS 121 ${ }^{\text {cl }}$ |  |
| CAS $141^{\text {cl }}$ |  |
| COLL 102 | College Success for All.................................................................... 3 |
| TOTAL CREDITS FOR COMPLETION ............................................................... 44 |  |
| *Courses a | ticulated with high schools for dual credit. |

## ARCHITECTURAL ENGINEERING DESIGN

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

## ASSOCIATE IN APPLIED SCIENCE - T DEGREE

Prepares students for employment in the field of architectural design or a related technical field, such as drawing for product manufacturers, contractors, engineering or design firms. Prior graduates have entered engineering technician positions in computer-aided drafting and design (CADD); project management; specification writing; cost estimating; residential design, site planning, and developing; customer sales and service; and performing structural calculations and computations for engineering of wood trusses and joists. Students participate in realistic training activities as a part of their educational experience.

## Student Learning Outcomes:

Upon successful completion of the Architectural Engineering Design degree, students will be able to:

- Demonstrate competency in the latest computer aided drafting (CAD) software, such as Revit, AutoCAD, Civil 3D, and SketchUp.
- Apply state building and energy codes and industry standards to create a complete set of construction documents for a single-family home.
- Create a dream home for a client based on their ideas, needs, budget, timeline, and site features.
- Manage a construction project to meet the construction schedule through the three phases of design: schematic design, design development, and construction documents.
- Analyze civil engineering data to create civil drawings using industry mapping software.
- Use statics and dynamics to assess engineering components of building materials and physical forces upon them.
- Research and categorize products used within the construction industry using industry's MasterFormat system in conjunction with the development of three-part specifications.
- Communicate effectively through written, oral, and visual means architectural, engineering, and design industry issues and associated design solutions.
In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) or the Associate in Applied Science-T
(AAS-T). The different requirements for each degree are listed below.
AAT Degree General Education Requirements (18 credits):
- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- Any 100 level math class
- PSYC\& $100^{\text {DIV }}$ General Psychology (PSY $112{ }^{\mathrm{DVV}}$, SOC\& $101^{\mathrm{DVV}}$, or other humanities course that meets the diversity requirement)
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements ( 23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142 , MATH\& 146 or MATH\& 151
- 5 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ or SOC\& $101^{\text {DIV }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100, ASL\& 121, ASL\& 122, BIOL\& 160, BIOL\& 175 , BIOL\& 241, BIOL\& 242, BIOL\& 260, CHEM\& 110, CHEM\& 121 , CHEM\& 131, GEOL\& 110 , HIST\& 146 , HIST\& 147 , HIST\& 148 , HUM\& 101, MUSC\& 105 , PHYS\& 114, POLS\& 202, PSYC\& 100 , PSYC\& 200, PSYC\& 220, SOC\& 101
- 3 credits in College Success: COLL 102

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity and computer literacy requirements.
Program Length: This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

Admission Dates: Fall and spring quarters.
Prerequisite(s): Successful completion of ENG 091 and MAT 092.
Computer skills are highly recommended prior to starting ARC courses.

## PROGRAM COURSE LIST

ARC 122 Residential Drafting \& Design I...................................................................... 5
ARC 124 Residential Drafting \& Design II......................................................................... 5
ARC 126 Residential Drafting \& Design III...................................................................... 5
ARC 144 Detailing and Light Construction.............................................................. 5
ARC 151 Construction Materials Research ...................................................................... 5
ARC 171 Drafting Technologies I ............................................................................ 5
ARC 174 Civil Engineering .................................................................................... 5
ARC 182 ${ }^{\text {CL }}$ Introduction to CAD Drafting............................................................................. 5
ARC 191 Engineering Mechanics of Materials................................................................ 5
ARC 220 Residential Drafting \& Design IV................................................................. 5
ARC 223 Design Project I............................................................................................ 5
ARC 225CAP Design ProjectII............................................................................................. 5

ARC 237 Energy Analysis.............................................................................................. 1
ARC 255 Employment Research..............................................................................
ARC 262 Intro to 3D Modeling ...................................................................................... 3
ARC 282 Intro to Building Information Modeling................................................................. 5
ARC 286 Advanced Building Information Modeling.................................................. 5
ARC 293 Engineering Statics ...................................................................................... 5

TECHNICAL COURSE REQUIREMENTS ................................................................ 88
Electives:
ARC 227 Special Intern Project.................................................................................. 5
ARC 229 Special Design Project................................................................................ 5
ARC $288^{\text {Cl }}$ Applied CADD ......................................................................................... 5
AAT PROGRAM REQUIREMENTS
Technical Course Requirements ....................................................................... 88
AAT General Education Requirements (See list above)........................................ 18
TOTAL CREDITS FOR AAT COMPLETION
106

## AAS-T PROGRAM REQUIREMENTS

Technical Course Requirements ............................................................................... 88
AAS-T Degree General Education Requirements (See list above)........................... 23
TOTAL CREDITS FOR AAS-T COMPLETION.
Clover Park Technical College and Washington State University (WSU) have agreed upon a Customized Articulation Agreement, which states that students who complete the Architectural Engineering Design AAS-T at Clover Park with at least a 3.0 cumulative grade point average will be certified as Architectural Studies majors at WSU and will be granted junior standing.

## ARCHITECTURAL ENGINEERING DESIGN

## ARCHITECTURAL CAD DRAFTING

## CERTIFICATE

Prepares students for entry-level careers in computer-aided drafting within the construction industry. Students will learn to create drawings and plans that show the technical details of an architectural structure from all angles.
CAD drafters use information provided by engineers, architects and clients to develop technical drawings that visually present the project and include essential details.
The certificate is a pathway to the Architectural Engineering Design associate degree program.
Program Length: This three-quarter certificate is specifically developed to provide students with assistance in gaining the skills they will need to be successful in the industry.
Admission Dates: Fall and spring quarters.
Prerequisite(s): Successful completion of ENG 091 and MAT 092.
Computer skills are highly recommended prior to starting ARC courses.

## PROGRAM COURSE LIST

| ARC 122 | Residential Drafting \& Design I. |  |
| :---: | :---: | :---: |
| ARC 124 | Residential Drafting \& Design II. |  |
| ARC 126 | Residential Drafting \& Design III. |  |
| ARC 144 | Detailing \& Light Construction.. |  |
| ARC 151 | Construction Materials Research |  |
| ARC 171 | Drafting Technologies I. |  |
| ARC 182 ${ }^{\text {Cl }}$ | Introduction to CAD Drafting. |  |
| ARC 262 | Intro to 3D Modeling. |  |
| ARC 282 | Intro to Building Information Modeling. |  |
| English Composition (or higher) or Public Speaking |  |  |
| Any 100-level Math Class. |  |  |
| General Psychology or Psychology of the Workplace. |  |  |
| COLL 102 | College Success for All. |  |

## AUTOMOTIVE COLLISION TECHNICIAN

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

Skilled automotive collision technicians may be employed in new car dealerships, independent auto collision shops, and industrial and government agency motor pools.
Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

## Student Learning Outcomes:

Upon successful completion of the Automotive Collision Technician degree, students will:

- Work safely and responsibly within safety and environmental guideline standards for a shop.
- Identify, care for, and use hand and power tools.
- Arrange welding equipment and select proper equipment for heating, cutting, and MIG welding.
- Identify types of plastic and select correct repair material for proper repair.
- Identify types of glass and installation materials and install/adjust auto glass.
- Shrink, stretch, and straighten metal. Mix and apply plastic filler.
- Inspect, remove, install, and align panels, doors, and trim to meet industry standards.
- Diagnose, twist, mash, sag, and side sway. Set up and measure.
- Evaluate collision damage and enter information into computer to achieve an accurate repair cost.
- Select specific materials and prepare surfaces to be topcoated.
- Determine type of paint, apply topcoat, and blend finishes.
- Correct surface defects and final clean vehicles inside and out for delivery.
Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of "C" (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a "C" (2.0) GPA or higher.

Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer-literacy requirements.
Students entering the Automotive Collision Technician degree from the Ford Maintenance \& Light Repair Technician program will not be required to repeat equivalent courses upon entering the Automotive Collision Technician degree program. They will be required to take IAUT 140 Basic Automotive Welding.
Program Length: This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance \& Light Repair Technician certificate, or equivalent with a "C+" (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver's license is required.

## INTRODUCTION TO AUTOMOTIVE LIST

IAUT 104 Introduction to Automotive Electrical............................................................... 4
IAUT 105 Introduction to Automotive Trades................................................................. 4
IAUT 115 Introduction to Automotive Steering, Suspension \& Brakes............................... 5

IAUT 140 Basic Automotive Welding....................................................................... 4
Total Automotive Core Requirements ........................................................................ 19
PROGRAM COURSE LIST
ACT 102 Fundamentals of Collision Repair.................................................................. 3

## (CONTINUED FROM PREVIOUS PAGE)

| ACT 106 |  |
| :---: | :---: |
| ACT 110 | Welding, Heating, \& Cutting.............................................................. 4 |
| ACT 115 | Plastics/SMC Repair ..................................................................................... |
| ACT 120* |  |
| ACT 125 | Introduction to Metal Straightening.............................................................. 3 |
| ACT 132 |  |
| ACT 133 |  |
| ACT 134 ${ }^{\text {CAP }}$ |  |
| ACT 141 | Auto Body Aluminum Repair ................................................................ 4 |
| ACT 145 | Collision Estimating........................................................................ 5 |
| ACT 151 | Refinish Equipment Preparation........................................................... 6 |
| ACT 154 |  |
| ACT 156 |  |
| ACT 157 | Post-Prime Preparation........................................................................... 5 |
| ACT 166CAP | Surface Imperfections/Exterior Trim.......................................................... 5 |
| ACT 171 |  |
| English Comp | n (or higher) or Public Speaking ........................................................... 5 |
| Any 100-Leve | th Class.................................................................................................... 5 |
| General Psyc | y (or other social science or humanities class) .............................................. 5 |
| Computer Lite pass the com | Requirement (Complete an approved computer literacy course or successfully iteracy exam) |
| COLL 102 | College Success for All.................................................................. 3 |
| TOTAL CREDITS FOR COMPLETION ............................................................ 122 |  |
| *Articulate | ses with high schools for dual enrollment |

## AUTOMOTIVE COLLISION TECHNICIAN REFINISHING TECHNICIAN

## CERTIFICATE

Skilled automotive collision refinishing technicians may be employed in new car dealerships and independent auto collision shops, as well as industrial and government agency motor pools.
Graduates of this program will enter the trade with considerable practical skills gained through hands-on repair experience throughout the program.
Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of "C" (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a "C" (2.0) GPA or higher.
Students entering the Refinishing Technician certificate from the Ford Maintenance \& Light Repair Technician program will not be required to repeat equivalent courses upon entering the Refinishing Technician certificate. They will be required to take IAUT 140 Basic Automotive Welding.

Program Length: This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance \& Light Repair Technician certificate, or equivalent with a "C+" (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver's license is required.

## INTRODUCTION TO AUTOMOTIVE LIST

IAUT 104
Introduction to Automotive Electrical. $\qquad$ ... 4
IAUT 105 Introduction to Automotive Trades .....  4
IAUT 115 Introduction to Automotive Steering, Suspension \& Brakes .....  5IAUT 130
IAUT 140Automotive HVAC 2
Total Automotive Core Requirements ..... 19
PROGRAM COURSE LIST
ACT 141 Auto Body Aluminum Repair .....  .4
ACT 145 Collision Estimating.. .....  5
ACT 151 Refinish Equipment Preparation. .....  6
ACT 154 Topcoat Refinishing .....  8
ACT 156 Pre-Prime Preparation .....  5
ACT 157 Post-Prime Preparation .....  .5
ACT $166^{\text {CAP }}$ Surface Imperfections/Exterior Trim. .....  5
ACT $171 \quad$ Plastic Refinishing .....  5
English Composition (or higher) or Public Speaking. .....  5
Any 100-Level Math Class. .....  .5
General Psychology (or other social science or humanities class). .....  5
COLL $102 \quad$ College Success for All. .....  3
TOTAL CREDITS FOR COMPLETION ..... 80

# AUTOMOTIVE COLLISION TECHNICIAN STRUCTURE REPAIR TECHNICIAN 

## CERTIFICATE

Skilled automotive collision structure repair technicians may be employed in new car dealerships and independent auto collision shops, as well as industrial and government agency motor pools.
Graduates of this program will enter the trade with considerable practical skills gained through actual hands-on repair experience throughout the program.
Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of "C" (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a "C" (2.0) GPA or higher.
Program Length: This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance \& Light Repair Technician certificate, or equivalent with a "C+" (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver's license is required.

## INTRODUCTION TO AUTOMOTIVE LIST

IAUT 104 Introduction to Automotive Electrical .....  4
IAUT 105 Introduction to Automotive Trades. .....  .4
IAUT 115 Introduction to Automotive Steering, Suspension \& Brakes .....  5
IAUT 130 Automotive HVAC. .2
IAUT 140 Basic Automotive Welding .....  4
Total Automotive Core Requirements ..... 19

## (CONTINUED FROM PREVIOUS PAGE)

## PROGRAM COURSE LIST

| ACT 102 | Fundamentals of Collision Repair | 3 |
| :---: | :---: | :---: |
| ACT 106 | Body Shop Equipment. | 3 |
| ACT 110 | Welding, Heating, \& Cutting. | 4 |
| ACT 115 | Plastics/SMC Repair. | 4 |
| ACT 120 | Glass, Trim, \& Hardware. | 5 |
| ACT 125 | Introduction to Metal Straightening. | 3 |
| ACT 132 | Panel Replacement. | 6 |
| ACT 133 | Panel Repair. | 6 |
| ACT 134 ${ }^{\text {CAP }}$ | Auto Collision Major Repair. | 5 |
| ACT 141 | Auto Body Aluminum Repair | 4 |
| English Composition (or higher) or Public Speaking ...................................................................... 5 |  |  |
| Any 100-Level Math Class........................................................................................................... 5 |  |  |
| General Psychology (or other social science or humanities class) .................................................. 5 |  |  |
| COLL 102 | College Success for All..... | ... 3 |

TOTAL CREDITS FOR COMPLETION 80

Note: ACT 120 is articulated with high schools for dual enrollment.

## AUTOMOTIVE RESTORATION \& CUSTOMIZATION - FINISHING

## CERTIFICATE

Focuses on exterior repair and restoration, customization, preparation for paint, stock, and/or custom finishing.
Designed to provide entry-level knowledge and skills necessary to restore and/or customize vehicles.
Students will participate in realistic training activities as part of their educational experience and/or will work on their own projects.
Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

## Student Learning Outcomes:

Upon successful completion of the Automotive Restoration \& Customization - Finishing certificate, students will:

- Work safely and responsibly within safety and environmental guideline standards, including OSHA and EPA.
- Demonstrate proper use and care of hand and power tools.
- Select proper equipment for heating, cutting, and welding. Demonstrate proper selection and use.
- Describe and/or demonstrate setup and use of sheet metal forming equipment.
- Demonstrate techniques of custom panel forming using metal, composites, and other materials.
- Shrink, stretch, and straighten metal and mix and apply plastic filler for the purpose of restoring or customizing body panels.
- Inspect, remove, install, and align panels, doors, and trim to meet restoration standards.
- Diagnose condition of frame or chassis to determine suitability of modifications or road-worthiness.
- Evaluate vehicle condition for restoration planning.
- Evaluate vehicle surface and prepare for topcoat finishing.
- Mix and adjust color, apply topcoat, and/or custom finishes.
- Correct finish defects and clean vehicles inside and out for delivery.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of "C" (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all
courses must be completed with a "C" (2.0) GPA or higher.
Program Length: This program is approximately four to six quarters long after meeting prerequisites, depending on the time students need to satisfactorily complete all graduation requirements and prerequisites, master the skills and techniques covered, and finish a capstone project.
Admission Dates: Summer, fall, winter, and spring quarters, by instructor's permission only.
Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance \& Light Repair Technician certificate, or equivalent with a "C+" (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver's license is required.

## PROGRAM COURSE LIST

ARCF 103 Fundamentals \& Shop Equipment............................................................................ 3

ARCF 114 Basic Repairs \& Assembly.......................................................................................... 8
ARCF 119 Custom Fabrication............................................................................................ 6
ARCF 124 Refinishing Equipment..................................................................................................... 4
ARCF 129 Refinish Preparation .............................................................................................. 7
ARCF 134 Custom Refinishing ................................................................................................. 6
ARCF 141 Surface Imperfections/Show \& Shine.................................................................... 4
ARCF 154 Automotive Restoration \& Customization Finishing Lab............................................-9
ARCF 167 Custom Paint Application ...................................................................................... 3
ARCF 168 Applied Metal Skills .................................................................................................... 3
English Composition (or higher) or Public Speaking ............................................................................. 5

General Psychology (or other social science or humanities class) ............................................... 5

TOTAL CREDITS FOR COMPLETION ................................................................ 70-75
Recommended Electives

| ARCF 130 | Advanced Paint Applications. | . 4 -6 |
| :---: | :---: | :---: |
| ARCF 133 | Fiberglass/Composites Techniques. | 4-6 |
| ARCF 159 | Metal Straightening \& Shaping... | 4-6 |
| ARCF 170 | Custom Refinishing - Special Projects | 4-6 |

## AUTOMOTIVE TECHNICIAN

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

This ASE-certified program prepares students for entry-level positions as automotive technicians. Students participate in realistic training experiences that prepare them for pre-apprenticeship training and ASE certification. Cooperative work experience is available with instructor's permission. Credits will depend on time spent in co-op.
Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

## Student Learning Outcomes:

Upon successful completion of the Automotive Technician degree, students will:

- Understand the theory and operation of, identify components of, and diagnose and repair automotive heating and air conditioning systems in a live work environment.
- Understand the theory and operation of, identify components of, and diagnose and repair automatic transmission/transaxle in a live work environment.
- Understand the theory and operation of, identify components of, and diagnose and repair manual drivetrain, drive axles, and four-wheel and all-wheel drive systems in a live work environment.
- Understand the theory and operation of, identify components of, and


## (CONTINUED FROM PREVIOUS PAGE)

diagnose and repair automotive electrical and electronic systems in a live work environment.

- Understand the theory and operation of, identify components of, and diagnose and repair fuel, ignition, and emission systems in a live work environment.
- Understand the theory and operation of, identify components of, and diagnose and repair steering, suspension, standard brake, anti-lock brake, and stability control systems in a live work environment.
- Understand the theory and operation of, identify components of, and diagnose and repair minor and major engine mechanical systems in a live work environment.
- Understand the theory and operation of, identify components of, and diagnose and repair Hybrid, Electric, and Alternate Fuel systems in a live work environment.
- Earn an automotive credential from one or more of the following sources: ASE, Ford Maintenance \& Light Repair, Audi Education Partnership.
To receive a certificate or degree in an automotive program, all courses must be completed with a 2.0 GPA or higher. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter.
Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity and computer literacy requirements.
Program Length: This program is approximately seven quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Must have required tools and textbooks.
Admission Dates: Fall and spring. Summer and winter quarters with instructor's permission only.

Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance \& Light Repair Technician certificate, or equivalent with a "C+" (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver's license is required.

## INTRODUCTION TO AUTOMOTIVE LIST

IAUT 104 Introduction to Automotive Electrical........................................................................ 4
IAUT 105 Introduction to Automotive Trades............................................................................. 4
IAUT 115 Introduction to Automotive Steering, Suspension \& Brakes.............................. 5
IAUT 130 Automotive HVAC........................................................................................ 2
IAUT 140 Basic Automotive Welding........................................................................... 4
Total Automotive Core Requirements 19

## PROGRAM COURSE LIST

AUT 147 Automotive Brakes ..................................................................................... 6
AUT 149 Automotive Suspension, Steering, \& Wheel Alignment..................................... 7
AUT 157 Automotive Brakes, Suspension, Steering, \& Wheel Alignment Lab................. 6
AUT 174 Engine Minor Mechanical Repair............................................................... 6
AUT 175 Engine Major Mechanical Repair .................................................................... 7


AUT 212 Electrical Systems..........................................................................................................
AUT 217 Automotive Ignition Systems.................................................................................. 7
AUT 223
AUT 236
Automotive Fuel Systems...7

Automotive Emissions Systems
AUT 239 Automotive Clutches \& Manual Transmissions................................................ 9
AUT 243 Automotive Axles, Drivelines, Differentials \& Transfer Cases .......................... 6
AUT 246 Manual Drive Trains \& Axles Lab ................................................................. 4
AUT 247 Automatic Transmissions............................................................................. $7 .{ }^{-}$
AUT 250 Automatic Transaxles ...................................................................................................
AUT 251CAP Automatic Transmission/Transaxle Lab.......................................................... 4
AUT 255 Automotive Air Conditioning, Heating \& Ventilation ......................................... 6
AUT 270 Introduction to Hybrid Safety ....................................................................... 4
English Composition (or higher) or Public Speaking .....  .5
Any 100-Level Math Class. .....  5
General Psychology (or other social science or humanities class). .....  .5
Computer Literacy Requirement (Complete an approved computer literacy course or successfullypass the computer literacy exam)...
COLL 102 College Success for All. .....  .3
TOTAL CREDITS FOR COMPLETION ..... 159
Note: AUT 147-236 must be taken in consecutive order. Students must take AUT209 and AUT 212 prior to AUT 255
Optional Course
AUT 295, On-the-Job Training/Work-Based Learning. ..... 1-12
Optional Electives
Students may also choose to take any course in the following programsas an optional elective for this program: Auto Collision, Auto Restorationand Customization, and Automotive Hybrid.
Students entering the Auto Technician degree from the Ford Maintenance \& Light Repair Technician program will not be required to repeat equivalent courses upon entering the Auto Technician degree program. They will be required to take IAUT 140 Basic Automotive Welding.

## AUTOMOTIVE TECHNICIAN DRIVE TRAIN TECHNICIAN

## CERTIFICATE

This ASE-certified program is designed to prepare students for entry-level positions as automotive technicians. Students participate in realistic training experiences that prepare them for pre-apprenticeship training and ASE certification.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of "C" (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a "C" (2.0) GPA or higher.
Program Length: This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance \& Light Repair Technician certificate, or equivalent with a "C+" (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver's license is required.

## INTRODUCTION TO AUTOMOTIVE LIST

| IAUT 104 | Introduction to Automotive Electrical............................................................. 4 |
| :---: | :---: |
| IAUT 105 | Introduction to Automotive Trades........................................................ 4 |
| IAUT 115 | Introduction to Automotive Steering, Suspension \& Brakes ............................ 5 |
| IAUT 130 |  |
| IAUT 140 | Basic Automotive Welding....................................................................... 4 |

## (CONTINUED FROM PREVIOUS PAGE)

## PROGRAM COURSE LIST

AUT 239 Automotive Clutches \& Manual Transmissions. .....  9
AUT 243 Automotive Axles, Drivelines, Differentials \& Transfer Cases.. .....  6
AUT 246 Manual Drive Trains \& Axles Lab .....  .4
AUT 247 Automatic Transmissions... .....  7
AUT 250 Automatic Transaxles .....  7
AUT 251 CAP Automatic Transmission/Transaxle Lab. .....  4
English Composition (or higher) or Public Speaking .....  .5
Any 100-Level Math Class .5
General Psychology (or other social science or humanities class) .....  5
COLL 102 College Success for All. 74
AUTOMOTIVE TECHNICIAN ELECTRICAL, ELECTRONICS \& AC/HEATING TECHNICIAN
CERTIFICATE

This ASE-certified program is designed to prepare students for entry-level positions as automotive technicians. Students participate in realistic training experiences that prepare them for pre-apprenticeship training and ASE certification.
Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of "C" (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a "C" (2.0) GPA or higher.
Program Length: This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance \& Light Repair Technician certificate, or equivalent with a "C+" (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver's license is required.

## INTRODUCTION TO AUTOMOTIVE LIST

| IAUT 104 | Introduction to Automotive Electrical................................................................. 4 |
| :---: | :---: |
| IAUT 105 | Introduction to Automotive Trades.................................................................... 4 |
| IAUT 115 | Introduction to Automotive Steering, Suspension \& Brakes .............................. 5 |
| IAUT 130 | Automotive HVAC .......................................................................................... 2 |
| IAUT 140 | Basic Automotive Welding.............................................................................. 4 |

## PROGRAM COURSE LIST

AUT 209 Electronic Systems...................................................................................................... 7
AUT 212 Electrical Systems....................................................................................................... 9
AUT 255 Automotive Air Conditioning, Heating \& Ventilation ............................................ 6
COLL 102 College Success for All.............................................................................................. 3

TOTAL CREDITS FOR COMPLETION

## AUTOMOTIVE TECHNICIAN ENGINE REPAIR \& ENGINE PERFORMANCE TECHNICIAN

## CERTIFICATE

This ASE-certified program is designed to prepare students for entry-level positions as automotive technicians. Students participate in realistic training experiences that prepare them for pre-apprenticeship training and ASE certification.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of "C" (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a "C" (2.0) GPA or higher.
Program Length: This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: By instructor's approval.
Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance \& Light Repair Technician certificate, or equivalent with a "C+" (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver's license is required.

## INTRODUCTION TO AUTOMOTIVE LIST

IAUT 104 Introduction to Automotive Electrical........................................................... 4
IAUT 105 Introduction to Automotive Trades..................................................................... 4
IAUT 115 Introduction to Automotive Steering, Suspension \& Brakes............................... 5
IAUT 130 Automotive HVAC.........................................................................................................
IAUT 140 Basic Automotive Welding..................................................................................... 4
Total Automotive Core Requirements ....................................................................... 19

## PROGRAM COURSE LIST

AUT 174

Engine Minor Mechanical Repair
... 6

AUT 175 Engine Major Mechanical Repair ....................................................................... 7


AUT 212 Electrical Systems.............................................................................................. 9
AUT 217 Automotive Ignition Systems................................................................................................
AUT 223 Automotive Fuel Systems ............................................................................. 7
AUT 236 Automotive Emissions Systems..................................................................... 7
English Composition (or higher) or Public Speaking ...................................................................... 5

General Psychology (or other social science or humanities class) ................................................... 5
COLL 102 College Success for All............................................................................ 3
TOTAL CREDITS FOR COMPLETION ..................................................................... 90
Note: AUT 174-AUT 236 must be taken in consecutive order.

# AUTOMOTIVE TECHNICIAN FORD MAINTENANCE \& LIGHT REPAIR TECHNICIAN 

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

Designed by Ford Motor Company to prepare students with the basic skills needed to gain employment as a maintenance and light repair technician.
In addition to Ford training, students receive hands-on experience working with Ford vehicles and using the latest Ford diagnostic tools.
The program is also designed to prepare students for entry-level positions as automotive technicians. Students participate in realistic training that prepares them for pre-apprenticeship training and ASE certification. Cooperative work experience is available with instructor's permission. Credits will depend on time spent in co-op.
Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

## Student Learning Outcomes:

Upon successful completion of the Ford Maintenance \& Light Repair Automotive Technician degree, students will:

- Identify basic automotive systems and shop safety requirements.
- Set up welding equipment and select proper equipment for heating, cutting, and MIG welding.
- Diagnose and repair standard and ABS systems.
- Diagnose and repair suspension and steering systems and perform wheel alignment procedures.
- Perform brakes, suspension, and steering repairs in a live work environment.
- Diagnose and repair minor engine mechanical systems.
- Diagnose and repair major engine mechanical systems.
- Perform engine mechanical repairs in a live work environment.
- Diagnose and repair automotive electrical systems.
- Diagnose and repair automotive electronic systems.
- Diagnose and repair automotive heating and air conditioning systems.
- Diagnose and repair automotive ignition systems.
- Diagnose and repair automotive fuel systems.
- Diagnose and repair automotive emissions systems.
- Diagnose and repair automotive clutch and manual transmission systems.
- Diagnose and repair automotive axles, drivelines, differentials, and transfer cases.
- Perform drive-train repairs in a live work environment.
- Diagnose and repair automatic transmissions.
- Diagnose and repair automatic transaxles.
- Perform automatic transmission/transaxle repairs in a live work environment.
- Earn an automotive credential.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of "C" (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second
quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a "C" (2.0) GPA or higher.
Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

Program Length: This program is approximately seven quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Students transferring to the Automotive Technician degree program may need to withdraw for one or two quarters to finish their program of study.
Admission Dates: Fall, winter, and spring quarters, or by instructor's permission.
Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in FAUT. Valid driver's license is required.

## PROGRAM COURSE LIST

FAUT 120 Ford Introduction to Automotive............................................................................... 2
FAUT $144 \quad$ Ford Basic Electrical Systems Diagnosis and Testing............................................ 6
FAUT 147 Ford Automotive Brakes.............................................................................................. 6
FAUT 149 Ford Automotive Suspension, Steering, \& Wheel Alignment .............................. 7
FAUT 157 Ford Automotive Brakes, Suspension, Steering, \& Alignment Lab....................... 5
FAUT 172 Ford Base Steering, Suspension, \& Alignment........................................................ 6
FAUT 179 Ford General Maintenance \& Tires.......................................................................... 7

FAUT 209 Ford Electronic Systems.............................................................................................. 7
FAUT 212 Ford Electrical Systems ............................................................................................. 9
FAUT 255 Ford Air-Conditioning, Heating \& Ventilation........................................................ 6
IAUT 140 Basic Automotive Welding....................................................................................... 4
AUT 174 Engine Minor Mechanical Repair........................................................................... 6
AUT 175 Engine Major Mechanical Repair .......................................................................... 7
AUT 178 Engine Mechanical Lab............................................................................................. 3
AUT 217 Automotive Ignition Systems..................................................................................... 7
AUT 223 Automotive Fuel Systems............................................................................................. 7
AUT 236 Automotive Emissions Systems.................................................................................. 7
AUT 239 Automotive Clutches \& Manual Transmissions....................................................... 9
AUT 243 Automotive Axles, Drivelines, Differentials \& Transfer Cases .................................. 6

AUT 247 Automatic Transmissions.............................................................................................. 7

AUT 251 ${ }^{\text {CAP }} \quad$ Automatic Transmission/Transaxle Lab .................................................................... 4
AUT 270 Introduction to Hybrid Safety ................................................................................... 4
English Composition (or higher) or Public Speaking ................................................................................ 5
Any 100-Level Math Class........................................................................................................................... 5
General Psychology (or other social science or humanities class) ......................................................... 5
Computer Literacy Requirement (Complete an approved computer literacy course or successfully pass the computer literacy exam).................................................................................................................. 3
COLL 102 College Success for All............................................................................................... 3

TOTAL CREDITS FOR COMPLETION ...................................................................................... 166
Optional Course
AUT 295, On-the-Job Training/Work-Based Learning.................................................................... 1-12

## Optional Electives

Students may also choose to take any course in the following programs as an optional elective for this program: Auto Collision, Auto Restoration and Customization, and Automotive Hybrid.

## AUTOMOTIVE TECHNICIAN FORD MAINTENANCE \& LIGHT REPAIR TECHNICIAN

## CERTIFICATE

Designed by Ford Motor Company to prepare students with the basic skills needed to gain employment as a maintenance and light repair technician.

In addition to Ford training, students receive hands-on experience working with Ford vehicles and using the latest Ford diagnostic tools.
The program is also designed to prepare students for entry-level positions as automotive technicians. Students participate in realistic training that prepares them for pre-apprenticeship training and ASE certification.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

To receive a certificate or degree in an automotive program, all courses must be completed with a 2.0 GPA or higher. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. Students must also successfully complete ENG 094 and MAT 094 by the end of the second quarter.
Program Length: This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Students continuing with the Ford Maintenance and Light Repair Technician degree program may need to withdraw for one or two quarters depending on sequence of courses offered.
Admission Dates: Fall, winter, and spring quarters.
Prerequisite(s): Valid driver's license is required.
Upon completion of the Ford MLR program, students may transfer to the Automotive Technician or the Automotive Collision degree program. Four additional quarters would be required to complete the AAT degree. Students entering the Automotive Technician program or the Automotive Collision program from the Ford MLR program will not be required to repeat equivalent courses. Students will be required to take IAUT 140 Basic Automotive Welding.

## PROGRAM COURSE LIST

## FAUT 120

Ford Introduction to Automotive .. .2
FAUT 144 Ford Basic Electrical Systems Diagnosis and Testing............................................ 6
FAUT 147
Ford Automotive Brakes.
FAUT 149 Ford Automotive Suspension, Steering, \& Wheel Alignment .............................. 7
FAUT 149 Ford Automotive Suspension, Steering, \& Wheel Alignment .............................. 7 .6

FAUT 157 Ford Automotive Brakes, Suspension, Steering, \& Alignment Lab...................... 5
FAUT 172 Ford Base Steering, Suspension, \& Alignment....................................................... 6
FAUT 179 Ford General Maintenance \& Tires....................................................................... 7
FAUT 185 Ford Brake Systems Diagnosis.................................................................................. 2
FAUT 209 Ford Electronic Systems............................................................................................ 7
FAUT 212 Ford Electrical Systems................................................................................................ 9
FAUT 255 Ford Air-Conditioning, Heating \& Ventilation........................................................ 6
English Composition (or higher) or Public Speaking ................................................................................ 5
Any 100-Level Math Class.
General Psychology (or other social science or humanities class) ........................................................ 5
COLL 102 College Success for All............................................................................................. 3

TOTAL CREDITS FOR COMPLETION .81

## AUTOMOTIVE TECHNICIAN FRONT END \& BRAKES TECHNICIAN

## CERTIFICATE

This ASE-certified program is designed to prepare students for entry-level positions as automotive technicians.
Students participate in realistic training experiences that prepare them for pre-apprenticeship training and ASE certification.
To receive a certificate or degree in an automotive program, all courses must be completed with a 2.0 GPA or higher. To remain in the program, all students must have the required textbooks and tools by the start of the third week of classes.
Program Length: This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): Successful completion of Introduction to Automotive, Ford Maintenance \& Light Repair Technician certificate, or equivalent.

## INTRODUCTION TO AUTOMOTIVE LIST

IAUT 104 Introduction to Automotive Electrical............................................................... 4
IAUT 105 Introduction to Automotive Trades............................................................................ 4

IAUT 130 Automotive HVAC...................................................................................................... 2


Total Automotive Core Requirements

## PROGRAM COURSE LIST

AUT 147 Automotive Brakes ....................................................................................................................
AUT 149 Automotive Suspension, Steering, \& Wheel Alignment....................................... 7
AUT 157 Automotive Brakes, Suspension, Steering, \& Wheel Alignment Lab................... 6
COLL 102 College Success for All............................................................................................. 3

TOTAL CREDITS FOR COMPLETION
.41
Note: AUT 147-157 must be taken in consecutive order.

## AUTOMOTIVE TECHNICIAN

## HYBRID \& ALTERNATIVE FUEL VEHICLE TECHNICIAN

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

## ASSOCIATE IN APPLIED SCIENCE - T DEGREE

This ASE-certified program prepares students for entry-level positions as automotive technicians. This degree builds upon the Automotive Technician program by providing an additional quarter of study focused specifically on hybrid and alternative fuel vehicles. Students participate in realistic training that prepares them for employment and ASE certification.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of "C" (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a "C" (2.0) GPA or higher.

## (CONTINUED FROM PREVIOUS PAGE)

## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- Any 100 level math class
- PSYC\& $100^{\text {Div }}$ General Psychology (PSY $112^{\text {Div }}$, SOC\& $101^{\text {Div }}$, or other humanities course that meets the diversity requirement)
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements ( 23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142 , MATH\& 146 or MATH\& 151
- 5 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ or SOC\& $101^{\text {DIV }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100 , ASL\& 121, ASL\& 122 , BIOL\& 160 , BIOL\& 175, BIOL\& 241, BIOL\& 242, BIOL\& 260, CHEM\& 110, CHEM\& 121, CHEM\& 131, GEOL\& 110, HIST\& 146, HIST\& 147, HIST\& 148, HUM\& 101, MUSC\& 105, PHYS\& 114, POLS\& 202, PSYC\& 100, PSYC\& 200, PSYC\& 220, SOC\& 101
- 3 credits in College Success: COLL 102

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity and computer literacy requirements.
Students entering the Hybrid \& Alternative Fuel Vehicle Technician degree from the Ford Maintenance \& Light Repair Technician program will not be required to repeat equivalent courses upon entering the Auto Technician degree program. They will be required to take IAUT 140 Basic Automotive Welding.
Program Length: This program is approximately eight quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Must have required tools and textbooks.
Admission Dates: Fall and spring quarters. Summer and winter quarters with instructor's permission only. Hybrid courses are taught summer quarter only.
Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance \& Light Repair Technician certificate, or equivalent with a "C+" (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver's license is required.

## INTRODUCTION TO AUTOMOTIVE LIST

| IAUT 104 | Introduction to Automotive Electrical..................................................... 4 |
| :---: | :---: |
| IAUT 105 | Introduction to Automotive Trades....................................................... 4 |
| IAUT 115 | Introduction to Automotive Steering, Suspension \& Brakes ........................... 5 |
| IAUT 130 | Automotive HVAC.......................................................................................... |
| IAUT 140 | Basic Automotive Welding............................................................... 4 |

## PROGRAM COURSE LIST

AUT 147
Automotive Brakes
AUT 149 Automotive Suspension, Steering, \& Wheel Alignment..................................... 7 AUT 157 Automotive Brakes, Suspension, Steering, \& Wheel Alignment Lab................. 6
AUT 174
AUT 175
AUT 178
AUT 209
Engine Minor Mechanical Repair..................................................................... 6 . .6

Engine Major Mechanical Repair .................................................................. 7
Engine Mechanical Lab...................................................................................... 3
Electronic Systems........................................................................................................ 7
Electrical Systems................................................................................................. 9
AUT 212
Automotive Ignition Systems...

AUT 223
AUT 236
AUT 239
AUT 243
AUT 246
AUT 247
AUT 250
AUT $251^{\text {CA }}$
AUT 255
AUT 270
AUTH 105
AUTH 110
AUTH 115
AUTH 120
AUTH 125
AUTH 130
AUTH 135
AUTH 140
AUTH 145
Automotive Fuel Systems .7
Automotive Emissions Systems.. .....  7
Automotive Clutches \& Manual Transmissions .....  9
Automotive Axles, Drivelines, Differentials \& Transfer Cases. .....  6
Manual Drive Trains \& Axles Lab. .....  .4
Automatic Transmissions ..... $\ldots . .7$
Automatic Transaxles. .....  7
Automatic Transmission/Transaxle Lab .....  .4
Automotive Air Conditioning, Heating \& Ventilation .....  .6
Introduction to Hybrid Safety .....  .4
Hybrid/Alternate Fuel Introduction \& Safety. .....  2
Alternate Fuel Vehicle Systems .....  2
Toyota Hybrid System Overview. .2
Toyota Prius Hybrid System. 2
Honda Hybrid System Overview. .....  2
Honda Civic IMA Hybrid System .....  2
Ford Escape/Mercury Mariner Hybrid System Overview.. .....  2
General Motors \& Other Hybrid Systems Overview .....  2
TECHNICAL COURSE REQUIREMENTS ..... 156
AAT PROGRAM REQUIREMENTS
Technical Course Requirements ..... 156
Computer Literacy Requirement (Complete an approved computer literacy courseor successfully pass the computer literacy exam) 3
AAT General Education Requirements (See list above) .....  18
TOTAL CREDITS FOR AAT COMPLETION ..... 177
AAS-T PROGRAM REQUIREMENTS
Technical Course Requirements ..... 156
Computer Literacy Requirement (Complete an approved computer literacy course or successfully pass the computer literacy exam). .....  3
AAS-T Degree General Education Requirements (See list above) .....  23
TOTAL CREDITS FOR AAS-T COMPLETION ..... 182
Note: Must take AUT 209 and AUT 212 prior to AUT 255.

## AUTOMOTIVE TECHNICIAN

## HYBRID \& ALTERNATIVE FUEL VEHICLE TECHNICIAN

## CERTIFICATE

This certificate covers the history and evolution of hybrid, electric and alternate-fuel vehicles; general safety precautions and procedures; and required and recommended tools for servicing. This certificate is designed to give students the theory and hands-on experience needed to safely and confidently service this growing vehicle population.

To receive a certificate or degree in an automotive program, all courses must be completed with a 2.0 GPA or higher. To remain in the program, all students must have the required textbooks by the start of the third week of classes and must have the required tools by the start of the second quarter.
Program Length: This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements. Must have required tools and textbooks.
Admission Dates: Hybrid courses are taught summer quarter only. Fall and spring admission to the Automotive Technician program.
Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance \& Light Repair

## (CONTINUED FROM PREVIOUS PAGE)

Technician certificate, or equivalent with a "C+" (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. A valid driver's license is required. Graduation from an ASE/NATEF certified program or two years of industry experience with instructor's permission. Must have approved safety glasses, coveralls and highvoltage gloves.

## PROGRAM COURSE LIST

AUTH 105 Hybrid/Alternate Fuel Introduction \& Safety......................................................... 2
AUTH 110 Alternate Fuel Vehicle Systems.................................................................................. 2
AUTH 115 Toyota Hybrid System Overview............................................................................. 2
AUTH 120 Toyota Prius Hybrid System....................................................................................... 2
AUTH 125 Honda Hybrid System Overview.............................................................................. 2
AUTH 130 Honda Civic IMA Hybrid System ............................................................................ 2
AUTH 135 Ford Escape/Mercury Mariner Hybrid System Overview.................................. 2
AUTH 140 General Motors \& Other Hybrid Systems Overview............................................ 2
AUTH 145 Advanced Lab \& Final Exam Preparation ................................................................. 2
TOTAL CREDITS FOR COMPLETION

## AVIATION MAINTENANCE TECHNICIAN

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

ASSOCIATE IN APPLIED SCIENCE - T DEGREE
This FAA-approved program is designed to prepare students for entry-level positions in the aircraft-maintenance industry. Graduates will meet Federal Aviation Administration (FAA) requirements for the issuance of airframe and powerplant certificates. Aviation maintenance technicians are qualified to perform service or make repairs on all types and sizes of private and commercial aircraft, including airplanes and helicopters and their propulsion systems. Related fields include aircraft and component manufacturing. Students are eligible for FAA certification upon completion of required technical credits.
Future employment may include positions with major and regional airlines, aircraft and rotorcraft repair and maintenance facilities, airline and corporate jet refurbishing repair stations, and aircraft and component manufacturing.
Courses are offered at the South Hill Campus in Puyallup.

## Student Learning Outcomes:

Upon successful completion of the Aviation Maintenance Technician degree, students will:

- Develop and apply skills necessary for employment as defined by specific industry needs.
- Meet \& Exceed FAA requirements for testing for A\&P Mechanic certificates.
- Develop the skills and knowledge to successfully pass the FAA written exams.
- Become competent in the skills, knowledge, and techniques necessary to successfully pass FAA oral and practical exams for certification.
- Employ expanded Rotary Wing maintenance training as an integral part of AMT program.
In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain.


## AAT Degree General Education Requirements ( 18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- Any 100 level math class
- PSYC\& $100^{\text {DIV }}$ General Psychology (PSY $112^{\text {Div, }}$, SOC\& $101^{\text {Div }}$, or other humanities course that meets the diversity requirement)
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements (23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142, MATH\& 146 or MATH\& 151
- 5 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ or SOC\& $101^{\text {DIV }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100, ASL\& 121, ASL\& 122, BIOL\& 160, BIOL\& 175 , BIOL\& 241, BIOL\& 242, BIOL\& 260, CHEM\& 110, CHEM\& 121 , CHEM\& 131 , GEOL\& 110 , HIST\& 146 , HIST\& 147 , HIST\& 148 , HUM\& 101, MUSC\& 105, PHYS\& 114, POLS\& 202, PSYC\& 100, PSYC\& 200, PSYC\& 220, SOC\& 101
- 3 credits in College Success: COLL 102

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer-literacy requirements.
Employability Requirements: Graduates must meet Federal Aviation Administration certification exams and pass literacy requirements.
Program Length: This program is approximately eight quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): None.

## PROGRAM COURSE LIST

AMT 104
AMT 109
AMT 116
AMT 119
AMT 125
AMT 127
AMT 132
AMT 133
AMT 135
AMT 136
AMT 137
AMT 138
AMT 139
AMT 140
AMT 141
AMT 142
AMT 143
AMT 144
AMT 145
AMT 146
AMT 208
AMT 210
AMT 212
AMT 215
AMT 217
AMT 219
AMT 221
AMT 224
AMT 225
AMT 226
AMT 228
AMT 229 ${ }^{\text {CA }}$
AMT 231
AMT 233
AMT 235

Basic Mathematics, Basic Physics, and Weight \& Balance ................................. 5 Basic Electricity........................................................................................................... 4 Aircraft Drawings, Cleaning \& Corrosion Control, Ground Operations \& Servicing, and Fluid Lines \& Fittings................................. 5
Materials \& Processes. .....  .5
Advanced Electricity.. .....  4
Maintenance Forms \& Records, Publications, and Mechanics Privileges \& Limitations. .....  4
Wood Structures, Aircraft Coverings, \& Finishes.. .....  4
Aircraft Fuel Systems, Ice \& Rain Control Systems, \& Fire
.4
Protection Systems... .....  .4
Welding, Position \& Warning Systems... .....  .3
Non-Metallic Structures. .....  4
Aircraft Inspections. .....  .4
Assembly \& Rigging. .....  .4
Aircraft Landing Gear... ..... $\ldots . .3$
Hydraulic \& Pneumatic Power Systems.. .....  3
Hangar Operations \& Maintenance . .....  3
Airframe Electrical Systems .....  .5
Engine Electrical Systems. .....  5
Cabin Atmosphere Control Systems.. .....  .3
Aircraft Instrument, Communication \& Navigation Systems. .....  3
Helicopter Operations \& Maintenance Practices... .....  .4
Basic Rotor Systems Maintenance \& Repair .....  4
Advanced Rotor Systems Maintenance \& Repair. .....  .4
Helicopter Systems .....  .4
FAA Testing \& Turbine Engines... .....  7
Engine Lubrication Systems. .....  4
Engine Instrument Systems.. .....  4
Powerplant Reciprocating Engine Theory.. .....  .6
Powerplant Maintenance \& Operation. .....  .6
Engine Fuel System \& Fire Protection.. .....  1
Engine Fuel Metering Systems. .....  5
Propellers \& FAA Final Testing. .....  .4
Engine Inspection. .....  4
Engine Ignition \& Starting Systems.. .....  .4
(CONTINUED FROM PREVIOUS PAGE)
AMT 239 Advanced Hangar Operations \& Maintenance .....  3
TECHNICAL COURSE REQUIREMENTS ..... 146
AAT REQUIREMENTS
Technical Course Requirements ..... 146
AAT General Education Requirements (See list above) .....  18
Computer Literacy Requirements (Complete an approved computer literacy courseor successfully pass the computer literacy exam). 3
TOTAL CREDITS FOR AAT COMPLETION. ..... 167
AAS-T REQUIREMENTS
Technical Course Requirements ..... 146
AAS-T Degree General Education Requirements (See list above) .....  23
Computer Literacy Requirements (Complete an approved computer literacy course or successfully pass the computer literacy exam). .....  3
TOTAL CREDITS FOR AAS-T COMPLETION. ..... 172
Note: AMT 142, AMT 239, and the general education courses are required bythe college for completion of the Associate of Applied Technology Degree, butare not subject to approval by the FAA.

# AVIATION MAINTENANCE TECHNICIAN AIRFRAME MAINTENANCE TECHNICIAN 

## CERTIFICATE

This FAA-approved program is designed to prepare students for entry-level positions in the aircraft maintenance industry. Graduates will meet FAA requirements for the issuance of an airframe certificate. Aviation maintenance technicians are qualified to perform service or make repairs on all types and sizes of private and commercial aircraft, including airplanes and helicopters. Related fields include aircraft and component manufacturing. Students are eligible for FAA certification upon completion of required technical credits.
Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.
Note: Graduates must meet FAA literacy requirements and complete technical credits for FAA certification.
Employability Requirements: Graduates must meet Federal Aviation Administration certification exams and pass literacy requirements.
Program Length: This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): None.

## PROGRAM COURSE LIST

AMT 104 Basic Mathematics, Basic Physics, and Weight \& Balance............................. 5
AMT 109 Basic Electricity............................................................................................... 4

AMT 116 Aircraft Drawings, Cleaning \& Corrosion Control, Ground Operations \& Servicing, and Fluid Lines \& Fittings................................................................... 5
AMT 119 Materials \& Processes ............................................................................................ 5

AMT 127 Maintenance Forms \& Records, Publications, and Mechanics Privileges \& Limitations..
AMT 132
Wood Structures, Aircraft Coverings, \& Finishes .. .... 4
AMT 133
Aircraft Fuel Systems, Ice \& Rain Control Systems, \& Fire ProtectionSystems... .4
AMT 135 Sheet Metal Structures .....  4
AMT 136 Welding, Position \& Warning Systems.. .....  3
AMT 137 Non-Metallic Structures. .....  4
AMT 138 Aircraft Inspections... .....  4
AMT 139 Assembly \& Rigging... .....  4
AMT 140 Aircraft Landing Gear ..... $\cdots$
AMT 141 Hydraulic \& Pneumatic Power Systems .....  3
AMT 142 Hangar Operations \& Maintenance . ..... $\ldots$
AMT 143 Airframe Electrical Systems. .....  5
AMT 145 Cabin Atmosphere Control Systems. .....  3
AMT 146 Aircraft Instrument, Communication \& Navigation Systems ... .....  3
AMT 208 Helicopter Operations \& Maintenance Practices .....  .4
AMT 210 Basic Rotor Systems Maintenance \& Repair.. .....  4
AMT 212 Advanced Rotor Systems Maintenance \& Repair. 4
AMT 215 Helicopter Systems... .....  4
English Composition (or higher) or Public Speaking .....  .5
Any 100-Level Math Class. .....
General Psychology (or other social science or humanities class). .....  5
COLL 102 College Success for All.$\cdots$
TOTAL CREDITS FOR COMPLETION ..... 108

## AVIATION MAINTENANCE TECHNICIAN POWERPLANT TECHNICIAN

## CERTIFICATE

This FAA-approved program is designed to prepare students for entry-level positions in the aviation engine maintenance industry. Graduates will meet FAA requirements for the issuance of a powerplant certificate. Aviation maintenance technicians are qualified to perform service or make repairs on all types and sizes of private and commercial aircraft propulsion systems. Related fields include aircraft and component manufacturing. Students are eligible for FAA certification upon completion of required technical credits.
Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.
Note: Graduates must meet FAA literacy requirements and complete technical credits for FAA certification.
Note: Transfer students will have their transcripts evaluated by the Aviation Maintenance staff in accordance with FAR Part 147 to determine their qualification and placement in any of the Aviation Maintenance Technician programs.
Employability Requirements: Graduates must meet Federal Aviation Administration certification exams and pass literacy requirements.
Program Length: This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): None.

## PROGRAM COURSE LIST

| AMT 104 | Basic Mathematics, Basic Physics, and Weight \& Balance ... |
| :---: | :---: |
| AMT 109 | Basic Electricity. |
| AMT 116 | Aircraft Drawings, Cleaning \& Corrosion Control, Ground Operations <br> \& Servicing, and Fluid Lines \& Fittings. $\qquad$ |
| AMT 119 |  |
| AMT 125 | Advanced Electricity .................................................................... 4 |
| AMT 127 | Maintenance Forms \& Records, Publications, and Mechanics <br> Privileges \& Limitations $\qquad$ |
| AMT 142 | Hangar Operations \& Mainten |

## (CONTINUED FROM PREVIOUS PAGE)

AMT 144 Engine Electrical Systems. .....  5AMT 217AMT 219AMT 221AMT 224AMT 225AMT 226AMT 228AMT 229 CAMT 231
AMT 233
AMT 235
AMT 235Induction, Airflow, Cooling \& Exhaust Systems
Engine Lubrication SystemsFAA Testing \& Turbine Engine7Any 100-Level Math Class
General Psychology (or other social science or humanities class).
COLL 102 College Success for All.
TOTAL CREDITS FOR COMPLETION101

## AVIONICS TECHNICIAN

## CERTIFICATE

This two-quarter program is designed to provide students with a foundation in aircraft electronics and digital instrument systems and prepare individuals to apply technical knowledge and skills to repair, service, and maintain operating, control, and electronic systems including instruction in flight instrumentation, aircraft communications and homing systems, radar and other sensory systems, navigation aids, and specialized systems for various types of civilian and military aircraft.

Students will receive an introduction to schematic reading, OSHA/FAA/ Basic electrical safety, tools of the trade, and basic electrical components. Students will also learn introductory techniques for troubleshooting and repairing aircraft electronic instrument systems.
Program Length: This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Must have required tools and textbooks.
Admission Dates: Fall, winter, spring, and summer quarters.
Prerequisite(s): Successful completion of AMT 104, AMT 109, AMT 116, AMT 119, AMT 125, AMT 127, AMT 143, and AMT 144 or FAA Airframe or Powerplant license or instructor's permission is required for entry into this program.

## PROGRAM COURSE LIST

AVIO\& 102Aircraft Electronic Fundamentals. 8
AVIO\& 103 Aircraft Wiring Systems. .....  .4
AVIO\& 104 Aircraft Fiber Optic Systems$\ldots$
AVIO\& 201 Aircraft Digital Electronic Instrument Systems. .....  8
AVIO\& 202 Avionics Systems for Airframe \& Powerplant. .8
AVIO\& 203 Avionics Communications .....  4
AVIO\& 204 Principles of Avionics Troubleshooting. .....  .4
COLL 102 College Success for All.$\cdots$
TOTAL CREDITS FOR COMPLETION ..... 42

## AVIONICS TECHNICIAN

AIRCRAFT ELECTRONICS AND ELECTRONIC INSTRUMENT SYSTEMS

## CERTIFICATE

This one-quarter program is designed to provide students with a foundation in aircraft electronics and digital instrument systems.

Students will receive an introduction to schematic reading, OSHA/FAA/ Basic electrical safety, tools of the trade, and basic electrical components. Students will also learn introductory techniques for troubleshooting and repairing aircraft electronic instrument systems. This certificate is a prerequisite to the Aircraft Wiring \& Avionics Systems Certificate.
Program Length: This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements. Must have required tools and textbooks.
Admission Dates: Fall, winter, spring, and summer quarters.
Prerequisite(s): Successful completion of AMT 104, AMT 109, AMT 116, AMT 119, AMT 125, AMT 127, AMT 143, and AMT 144 or FAA Airframe or Powerplant license or instructor's permission is required for entry into this program.

PROGRAM COURSE LIST

AVIO\& 201 Aircraft Digital Electronic Instrument Systems................................................... 8

TOTAL CREDITS FOR COMPLETION .19

## AVIONICS TECHNICIAN

## AIRCRAFT WIRING \& AVIONICS SYSTEMS

## CERTIFICATE

This one-quarter program builds on the avionics skills learned in the Aircraft Electronics and Electronic Instrument Systems Certificate. This program prepares individuals to apply technical knowledge and skills to repair, service, and maintain operating, control, and electronic systems including instruction in flight instrumentation, aircraft communications and homing systems, radar and other sensory systems, navigation aids, and specialized systems for various types of civilian and military aircraft.

Program Length: This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements. Must have required tools and textbooks.
Admission Dates: Fall, winter, spring, and summer quarters.
Prerequisite(s): Successful completion of AVIO\& 102 and AVIO\& 201.

## PROGRAM COURSE LIST

AVIO\& 103 Aircraft Wiring Systems..................................................................................... 4
AVIO\& 104 Aircraft Fiber Optic Systems..........................................................................................
AVIO\& 202 Avionics Systems for Airframe \& Powerplant................................................... 8
AVIO\& 203 Avionics Communications.............................................................................................
AVIO\& 204 Principles of Avionics Troubleshooting.......................................................... 4
COLL 102 College Success for All.................................................................................. 3
TOTAL CREDITS FOR COMPLETION .26

## CENTRAL SERVICE/STERILE PROCESSING

## CERTIFICATE

Graduates of this program are educated and trained in Central Service/ Sterile Processing (CS/SP) technology, under the guidelines of the International Association of Healthcare Central Service Materiel Management and the local Healthcare Advisory Committee.
The structured curriculum consists of basic sciences, infection control, sterilization, human relations and necessary job skills, and clinical

## (CONTINUED FROM PREVIOUS PAGE)

internships in area health care facilities. There is an emphasis on care and preparation of surgical instruments. Classroom instruction and clinical internship prepare the student to assume the role of a CS/SP technician in a variety of health care delivery settings.
Students are required to carry personal health/medical insurance throughout their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office.
No student will be allowed at clinical sites without proof of insurance.

## Student Learning Outcomes:

Upon successful completion of the Central Services/Sterile Processing certificate, students will:

- Use interactive communication skills to work effectively with others, with special emphasis on the needs of the surgical department.
- Maintain professional ethics while demonstrating respect for staff, faculty, and patients.
- Demonstrate effective methods of infection control as it relates to personal hygiene, patient care equipment, and surgical asepsis.
- Demonstrate basic principles of Standard Precautions and the use of Personal Protective Equipment correctly.
- Identify basic and complex surgical instrumentation.
- Demonstrate and verify the decontamination process with special attention to endoscopic, robotic, and powered surgical instruments.
- Correctly identify appropriate packaging material and demonstrate proper wrapping techniques.
- Select appropriate process indicators for low- and high-temperature reprocessing. Apply recommended standards for biological monitoring and record keeping.
- Identify appropriate sterilization methods, cycles, and parameters for commonly used items.
- Apply learned skills in the clinical setting to successfully accrue the required number of clinical hours to sit for the certification exam.
Physical Activity Requirements: This occupation requires the ability to lift 50 lbs . and work on your feet for up to eight hours. Students must be able to meet these physical requirements in order to be assigned to a clinical rotation and meet employment demands.
Employability Requirements: High school diploma or equivalent. Upon graduation, students are eligible to sit for the International Association of Healthcare Central Service/Materiel Management Certification Exam, which is honored throughout the world. Must meet facility eligibility requirements, including a criminal background check, in order to apply for employment. Persons with some types of criminal convictions may not be eligible for hire.

Program Length: This program is a combination of classroom, laboratory and clinical experience, approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## Admission Dates: Fall and spring quarters

Prerequisite(s): Successful completion of ENG o91 or equivalent. Basic computer skills recommended.
In order to participate in the clinical aspect of the program, students must receive a "No Record On File" report from a criminal background check (there are some exceptions; contact instructor for details). A non-refundable fee is charged to each student for the background check. Students must have current immunizations or laboratory verification of immune status. This could include, but may not be limited to, Hepatitis B series, Tdap, 2-Step Tuberculosis Test, Measles/Mumps/Rubella, Varicella, and seasonal flu shot as required by contracts with clinical facilities. Proof of immunity is required by the last week of the first quarter in order to participate in the clinical portion of the program.

Students must provide a transcript showing high school graduation or completion of a high school equivalency diploma. Must complete the American Heart Association's BLS for health care provider CPR Course prior to the last week of the first quarter (not included in the program).

## PROGRAM COURSE LIST

MMN 103 Introduction to the Program \& the Health Care Industry....................................... 3
MMN 106 Anatomy \& Physiology/Medical Terminology...................................................... 4
MMN 111 Microbiology/Infection Control.............................................................................. 3
MMN 124 Surgical Instrumentation ............................................................................................ 4
MMN $126 \quad$ Principles and Methods of Cleaning \& Disinfecting ............................................. 6
MMN 129 Principles and Practices of Sterilization .................................................................. 6
MMN 132 Material Management/Central Service Applications......................................... 3
MMN 213 Clinical Internship I ..................................................................................................... 6
MMN 215 Clinical Internship II .................................................................................................... 6
COLL 102 College Success for All.............................................................................................. 3
TOTAL CREDITS FOR COMPLETION ......................................................................... 44

## COMPOSITES

## ADVANCED COMPOSITE MANUFACTURING

## CERTIFICATE

The Advanced Composite Manufacturing certificate is designed to prepare students to fabricate, assemble, and repair composite materials for a variety of industries, including aviation, automotive, marine, and recreation. The knowledge and skills gained through this program are those required for entry-level positions as composite technicians.
Program Length: The Advanced Composite Manufacturing certificate is a two-quarter program.
Admission Dates: Summer, fall, winter, and spring quarters. Prerequisite(s): None.

## PROGRAM COURSE LIST

ACM 105 Basic Mathematics, Basic Physics, and Weight \& Balance.............................. 5
ACM 110 Blueprints; Drawings; and Precision Measuring.................................................... 4
ACM 115 Materials and Processes/Lab and Equipment Safety....................................... 5

ACM 125 Composite Assembly....................................................................................................
ACM 130 Composite Repair...................................................................................................... 4
ACM 145 Special Projects......................................................................................................... 3
COLL 102 College Success for All............................................................................................. 3
TOTAL CREDITS FOR COMPLETION ....................................................................... 32

## COMPUTER NETWORKING \& INFORMATION SYSTEMS SECURITY

## associate of appled technology degree

## ASSOCIATE IN APPLIED SCIENCE - T DEGREE

The CNISS program prepares students to pursue careers in a variety of entry- to mid-level positions including, but not limited to, help desk, network system administration, and cyber security. Our instructors prepare students for careers involving the protection of information on computers and networks against unauthorized access or modification of information and against the denial of service to authorized users. Includes those security measures, both physical and virtual, necessary to detect, document, and counter such threats. Curriculum content includes basic and advanced computer and networking skills, physical and virtual security processes and procedures, and introduction to security management, planning, and recovery.

## (CONTINUED FROM PREVIOUS PAGE)

The CNISS AAT/AAS-T program focuses primarily on the technical and problem-solving skills associated with PC and network management and cyber-security implementation but adds hands-on experience building computer and network systems. Additional skills include administration, configuration and security for Cisco, Linux and Microsoft products. Our focus also includes ethical hacking and prevention, assessing the security needs of computer networking systems, and developing safeguard solutions for computer and information-system infrastructures and countermeasures.

## Student Learning Outcomes:

Upon successful completion of the Computer Networking \& Information Systems Security degree, students will:

- Diagnose and repair computers and printers.
- Analyze user and system problems. Provide network and computer support.
- Demonstrate best practices for installing, configuring, and administering server operating systems, network devices, and directory services.
- Analyze user and intruder activity, analyze malware, collect evidence, and document findings.
- Discuss technical issues orally and in writing with supervisors, team members, and users at a college level.
- Demonstrate job-ready skills by preparing an IT job search, resume, and LinkedIn profile and discussing questions in an interview in a professional manner.
- Evaluate risk in information systems. Demonstrate sound judgement when recommending cybersecurity mitigations.
- Plan, design, and implement computer networks in a team environment.

The AAT or AAS-T degree is earned by completing technical-core requirements, general-education requirements, and choosing one specialty option. (Option 1: Cisco Network Design Security; or Option 2: Computer \& Communications Security.)
The program includes preparing students for the CompTIA A + , Security+, Linux + , Cisco CCENT, CCNA and Microsoft MCSA \& MTA certification examinations and internship work experience
Employers include business and industrial firms, financial institutions, government agencies, consulting firms, software developers, health providers and Internet service providers. Innovations in computer technology continue to rapidly change and expand the computer security field. Therefore, the following courses of study may be subject to change in order to offer students training based on current industry standards.
In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) or the Associate in Applied Science-T (AAS-T). The different requirements for each degree are listed below:

## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- Any 100 level math class
- PSYC\& $100^{\text {DIV }}$ General Psychology (PSY $112^{\text {DIv }}$, SOC\& $101^{\text {DIV }}$, or other humanities course that meets the diversity requirement)
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements (23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

[^0]- 5 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ or SOC\& $101^{\text {DIV }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100 , ASL\& 121, ASL\& 122, BIOL\& 160 , BIOL\& 175, BIOL\& 241, BIOL\& 242, BIOL\& 260, CHEM\& 110, CHEM\& 121 , CHEM\& 131, GEOL\& 110, HIST\& 146, HIST\& 147, HIST\& 148, HUM\& 101, MUSC\& 105 , PHYS\& 114, POLS\& 202, PSYC\& 100, PSYC\& 200, PSYC\& 220, SOC\& 101
- 3 credits in College Success: COLL 102

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy and the capstone project.
Program Length: This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Successful completion of ENG 091. Prior to completion of first quarter, student must provide documentation of a background check with the Washington State Patrol.

## PROGRAM COURSE LIST


NSS 105 IT Essentials |I..................................................................................................... 4
NSS 109 CISCO Networking l............................................................................. 5
NSS 120 MS Desktop Support I................................................................................... 5
NSS 125 MS Desktop Support II............................................................................... 4
NSS 127 Scripting for Network Admins....................................................................................
NSS 135 Implementing System Security............................................................................ 4
NSS 139 Server OS Installation and Configuration ....................................................... 4
NSS 141 Digital Forensics................................................................................... 5
NSS 145 Server Security....................................................................................... 4

NSS 160 Introduction to Linux........................................................................................... 5
NSS 161 Administering Windows Server OS............................................................. 4
NSS 164 Virtualization and Cloud Technologies ............................................................ 4
NSS 201 Advanced Linux...................................................................................... 5
NSS 206 Advanced Windows Server Configuration..................................................... 5
CNISS Program Option (See list below) ...............................................................................24-29
Technical Course Requirements ...............................................................95-100

## AAT PROGRAM REQUIREMENTS

Technical Course Requirements ...................................................................-100
AAT General Education Requirements (See list above)........................................ 18
TOTAL CREDITS FOR AAT COMPLETION ................................................. 113-118
AAS-T PROGRAM REQUIREMENTS
Technical Course Requirements .............................................................................95-100
AAS-T General Education Requirements (See list above)..................................... 23

TOTAL CREDITS FOR AAS-T COMPLETION
For an AAT or AAS-T degree, students must complete one of the specialty options listed below. These options may also be taken as a stand-alone certificate for those not pursuing a degree.

## CNISS Program Options

## Cisco Network Design \& Security

NSS 180CAP Internship |.........................................................................................................................
NSS 250CAP Internship II............................................................................................. 2
NSSC 201 CISCO Networking II................................................................................. 5


NSSC 208 Managing Network Security.............................................................................. 5
Computer \& Communications Security
NSS 180CAP Internship I................................................................ 2

## Internship II.

.... 2
Penetration Testing and Security Analysis............................................................... 5
Security Learning Labl.
.... 3
Computer Forensics...................................................................................................... 4
Security Learning Lab II.
Investigation and Response.
Scripting for Penetration Testers. .3


## COMPUTER NETWORKING \& INFORMATION SYSTEMS SECURITY CISCO NETWORK DESIGN \& SECURITY

## CERTIFICATE

Clover Park Technical College is a member of the Cisco Networking Academy community in 165 different countries. Our Cisco program delivers a comprehensive, 21st-century learning experience to help students develop the foundational information and communication technology skills needed to design, build, secure, and manage networks. Our program also helps students develop career skills, such as problem solving, collaboration, and critical thinking. The Cisco Academy uses a blended-learning model that combines face-to-face teaching with engaging online content and hands-on learning activities to help students prepare for industry-standard certifications, such as CCENT and CCNA; entry-level and advanced careers; and higher education in engineering, computer science, information systems, and related fields.
As networking technologies bring new economic and social opportunities to communities throughout the world, businesses, non-profits, hospitals, schools, and government organizations are experiencing growing demand for networking professionals to design, build, maintain, and secure their networks. Graduates are qualified to work as field-service and help-desk technicians, network support technicians, IT technicians and administrators, network security support technicians, network engineers, and administrators

Program Length: This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements. The Cisco Networking Academy curriculum is used, and two additional lab courses prepare student for the CCENT and CCNA industry certification exams. All the courses in this certificate count toward the Computer Networking \& Information Systems Security (CNISS) AAT or AAS-T degree program.
Admission Dates: Summer, fall, winter, and spring quarters. Prerequisite(s): Successful completion of NSS 109.

## PROGRAM COURSE LIST

NSSC 201
CISCO Networking II ... 5
NSSC 203 CISCO Networking III............................................................................................. 5
NSSC 205
CISCO Networking IV.
CISCO Learning Lab I.

NSSC 205
NSSC 208
NSSC 210
Managing Network Security.
CISCO Learning Lab II.
College Success for All.

TOTAL CREDITS FOR COMPLETION
Note: NSSC 201, 203 and 205 are articulated courses with high schools for dual enrollment.

## COMPUTER NETWORKING \& INFORMATION SYSTEMS SECURITY COMPUTER \& COMMUNICATIONS SECURITY

## CERTIFICATE

Introduces Computer and Communications Security in an everchanging environment where malware compromises data integrity and creates multiple issues with today's computer and network systems.

Analysis and understanding of security risks involved in operating a website and developing appropriate levels of security will be covered. Additionally, students will be introduced to network defenses, computer forensics, scripting, and hacking in its various forms.
Prior to completion, students must provide documentation of a background check with the Washington State Patrol. All courses in this certificate count toward the Computer Networking \& Information Systems Security (CNISS) AAT or AAS-T degree program.

Program Length: This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): A meeting with the program instructor prior to enrollment is necessary for assessment purposes or successful completion of NSS 135 and NSS 141.

## PROGRAM COURSE LIST

NSSB 203 Penetration Testing and Security Analysis................................................... 5
NSSB 210 Security Learning Lab I ............................................................................................... 3
NSSB 215 Computer Forensics................................................................................................... 4
NSSB 220 Security Learning Lab II............................................................................................. 3
NSSB 232 Investigation and Response ..................................................................................... 5
NSSB 246 Scripting for Penetration Testers................................................................................ 5
COLL 102 College Success for All............................................................................................ 3
TOTAL CREDITS FOR COMPLETION ...................................................................... 28

## COMPUTER NETWORKING \& INFORMATION SYSTEMS SECURITY COMPUTER HELP DESK TECHNICIAN

## CERTIFICATE

This certificate is designed to prepare students for entry-level careers supporting computer users as a Computer Help Desk Technician. A Computer Help Desk Technician performs a wide range of support tasks for the computer user, including computer configuration, image deployment, troubleshooting, and training. Students will complete NSS 120 and NSS 125 (Desktop Support 1 and 2) in a hybrid learning environment. Lectures, reading, exercises, and video demonstrations are all completed online. Students will typically spend three or more hours outside the classroom doing online learning for every hour spent in the classroom. They should budget at least 10 hours per week for homework. Students will meet in the classroom one day per week performing the hands-on skills they learned through the online exercises. The courses' learning objectives support the Microsoft Certified Solution Associate exam standards for the current desktop
operating system, though this is not a certification preparation program.
Courses in this certificate transfer towards the Computer Networking \& Information Systems Security (CNISS) AAT or AAS-T degree program.
Program Length: This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall, winter, and spring quarters (it is not offered in the summer quarter).
Prerequisite(s): Students should be familiar with navigating current Windows desktop operating systems.

## PROGRAM COURSE LIST

NSS 120
MS Desktop Support I. ... .5
NSS 125
MS Desktop Support II. .4
TOTAL CREDITS FOR COMPLETION . .9

> COMPUTER NETWORKING \& INFORMATION SYSTEMS SECURITY COMPUTER NETWORKING \& INFORMATION SYSTEM SECURITY PROFESSIONAL

CERTIFICATE

This certificate is designed to prepare students for entry-level careers involving the protection of computers, networks and information systems against unauthorized access or modification of information, and against the denial of service to authorized users. Includes those security measures, both physical and virtual, necessary to detect, document, and counter such threats.
Curriculum content includes basic computer and networking skills, physical and virtual security processes and procedures, and introduction to security management, planning, and recovery.
The program includes preparing students for the CompTIA A+, Security+, Linux+, and Microsoft MCSA \& MTA certification examinations. Employers include business and industrial firms, financial institutions, government agencies, consulting firms, software developers, health providers, and Internet service providers.
Program Length: This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Successful completion of ENG 091. Prior to completion of first quarter, student must provide documentation of a background check with Washington State Patrol.

## PROGRAM COURSE LIST

NSS 101
IT Essentials 1 .
NSS 105 ${ }^{\text {CL }}$
IT Essentials II.. .. .5

NSS 109 CISCO


NSS 127 Scripting for Network Admins ................................................................................. 4
NSS 135 Implementing System Security.................................................................................. 4
NSS 139
NSS 141
NSS 145
NSS 156
NSS 160
NSS 161
Server OS Installation and Configuration ...
Digital Forensics... 4

Server Security.... .... 5

Cyber Security Fundamentals.. .4
Introduction to Linux.$\begin{array}{r}. . .4 \\ . . \\ \hline\end{array}$
Administering Windows Server OS..

NSS 164 Virtualization and Cloud Technologies ........................................................... 4
NSS 201 Advanced Linux ........................................................................................ 5
NSS 206 Advanced Windows Server Configuration...............................................................
English Composition (or higher) or Public Speaking .................................................................... 5

General Psychology (or other social science or humanities class) ............................................... 5

TOTAL CREDITS FOR COMPLETION 89

## COMPUTER NETWORKING \& INFORMATION SYSTEMS SECURITY COMPUTER SUPPORT TECHNICIAN

## CERTIFICATE

This certificate is designed to prepare students for entry-level careers supporting computer users as a Computer Support Technician. A Computer Support Technician performs a wide range of hands-on tasks for the computer user, including computer installation, maintenance, troubleshooting, repair, retirement, and training. Students will complete NSS 101 and NSS 105 (IT Fundamentals 1 and 2) in a hybrid learning environment. Lectures, reading, exercises, and video demonstrations are all completed online. Students will typically spend three or more hours outside the classroom doing online learning for every hour spent in the classroom. They should budget at least 10 hours per week for homework. Students will meet in the classroom one day per week performing the hands-on skills they learned through the online exercises. The courses' learning objectives roughly parallel those of the CompTIA A+ certification exam objective, though this is not an exam preparation program. Courses in this certificate transfer towards the Computer Networking \& Information Systems Security (CNISS) AAT or AAS-T degree program.
Program Length: This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall, winter, and spring quarters (it is not offered in the summer quarter).
Prerequisite(s): Students should be able to use a computer to read the courseware online and be able to send email.

PROGRAM COURSE LIST
NSS 101 IT Essentials I..................................................................................................... 5
NSS 105 ${ }^{\text {cl }}$ IT Essentials II............................................................................................. 4
TOTAL CREDITS FOR COMPLETION ........................................................................ 9

## COMPUTER NETWORKING \& INFORMATION SYSTEMS SECURITY SERVER ADMINISTRATOR

## CERTIFICATE

This certificate is designed to upgrade an entry-level computer support professional's skills to begin a career as a Server Administrator in an enterprise environment. A Server Administrator performs a wide range of planning, configuration, and support tasks required to administer a server(s). Students will complete NSS 139 (Server OS Installation and Configuration) and NSS 162 (Administering Windows Server OS) in a hybrid learning environment. Lectures, reading, exercises, and video demonstrations are all completed online. Students will typically spend

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three or more hours outside the classroom doing online learning for every hour spent in the classroom. They should budget at least 10 hours per week for homework. Students will meet in the classroom one day per week performing the hands-on skills they learned through the online exercises. The courses' learning objectives support the Microsoft Certified Solution Associate exam standards for two of the three required exams for the current server operating system.
Courses in this certificate transfer towards the Computer Networking \& Information Systems Security (CNISS) AAT or AAS-T degree program.
Program Length: This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall, winter, and spring quarters (it is not offered in the summer quarter).
Prerequisite(s): Students should be familiar with navigating current Windows Server operating systems.

## PROGRAM COURSE LIST

NSS 139 Server OS Installation and Configuration ............................................................. 4
NSS 161 Administering Windows Server OS......................................................................... 4

TOTAL CREDITS FOR COMPLETION ........................................................................ 8

## COMPUTER PROGRAMMING

## ASSOCIATE IN APPLIED SCIENCE - T DEGREE

This program is designed to prepare students planning to continue their education at a college or university that offers a Bachelor's degree in Computer Science, Information Systems Management, Software Systems, or related field.

## Student Learning Outcomes:

Upon successful completion of the Computer Programming degree, students will:

- Debug and troubleshoot programs to identify and fix defects.
- Document software and methods for technical staff as well as end-user.
- Work with a team to design, develop, and test an application.
- Work with local industry partners or on a self-proposed project to apply technical skills and standards.
In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain.
Students pursuing an AAS-T degree for transfer to the University of Washington-Tacoma are required to take additional core academic classes that may or may not be offered at Clover Park Technical College. Please see your instructor for the latest articulation requirements.
Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
Program Length: Classes will be offered with sufficient frequency that, with reasonable schedule planning, this program may be completed in seven quarters of full-time effort. It may take longer, depending on the student's prior educational preparation and the time it takes to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): Successful completion of ENG 091 and MAT 092 or equivalent and basic competencies with personal computers, Windowsbased word processing and spreadsheet software. Touch-typing proficiency of 35 words per minute is recommended.


## PROGRAM COURSE LIST

ASL\& 121



ENGL\& 101 English Composition I.................................................................................. 5
ENGL\& 235 Technical Writing ............................................................................................................

MATH\& 142 Precalculus II, Functional Trigonometry........................................................ 5
MATH\& 146 or higher.........................................................................................................................................
Introduction to Music or Introduction to Art......................................................................................... 5
Any Lab-Based Science ............................................................................................................ 5
PSYC\& $100^{\text {oiv }}$ General Psychology (or higher, but not PSY 112) or SOC\& $101^{\text {DVV }}$ Introduction to
Sociology 5
CPW 101 Programming Fundamentals.......................................................................... 5
CPW 118 Web Design Principles .............................................................................. 5
CPW 142 Java Object-Oriented Programming I ............................................................ 5
CPW 143 Java Object-Oriented Programming II............................................................. 5
CPW 150 Principles of Relational Databases.............................................................................
CPW 205CAP Object-Oriented Analysis \& Design................................................................ 5
CPW 210 Advanced Database Programming.............................................................. 5

CPW 223 Introduction to JavaScript.............................................................................................
CPW 240 Programming Practicum.......................................................................... 5
CPW 245 Data \& Logic Structures.............................................................................. 5
CPW 252 Phone Programming .................................................................................... 5
TOTAL CREDITS FOR AAS-T DEGREE

## COMPUTER PROGRAMMING

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

This program is designed to prepare students for computer programming and web development positions with concentrations in web programming, database programming, or application systems programming.
The coursework prepares individuals for positions such as .NET developer, ASP.NET web developer, application programmers, programmer/analysts, database designers, and other related information technology positions.
Employers may include business and industrial firms, banks and other financial institutions, government agencies, consulting firms, and software and web development companies.

## Student Learning Outcomes:

Upon successful completion of the Computer Programming degree, students will:

- Debug and troubleshoot programs to identify and fix defects.
- Document software and methods for technical staff as well as end-user.
- Work with a team to design, develop, and test an application.
- Work with local industry partners or on a self-proposed project to apply technical skills and standards.
Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities upon which technical skills are built and personal development is enhanced. Students must take all the academic and programming core courses.


## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- MATH\& 141 Precalculus or higher
- PSYC\& $100^{\text {DIV }}$ General Psychology (PSY $112^{\text {DIV }}$, SOC\& $101^{\text {DIV }}$, or other humanities course that meets the diversity requirement)
- COLL 102 College Success for All

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy and the capstone project.

## (CONTINUED FROM PREVIOUS PAGE)

Program Length: Classes will be offered with sufficient frequency that, with reasonable schedule planning, this program may be completed in six quarters of full-time effort. It may take longer, depending on the student's prior educational preparation and the time it takes to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): Successful completion of ENG 091 and MAT 092 or equivalent and basic competencies with personal computers, Windowsbased word processing and spreadsheet software. Touch-typing proficiency of 35 words per minute is recommended.

## PROGRAM COURSE LIST

| COLL 102 | College Success for All ...................................................................... 3 |
| :---: | :---: |
| ENGL\& 101 |  |
| MATH\& 141 |  |
| PSYC \& $100{ }^{\text {DV }}$ | General Psychology (or other social science or humanities class).................. 5 |
| CPW 101 ${ }^{\text {cl }}$ | Programming Fundamentals.............................................................. 5 |
| CPW 116 |  |
| CPW 118 | Web Design Principles .............................................................................. 5 |
| CPW 142 |  |
| CPW 143 | Java Object-Oriented Programming II................................................. 5 |
| CPW 150 |  |
| CPW 203 | Advanced JavaScript...................................................................... 5 |
| CPW 205 ${ }^{\text {cap }}$ | Object-Oriented Analysis \& Design...................................................... 5 |
| CPW 210 | Advanced Database Programming ........................................................... 5 |
| CPW 212 | Advanced .NET Programming ........................................................... 5 |
| CPW 213 | .NET Web Programming................................................................... 5 |
| CPW 215 | Advanced .NET Web Programming ..................................................... 5 |
| CPW $217{ }^{\text {CAP }}$ |  |
| CPW 218 |  |
| CPW 223 | Introduction to JavaScript................................................................. 5 |
| CPW 240 |  |
| CPW 245 |  |
| CPW 252 |  |

## COMPUTER PROGRAMMING .NET DEVELOPER

## CERTIFICATE

This certificate program prepares students with professional programming experience or prior training in computer programming for positions as .NET developers. It is directed toward enabling them to refresh and extend their job skills to advance their career or to qualify for new employment opportunities.
Employers may include business and industrial firms, banks and other financial institutions, government agencies, consulting firms, and software and web development companies.
Program Length: Classes will be offered with sufficient frequency that, with reasonable schedule planning, this program may be completed in three quarters of full-time effort. It may take longer, depending on the student's prior educational and professional experience and the time it takes to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): Instructor's approval required.

## PROGRAM COURSE LIST

| CPW 116 | .NET Programming. |
| :---: | :---: |
| CPW 142 | Java Object-Oriented Programming I . |
| CPW 150 | Principles of Relational Databases. |
| CPW 205 ${ }^{\text {CAP }}$ | Object-Oriented Analysis \& Design.. |
| CPW 212 | Advanced .NET Programming |
| CPW 213 | .NET Web Programming. |
| CPW $217{ }^{\text {CAP }}$ | Porifolio.. |
| CPW 218 | C++................................................................................................. 5 |

CPW 142 Java Object-Oriented Programming I......................................................... 5

CPW 205CAP Object-Oriented Analysis \& Design.............................................................. 5
CPW 212

CPW $217{ }^{\circ}$
Portfolio
C++

COLL 102

## CONSTRUCTION TECHNOLOGIES

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE ASSOCIATE IN APPLIED SCIENCE - T DEGREE

This program is designed to train construction professionals and facilities managers for building applications and systems that consume a minimal amount of non-renewable resources and contribute to environmental and personal health.
This program will prepare graduates for careers in resource energy management, indoor air quality, solar installation, home energy rating systems, and other specialties that support the design, building, and maintenance of sustainable living environments.
Participants will receive a solid foundation in applied mathematics, applied physics, and communication. Students will also receive training in industry-specific applications using energy-efficiency technology to diagnose building deficiencies. Advanced training in sustainable systems, solar (photovoltaic) systems, resource conservation management, and weatherization will prepare graduates for a variety of careers within the construction and utilities industries, including careers as resource conservation managers, energy auditors, weatherization specialists, solar energy specialists, and home energy raters.

## Student Learning Outcomes:

Upon successful completion of the Construction Technologies degree, students will:

- Apply the appropriate repairs to various types of buildings.
- Be a change agent for sustainability in construction.
- Communicate efficiently and effectively with employers.
- Demonstrate proficiency when working with building diagnosis.
- Design and integrate renewable energies into the building.
- Identify and evaluate building systems.
- Perform a building energy audit and make recommendations.
- Perform scheduling tasks and coordinate the different trades.
- Read and correctly interpret building blueprints.
- Utilize problem-solving and decision-making skills.
- Work in coordination with others in a team effort.
- Work responsibly and safely within company guidelines.
- Diagnose and repair air leakage in the building shell.
- Identify and integrate green building practices into the construction industry.


## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- Any 100 level math class
- PSYC\& $100^{\text {DIV }}$ General Psychology (PSY $112^{\text {Div, }}$, SOC\& $101^{\text {Divv }}$, or other humanities course that meets the diversity requirement)
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements (23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142, MATH\& 146 or MATH\& 151


## (CONTINUED FROM PREVIOUS PAGE)

- 5 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ or SOC\& $101^{\text {DIV }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100, ASL\& 121, ASL\& 122, BIOL\& 160, BIOL\& 175 , BIOL\& 241, BIOL\& 242, BIOL\& 260, CHEM\& 110, CHEM\& 121 , CHEM\& 131, GEOL\& 110, HIST\& 146, HIST\& 147, HIST\& 148, HUM\& 101, MUSC \& 105, PHYS\& 114, POLS\& 202, PSYC\& 100, PSYC\& 200, PSYC\& 220, SOC\& 101
- 3 credits in College Success: COLL 102

Students pursuing an AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
Physical Requirements: Should be able to lift 40 lbs..
Program Length: This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): None.

## PROGRAM COURSE LIST

CONST 104* Trades Math \& Print Reading for Const. .............................................................. 5
CONST 106* Basic Carpentry Skills...................................................................................................
CONST 109* Employment Preparation................................................................................... 4
CONST 112* Footings and Foundations............................................................................ 3

CONST 120* Wall Framing, Sheeting, \& Ceilings.............................................................. 5
CONST 122* Roof Framing.................................................................................................. 5
CONST 126* Roofing Materials and Installation................................................................ 3
CONST 134* Exterior Finish.............................................................................................................. 3
CONST 139* Interior Finish I......................................................................................... 5
CONST 142 Interior Finish II ........................................................................................................ 3


CONST 155 Decking..................................................................................................
CONST 158 Energy Auditor ..................................................................................................................
CONST 160 Home Inspector.............................................................................................................
SBS 107 Sustainable Building Basics ....................................................................... 4
SBS 121 Survey of Energy Ratings............................................................................. 3
SBS 130 Alternative Energy Systems.......................................................................... 5
SBS 142 Building Envelope .........................................................................................................

SBS 174 Basic Diagnostics and Testing...................................................................... 4
SBS 185CAP Service Learning Project............................................................................ 3
Computer Literacy Requirement (Complete an approved computer literacy course or successfully pass the computer literacy exam)..

TECHNICAL COURSE REQUIREMENTS 94

## AAT REQUIREMENTS

Technical Course Requirements
AAT General Education Requirements (See list above)............................................ 18

TOTAL CREDITS FOR AAT COMPLETION.

## AAS-T REQUIREMENTS

Technical Course Requirements .................................................................................. 94
AAS-T Degree General Education Requirements (See list above)........................... 23

TOTAL CREDITS FOR AAS-T COMPLETION.......................................................... 117
Note: CONST 102-139 are articulated courses with high schools for dual enrollment.

## CONSTRUCTION TECHNOLOGIES

CONSTRUCTION TECHNOLOGY

## CERTIFICATE

This certificate program builds on the knowledge and skills students earn in the C-TAPP certificate, which serves as the first quarter of the program, and provides an introduction to residential construction technologies.
Second quarter expands into foundation form work, floor systems and framing, wall and roof framing, leveling and aligning, and sheeting.
Physical Requirements: Should be able to lift 40 lbs .
Program Length: This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements
Admission Dates: Fall and spring quarters.
Prerequisite(s): None.

## PROGRAM COURSE LIST

CONST 102* Safety \& Operating Certificates..................................................................... 3

CONST 106* Basic Carpentry Skills.................................................................................... 6
CONST 109* Employment Preparation........................................................................................ 4
CONST 112* Footings and Foundations............................................................................ 3
CONST 116* Floor Framing....................................................................................................................
CONST 120 Wall Framing, Sheeting, \& Ceilings........................................................................ 5
CONST 122 Roofframing......................................................................................... 5
COLL 102 College Success for All................................................................................ 3
TOTAL CREDITS FOR COMPLETION
Note: CONST 102-139 are articulated courses with high schools for dual enrollment.

## CONSTRUCTION TECHNOLOGIES

## CONSTRUCTION TRADES

 ACADEMY PREAPPRENTICESHIP PROGRAM (C-TAPP)
## CERTIFICATE

This apprenticeship readiness program prepares students with the knowledge and skills necessary for employment in the construction industry.
This one-quarter program covers safety, hand and power tool use, math, carpentry trades, print and plan reading, and employment preparation.
Students entering the one-quarter Pre-Apprenticeship Construction Trades program will be required to complete entry and quarterly assessments while enrolled in the program. These assessments will not determine eligibility for the program.
Physical Requirements: Should be able to lift 40 lbs.
Program Length: This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): None.

## PROGRAM COURSE LIST

| CONST 102* | Safety \& Operating Certificates..................................................................... |
| :---: | :---: |
| CONST 104* | Trades Math \& print reading for Const......................................................... 5 |
| CONST 106* | Basic Carpentry Skills........................................................................ 6 |
| CONST 109* | Employment Preparation .................................................................. 4 |

Note: CONST 102-139 are articulated courses with high schools for dual enrollment.

## COSMETOLOGY

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

Educating students in all aspects of professional cosmetology and hair design. Providing services to the hair, head, neck, or scalp. It includes conditioning treatments, haircutting, hairstyling, hair coloring, chemical texturizing services, and skin and nail care. Successful graduates are prepared for the Washington State Department of Licensing Cosmetology examination, and upon licensing will be qualified for positions as cosmetologists. Students will participate in realistic training in the student-operated salon. Clover Park Technical College uses an interactive system of training, utilizing hands-on applications, as well as up to 25 percent online training to support student learning. This model is considered a world leader in beauty education and provides innovative, high-quality educational systems that promote excellence in the hair and beauty industry.

## Student Learning Outcomes:

Upon successful completion of the Cosmetology degree, students will:

- Demonstrate proficiency in salon-quality hair services, including shampoo/condition, hair design, hair cutting, chemical texture services, hair coloring, artificial hair, and nail and skin care.
- Follow effective protocols of infection control, hygiene, and safety, according to state laws.
- Complete and pass all courses offered in curriculum with a passing grade of 75 percent or better to achieve AAT degree.
- Develop strategies for a successful salon business.
- Apply science and art of beautifying and improving hair, skin, and nails.
- Show skills and preparedness for WA State practical and written examinations for licensure.

Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), social sciences (psychology, sociology), and COLL 102 that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.
Employability Requirements: To qualify for a cosmetologist license from the Washington State Department of Licensing, a student must successfully complete the technical courses offered in the program options and pass both the written and practical examinations required by the Washington Department of Licensing.
Program Length: This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## Admission Dates:

Day Program: Summer, fall, winter, and spring quarters.
Evening Program: TBD
Prerequisite(s): A mandatory orientation is required prior to admission to the program.

Program Note: COSMO 183, 189 and 233 will only be offered in the Fall and Spring quarters

Accreditation: This school is licensed under chapter 18.16 RCW. Inquiries,
concerns, or complaints regarding this school can be made to the Department of Licensing.

Mailing Address:<br>Professional Licensing Support Services<br>Department of Licensing<br>PO BOX 9026<br>Olympia, WA 98507-9026

Phone: 360-664-6645
Email: plssunit@dol.wa.gov

## PROGRAM COURSE LIST

COSMO 112 Infection Control Principles \& Practices......................................................... 2
COSMO 116 General Science of Hair......................................................................... 5
COSMO 123 Cosmetology Fundamentals ............................................................................. 2
COSMO 136 Application of Haircutting and Hairstyling ................................................. 14
COSMO 142 Advanced Applications of Haircutting and Hairstyling................................... 4

COSMO 158 General Science of Hair Coloring ..............................................................................

COSMO 163 Lab Clinic II............................................................................................ $9 . . . a^{-a}$
COSMO 172 Lab Clinic III............................................................................................... 10
COSMO 175 Cosmetology Salon Business Practices.......................................................... 3
COSMO 181 Artificial Hair............................................................................................. 2
COSMO 183 General Science of Nails........................................................................................

COSMO 226 Advanced Hair Coloring............................................................................ 8
COSMO 229 State Board Practical Preparation.................................................................... 4
COSMO 231 Lab Clinic IV................................................................................................................ 10
COSMO 233 Lab Clinic V (optional) ................................................................................... 6
COSMO 236 State Board Written Test Review ................................................................... 3

English Composition (or higher) or Public Speaking ..................................................................... 5
MAT 111 Math for Cosmetology/Esthetics Professionals (preferred) or
100-level math class..............................................................................................
General Psychology (or other social science or humanities class) .................................................... 5

Computer Literacy Requirements (Computer Literacy Course that meets the degree requirement, or successfully pass the computer literacy exam) .............................................................................. 3

TOTAL CREDITS FOR AAT COMPLETION.
$.134-140$
Students not meeting state licensure hours requirements will take one or more of the following internship courses:
COSMO 248 Industry Internship I ....................................................................................... 1
COSMO 250 Industry Internship II........................................................................................... 2
COSMO 252 Industry Internship III................................................................................. 3
COSMO 254 Industry Internship IV .....................................................................................................
COSMO 256 Industry Internship V.................................................................................. 5

## COSMETOLOGY

## HAIR DESIGN

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

Educating students in all aspects of professional hair design. Providing services to the hair, head, neck or scalp. It includes conditioning treatments, haircutting, hairstyling, hair coloring, and chemical texturizing. Successful graduates are prepared for the Washington State Department of Licensing Hair Designer examination, and upon licensing will be qualified for positions as hair designers. Students will participate in realistic training in the student-operated salon. Clover Park Technical College uses an interactive system of training, utilizing hands-on applications as well as up to 25 percent online training to support student learning. This model is considered a world leader in beauty education and provides innovative, high-quality educational systems that promote excellence in the hair and beauty industry.

## Student Learning Outcomes:

Upon successful completion of the Cosmetology Hair Designer degree, students will:

## (CONTINUED FROM PREVIOUS PAGE)

- Demonstrate proficiency in salon-quality hair services, including shampoo/condition, hair design, hair cutting, chemical texture services, hair coloring, and artificial hair.
- Follow effective protocols of infection control, hygiene, and safety, according to state laws.
- Complete and pass all courses offered in curriculum with a passing grade of 75 percent or better to achieve AAT degree.
- Develop strategies for a successful salon business.
- Apply science and art of beautifying and improving hair.
- Show skills and preparedness for WA State practical and written examinations for licensure.
Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), social sciences (psychology, sociology), and COLL 102 that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.
The hair designer license is a new option for those wanting to specialize in hair design. This program does not include nail or skin care. Hair designers may return for the skin and nail care quarter. Student must pass the Washington State Department of Licensing written and practical examinations to receive the cosmetology licensure.
Employability Requirements: To qualify for a cosmetologist license from the Washington State Department of Licensing, a student must successfully complete the technical courses offered in the program options and pass both the written and practical examinations required by the Washington Department of Licensing
Program Length: This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.


## Admission Dates:

Day Program: Summer, fall, winter, and spring quarters.
Evening Program: TBD.
Prerequisite(s): A mandatory orientation is required prior to admission to the program.

## PROGRAM COURSE LIST

| COSMO 112 | Infection Control Principles \& Practices ..................................................... 2 |
| :---: | :---: |
| COSMO 116 | General Science of Hair.................................................................. 5 |
| COSMO 123 |  |
| COSMO 136 | Application of Haircutting and Hairstyling............................................ 14 |
| COSMO 142 | Advanced Applications of Haircutting and Hairstyling ............................... 4 |
| COSMO 146 | Chemical Texture Services ....................................................................... 5 |
| COSMO 158 |  |
| COSMO 164 |  |
| COSMO 163 |  |
| COSMO 172 | Lab Clinic III....................................................................................10 |
| COSMO 175 | Cosmetology Salon Business Practices................................................. 3 |
| COSMO 181 |  |
| COSMO 226 |  |
| COSMO 229 | State Board Practical Preparation........................................................ 4 |
| COSMO 231 | Lab Clinic IV............................................................................... 10 |
| COSMO 236 | State Board Written Test Review ......................................................... 3 |
| COSMO 244 ${ }^{\text {CAP }}$ | Cosmetology Capstone...................................................................... 3 |
| English Composition (or higher) or Public Speaking ......................................................... 5 |  |
| MAT 111 | Math for Cosmetology/Esthetics Professionals (preferred) or any 100 -level math class.. |
| General Psychology (or other social science or humanities class) ......................................... 5 |  |
| COLL 102 | College Success for All.................................................................. ${ }^{\text {a }}$ |
| Computer Literacy Requirement (Complete an approved computer literacy course or successfully pass the computer literacy exam). $\qquad$ |  |

Students not meeting state licensure hours requirements will take one or more of the following internship courses:
Industry Internship II. .....  2

COSMO 250
COSMO 252
COSMO 254
COSMO 256
Industry Internship III.. .....  3Industry Internship V..$\begin{array}{r}. . . \\ \hline\end{array}$

## CULINARY ARTS

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

## ASSOCIATE IN APPLIED SCIENCE - T DEGREE

Graduates are prepared to enter the fast-paced and exciting culinary field as entry-level cooks, lead cooks, or kitchen station supervisors.
Emphasizes fine-dining food production skills combined with professional service training and food-management techniques. Food production courses emphasize quality food preparation.
Potential employers include fine-dining establishments, hotels, resorts, catering kitchens, clubs, and executive dining services. In combination with additional study and experience, this degree can place graduates on a career ladder that could lead to positions such as restaurant manager, catering/banquet manager, sous-chef and executive chef.
Students train in aspects of culinary arts food service operations and management. The program emphasizes preparation of food for healthy lifestyles and is designed to exceed the standards set by the American Culinary Federation and the National Restaurant Association's Professional Management Development Program. The program combines classroom study and work-site learning in college restaurant operations.

## Student Learning Outcomes:

Upon successful completion of the Culinary Arts degree, students will:

- Evaluate work quality and generate recommendations for continuous improvement.
- Have gained competencies to be employed in the hospitality industry or closely related field.
- Demonstrate the ability to input orders and correct mistakes as needed.
- Demonstrate the ability to plan day-to-day operations for a restaurant.
- Demonstrate the ability to manage and lead other students by acting as lead cook and sous chef.
- Possess the following certificates: Food Handler cards, Restaurant Management Certificate (NRA) and Accounting Certificate (NRA).
- Apply problem-solving and decision-making skills to resolve guest and student complaints.
- Demonstrate the ability to plan, write, and execute a complete menu and monitor quality.
- Students will be able to pass the ServSafe exam given by the National Restaurants Association.
- Work as a team with coworkers to ensure quality and guest services.

The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science-T (AAS-T). The different requirements for each degree are listed below.

## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- Any 100 level math class
- PSYC\& $100^{\text {DIV }}$ General Psychology (PSY $112^{\text {DIV }}$, SOC\& $101^{\text {DIV }}$, or other humanities course that meets the diversity requirement)
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements ( 23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

## (CONTINUED FROM PREVIOUS PAGE)

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142 , MATH\& 146 or MATH\& 151
- 5 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ or SOC\& $101^{\text {DIV }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100, ASL\& 121, ASL\& 122, BIOL\& 160, BIOL\& 175, BIOL\& 241, BIOL\& 242, BIOL\& 260, CHEM\& 110, CHEM\& 121, CHEM\& 131, GEOL\& 110, HIST\& 146, HIST\& 147, HIST\& 148, HUM\& 101, MUSC\& 105, PHYS\& 114, POLS\& 202, PSYC\& 100, PSYC\& 200, PSYC\& 220, SOC\& 101
- 3 credits in College Success: COLL 102

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
Physical Activity Requirements: This occupation requires the ability to stand, walk, and perform repetitive motions for extended periods of time and lift up to 50 lbs . Students must be able to meet these physical requirements in order to complete lab requirements and obtain employment in this field.
Employability Requirements: All food workers (includes those who work with unpackaged food, food equipment or utensils, or with any surface where people put unwrapped food) are required to have a valid food worker card to work in Washington. (Chapter 246-217 WAC.)
Program Length: This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements. In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain.
Admission Dates: Summer, fall, winter, and spring quarters. Prerequisite(s): None.

## PROGRAM COURSE LIST

CUL 104 Sanitation in Food Service Operations ....................................................... 3
CUL 107 Professional Cooking I...................................................................................... 7

CUL 111 Food Preparation I....................................................................................................
CUL 113 Introduction to Baking.............................................................................................
CUL 117 Professional Cooking II............................................................................. 7

CUL 123 Cooking Methods II.....................................................................................................

CUL 132 American Regional Cuisine............................................................................... 3
CUL 135 Food Preparation III................................................................................. 3
CUL 139 Cooking Methods III.................................................................................. 7
REST 103 Food \& Beverage Cost Control.................................................................. 4
REST 107CAP Kitchen \& Dining Management.................................................................... 3
REST 109 Marketing/Public Relations.................................................................................... 3

REST 115 Catering Production .................................................................................. 3
REST 119 Operations Management........................................................................... 4
REST 122 Food Service Nutrition ............................................................................. 4

REST 131 Business Plan Development........................................................................ 4
REST 133 Beverage Service Management..................................................................... 4

TECHNICAL COURSE REQUIREMENTS .............................................................. 104

## AAT PROGRAM REQUIREMENTS

Technical Course Requirements...................................................... 104
AAT General Education Requirements (See list above)...................... 18
Computer Literacy Requirement (CAS 130 (Excel I) recommended to meet computer literacy degree requirement or successful completion of computer literacy exam).

## AAS-T REQUIREMENTS

Technical Course Requirements..................................................... 104
AAS-T Degree General Education Requirements (See list above)...... 23
Computer Literacy Requirement (CAS 130 (Excel I) recommended to
meet computer literacy degree requirement or successful completion
of computer lite.............................................

TOTAL CREDITS FOR AAS-T COMPLETION
130

## CULINARY ARTS

## BASIC COOKING SKILLS

## CERTIFICATE

Designed to train students in basic cooking skills, this certificate program includes portions of the Culinary Arts degree program.
Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.
Physical Activity Requirements: This occupation requires the ability to stand, walk, and perform repetitive motions for extended periods of time and lift up to 50 lbs . Students must be able to meet these physical requirements in order to complete lab requirements and obtain employment in this field.
Employability Requirements: All food workers (includes those who work with unpackaged food, food equipment or utensils, or with any surface where people put unwrapped food) are required to have a valid food worker card to work in Washington. (Chapter 246-217 WAC.)
Program Length: This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): None.

## PROGRAM COURSE LIST

CUL 104 Sanitation in Food Service Operations .......................................................... 3
CUL 107 Professional Cooking I............................................................................... 7
CUL 109 Cooking Methods I.................................................................................... 7
CUL 111 Food Preparation I............................................................................................
CUL 113 Introduction to Baking.............................................................................. 3
CUL 117 Professional Cooking II................................................................................................
CUL 119 Food Preparation II................................................................................. 3
CUL 123 Cooking Methods II............................................................................................. 7

CUL 132 American Regional Cuisine................................................................................ 3
CUL 135 Food Preparation III................................................................................ 3

English Composition (or higher) or Public Speaking ................................................................................ 5
Any 100-Level Math Class............................................................................................................................ 5
General Psychology (or other social science or humanities class) ........................................................ 5
COLL 102 College Success for All................................................................................ 3
TOTAL CREDITS FOR COMPLETION ....................................................................... 78

## CULINARY ARTS RESTAURANT MANAGEMENT

## CERTIFICATE

Prepares student for management careers within the food and beverage industry. Coursework is based on the professional management development program endorsed by the National Restaurant Association.

Physical Activity Requirements: This occupation requires the ability to stand, walk, and perform repetitive motions for extended periods of time and lift up to 50 lbs. Students must be able to meet these physical requirements in order to complete lab requirements and obtain employment in this field.
Employability Requirements: All food workers (includes those who work with unpackaged food, food equipment or utensils, or with any surface where people put unwrapped food) are required to have a valid food worker card to work in Washington. (Chapter 246-217 WAC.)
Program Length: This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters, based on availability.
Prerequisite(s): None.

## PROGRAM COURSE LIST

REST 103 Food \& Beverage Cost Control............................................................................... 4
REST 107 ${ }^{\text {CAP }} \quad$ Kitchen \& Dining Management............................................................................... 3
REST 109 Marketing/Public Relations...................................................................................... 3
REST 112 Restaurant Dining....................................................................................................... 7
REST 115 Catering Production .................................................................................................. 3
REST 119 Operations Management......................................................................................... 4
REST 122 Food Service Nutrition ................................................................................................ 4
REST 126 Finance \& Accounting................................................................................................ 4
REST 131 Business Plan Development.................................................................................................... 4
REST 133 Beverage Service Management............................................................................. 4
REST 137 Hospitality Law .......................................................................................................... 4
TOTAL CREDITS FOR COMPLETION

## DENTAL ASSISTANT

## ADA ACCREDITED

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

Designed to prepare students for positions in the dental field, including both front-office and dental-assistant career tracks. Graduates of the program will have a foundation of knowledge of dental sciences, dental assisting skills, dental materials, dental laboratory procedures, radiography, infection control, and dental business office-management skills.
Students will develop an understanding of the role of the dental assistant and dental business office assistant within the dental care team. Graduates are qualified for entry-level positions as expandedduties dental assistants and coordinating assistants, as well as dental business office assistants within a dental office.

This program is accredited through the American Dental Association (ADA). The last Friday in each of the final three quarters of study, students will be required to take one of the three components of the Dental Assistant National Board (DANB) Certification Examination. Completing the appropriate component of the exam is a prerequisite for continuing into the third and fourth quarters of study in the Dental Assistant program.

In addition, successful completion of the first component (Infection Control), completed at the end of the second quarter of study, is a prerequisite to entering the fourth quarter clinical experience. The second and third components of the exam are requirements for graduation from the program. Successfully completing these exams will result in the student receiving their national certification from DANB, entitling them to use the title of certified dental assistant.

Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), and social sciences (psychology, sociology) that provide knowledge and abilities upon which technical skills are built and personal development is enhanced.
Students are strongly encouraged to carry personal health/medical insurance throughout their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office.

## Student Learning Outcomes:

Upon successful completion of the Dental Assistant degree, students will:

- Communicate effectively, verbally and in writing, with team members and patients, including confidentiality in compliance with HIPAA regulations.
- Select appropriate instruments, materials, and equipment for various dental procedures.
- Maintain aseptic technique and apply maintenance of infection control pre-operatively, during patient care, and post-operatively according to OSHA regulations.
- Anticipate the dentist's needs based on the procedure being performed.
- Correctly identify facial landmarks and dental anatomy.
- Utilize critical thinking in evaluating information, making decisions, and completing projects.
- Evaluate work quality and generate recommendations for continuous improvement.
- Maintain conduct in a manner appropriate with dental standards in compliance with state and federal law.
- Multitask and demonstrate flexibility as it pertains to changes in daily routines and scheduled procedures.
- Prioritize and organize work assignments. Demonstrate effective time management skills.
- Obtain employment in the dental field or pursue advanced education.
- Successfully complete all three components of the Dental Assistant National Board exam to become a Certified Dental Assistant.
Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
Employability Requirements: To be employed as a dental assistant, you must apply for registration and become registered with the Washington Department of Licensing. You must also complete seven hours of AIDS/HIV education and hold a current and valid Health Care Provider Basic Life Support (BLS) certification. If newly hired, you must obtain the required certification within 45 days of the date hired (WAC 246-817-720).
Program Length: This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): In order to participate in the program, students must have current immunizations or laboratory verification of immune status. This includes, but is not limited to, Hepatitis B series, including a positive titer, Tetanus/Diphtheria, Tuberculosis Test, Measles/Mumps/


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Rubella, and Varicella as required by contracts with clinical facilities and CDC recommendations. Students must have a current Basic Life Support (CPR) card for health care providers, a First Aid card, and a current dental examination form completed by their dentist.

To enter the program, a student must be eligible the first quarter to take MAT 094, college-level English, and psychology or another social science or humanities course.
In order to participate in the externship, students must have all general education requirements completed and receive a "No Record On File" report related to crimes against persons from the Washington State Patrol. Students must be at least 18 years of age and have a high school diploma or high school equivalency diploma (per ADA standards).

## PROGRAM COURSE LIST

DAS 103 General Studie
DAS 105 Biomedical Sciences
Biomedical Sciences.................................................................................................. 4
DAS 110 Dental Sciences I.......................................................................................................... 5
DAS 113 Dental Assisting Skills I............................................................................................... 4
DAS 116 Foundations of Clinical Dentistry ............................................................................. 4
DAS 118 Principles of Radiography........................................................................................ 1
DAS 120 Dental Sciences II ..................................................................................................... 5
DAS 125 Dental Assisting Skills II.............................................................................................. 6
DAS 130 Dental Specialties I..................................................................................................... 3
DAS 135 Principles of Radiography II ..................................................................................... 5
DAS 140 Certification Review I................................................................................................ 1
DAS 223 Dental Sciences III ....................................................................................................... 3

DAS 226 Dental Specialties II..................................................................................................... 8
DAS 228 Certification Review II.............................................................................................. 1
DAS 237CAP Clinical Experience I.................................................................................................. 1
DAS 239CAP Clinical Experience II.............................................................................................. 10
DAS 243 Certification Review III............................................................................................... 1
DBOA 103 Dental Terminology \& Procedures........................................................................... 4
DBOA 111 Dental Charting, Scheduling and Recall Management....................................... 5
DBOA 119 Dental Documents and Inventory Systems.............................................................. 4

Dental Assistant Computer Skills Elective (See list below)....................................................................... 4
English Composition (or higher) or Public Speaking................................................................................ 5
Any 100-Level Math Class........................................................................................................................... 5
PSYC\& 100 DIV General Psychology or higher................................................................................. 5
COLL 102 College Success for All............................................................................................. 3
TOTAL CREDITS FOR AAT COMPLETION................................................................ 110

## Recommended Electives

CAH 105 Cl Computer Applications ..................................................................................... 5
CAS 105 Keyboarding............................................................................................................ 3
CAS 115CL Introduction to Computing....................................................................................... 3

CAS 125 Word II........................................................................................................................ 3
CAS 130 Ex Exell.......................................................................................................................... 3
CAS 135 Ex Ex II......................................................................................................................... 3
CAS 141 CL PowerPoint.................................................................................................................. 3


## DENTAL ASSISTANT

## ADA ACCREDITED CERTIFICATE

Designed to prepare students for positions in the dental assistant field. Provides a foundation of knowledge of dental sciences, dental assisting skills, dental materials, dental laboratory procedures, radiography, infection control, and office management skills.
Students will develop an understanding of the role of the dental assistant within the dental care team. Graduates are qualified for entry-level positions and for positions as expanded-duties dental assistants and coordinating assistants in the dental office.
Accreditation: This program is accredited through the American Dental Association (ADA). The last Friday in each of the final three quarters of study, students will be required to take one of the three
components of the Dental Assistant National Board (DANB)
Certification Examination. Completion of the appropriate component of the exam will be a prerequisite for continuation into the third and fourth quarters of study in the Dental Assistant program.

In addition, successful completion of the first component (Infection Control), completed at the end of the second quarter of study, is a prerequisite to entering the fourth quarter clinical experience. The second and third components of the exam are requirements for graduation from the program. Successfully completing these exams will result in the student receiving his or her national certification from DANB, entitling him or her to use the title of certified dental assistant. Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), and social sciences (psychology, sociology) that provide knowledge and abilities upon which technical skills are built and personal development is enhanced. Students are strongly encouraged to carry personal health/ medical insurance throughout their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office.
Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy and the capstone project.
Employability Requirements: To be employed as a dental assistant, you must apply for registration and become registered with the Washington Department of Licensing. You must also complete seven hours of AIDS/HIV education and hold a current and valid Health Care Provider Basic Life Support (BLS) certification. If newly hired, you must obtain the required certification within 45 days from the date hired (WAC 246-817-720).
Program Length: This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): In order to participate in the program, students must have current immunizations or laboratory verification of immune status. This includes, but is not limited to, Hepatitis B series including a positive titer, Tetanus/Diphtheria, Tuberculosis Test, Measles/Mumps/Rubella, and Varicella as required by contracts with clinical facilities and CDC recommendations. Students must have a current Basic Life Support (CPR) card for health care providers, a First Aid card, and a current dental examination form completed by their dentist.
In order to participate in the externship, students must complete all general education requirements and receive a "No Record On File" report related to crimes against persons from the Washington State Patrol. Students must be at least 18 years of age and have a high school diploma or high school equivalency diploma (per ADA standards).
To enter the program, students must be eligible the first quarter to take MAT 094, college-level English, and psychology or another social science or humanities course.

## PROGRAM COURSE LIST

DAS 103 General Studies.................................................................................................. 4

DAS 110 Dental Sciences I.............................................................................................. 5


DAS 118 Principles of Radiography........................................................................... 1
DAS 120 Dental Sciences II ................................................................................. 5
DAS 125 Dental Assisting Skills II.............................................................................................. 6
DAS 130 Dental Specialties I..................................................................................................... 3
DAS 135 Principles of Radiography II..................................................................................... 5
DAS 140 Certification Review I................................................................................................ 1
DAS 223 Dental Sciences III..................................................................................................... 3
DAS 224 Dental Assisting Skills III .............................................................................................. 7
DAS 226 Dental Specialties II................................................................................................... 8
(CONTINUED FROM PREVIOUS PAGE)

| DAS 228 | Certification Review II. |  |
| :---: | :---: | :---: |
| DAS 237 CAP | Clinical Experience I. |  |
| DAS 239CAP | Clinical Experience II.. | 10 |
| DAS 241 | Advanced Theory | . 4 |
| DAS 243 | Certification Review III. | . 1 |
| English Composition (or higher) or Public Speaking |  | . 5 |
| Any 100-Level Math Class. |  | . 5 |
| General Psychology (or other social science or humanities class) |  | . 5 |
| COLL 102 | College Success for All. |  |

## DIGITAL ENTERTAINMENT DESIGN AND PRODUCTION

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE ASSOCIATE IN APPLIED SCIENCE - T DEGREE

Digital Entertainment Design and Production is a multidisciplinary subject combining elements of art, computer science and communications. If it is on a screen, we are the ones who put it there. From videos and commercials to ads and games, today's world is run by media.
The Clover Park Digital Entertainment Design and Production degree provides students with fundamental skills that apply to careers in the film, game design and digital illustration fields. We do this by giving the students a foundation in basic art and design skills before proceeding into the medium of their choice. Whether that medium is games, film, or digital illustration, students begin building skill sets that allow them the type of self-expression that makes a portfolio stand apart.
This program prepares students for a wide variety of career options, including production assistant, digital photographer, digital editor, digital effects artist, animator, video game developer, video game tester, level designer, and 3D artist.

## Student Learning Outcomes:

Upon successful completion of the Digital Entertainment Design and Production degree, students will:

- Apply artistic decisions that fit with the mood and atmosphere suitable for the client or project needs.
- Apply elements of design, composition, and color theory to create professional work.
- Design and assemble a complete production book that will cover the necessities of all aspects of the full production cycle for digital films and games.
- Demonstrate the ability to properly delegate tasks that best fit within the needs of the project or client.
- Write a full production breakdown according to the type of project.
- Effectively communicate technical issues and design solutions through written, oral, and visual means.
- Demonstrate proficiency and professional competencies with care and use of computer and video equipment.
- Effectively present through oral, written, and graphic communication a design, research project, or skill demonstration.
- Assess the project to compute the needs and timelines of the client(s) and/or project(s).
- Justify the artistic and technical choices that have been made through production and communication.
- Set up a production that follows a schedule and production book to construct a story.
- Produce a professional project that summarizes the practice of the technical and artistic technique and skills.
In addition to the program course requirements, students must also
complete the general education requirements for the degree they seek. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science - T (AAS-T). The different requirements for each degree are listed below:


## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- Any 100 level math class
- PSYC\& $100^{\text {DIV }}$ General Psychology (PSY $1122^{\text {DVV }}$, SOC\& $101^{\mathrm{DVV}}$, or other humanities course that meets the diversity requirement)
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements ( 23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142, MATH\& 146 or MATH\& 151
- 5 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ or SOC\& $101^{\text {DIV }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100, ASL\& 121, ASL\& 122, BIOL\& 160, BIOL\& 175 , BIOL\& 241, BIOL\& 242, BIOL\& 260 , CHEM\& 110 , CHEM\& 121 , CHEM\& 131, GEOL\& 110, HIST\& 146, HIST\& 147, HIST\& 148, HUM\& 101, MUSC\& 105, PHYS\& 114, POLS\& 202, PSYC\& 100, PSYC\& 200, PSYC\& 220, SOC\& 101
- 3 credits in College Success: COLL 102

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
Program Length: This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters. This is an afternoon program.
Prerequisite(s): Enrollment in or successful completion of ENG 091.

## PROGRAM COURSE LIST

DED 102

Genre Studies
$\cdots$

DED 104 General Art...
DED 106 C
DED 108
DED 110
DED 112
DED 120
DED 125
DED 127
DED 130
DED 135
DED 138
DED 140
DED 145
DED 147
DED 150
DED 152
DED 154
DED 158
DED 159CAP
DED 170
DED 172
DED 174
DED 175
DED 183 .. 4

Digital Art I
.... 4

Screenwriting.
Digital Photography I .3

Digital Art II ... 4

Digital Photography II. ... 4

## Digital Video I

.......................................................................... 4
Advanced Media Creation ...................................................................................... 4
Storyboarding............................................................................................................... 3
Motion Graphics I ................................................................................................................. 4
Advanced Development Tools.................................................................................. 4
Digital Video II ............................................................................................................. 4
Digital Editing ............................................................................................................. 4
Advanced Design Theory .......................................................................................... 4
3D Modeling I ............................................................................................................ 4
Motion Graphics II ..................................................................................................... 4
Game Design I............................................................................................................... 3
3D Modeling II............................................................................................................. 4
Capstone/Internship................................................................................................... 4
3D Modeling III........................................................................................................... 4
Scene Design. ........................................................................................................... 4
3D Animation............................................................................................................... 4
Development Project.................................................................................................. 4
Interactivity Guidance ................................................................................................ 4

TECHNICAL COURSE REQUIREMENTS

## AAT REQUIREMENTS

Technical Course Requirements ................................................................................ 96
AAT General Education Requirements (See list above)............................................ 18

TOTAL CREDITS FOR AAT COMPLETION............................................................. 114

## AAS-T REQUIREMENTS

Technical Course Requirements ................................................................................ 96
AAS-T Degree General Education Requirements (See list above)........................... 23

TOTAL CREDITS FOR AAS-T COMPLETION

## EARLY CARE \& EDUCATION

ASSOCIATE OF APPLIED TECHNOLOGY DEGREE
ASSOCIATE IN APPLIED SCIENCE - T DEGREE
Prepares students for careers in the Early Care \& Education field as child care directors, teachers, leads, and assistant child care providers.
To obtain the degree, a student must complete the required courses and elective credits. Students participate in practicum experiences at the Hayes Child Development Center on the Lakewood Campus or in an approved local child care center.
Students will complete four practicum experiences. The fourth practicum will be in an area of the student's choice: Leadership in ECE; Child Development - Infant/Toddler; Child Development - Preschool; Child Development - School Age; Family Childcare Professional; or Special Needs. Degree candidates may petition for credits based on possession of a current CDA credential.
Students are required to develop a program portfolio to be completed and presented prior to graduation.
All courses must be completed with a minimum of a "C" grade to graduate. The Foundation Certificate and Washington State ECE Stackable Certificate are embedded in the degree program, so students may earn stepping-stone credentials on their way to completing an associate degree.

## Student Learning Outcomes:

Upon successful completion of the Early Care \& Education degree, students will:

- Understand and apply child development and learning.
- Build family and community relationships.
- Observe, document, and assess child development.
- Use developmentally effective approaches to connect with children and families.
- Use content knowledge to build meaningful curriculum.
- Demonstrate professional standards related to early childhood practice.

Proficiency in reading, writing, and an understanding of the English language are required. ENGL\& 101 must be completed by the end of the fourth quarter. Students are required to take the Accuplacer assessment or equivalent before entry into the program and must meet with an ECE faculty advisor. All degree students must fulfill portfolio requirements, which must be completed by the time of graduation from the program.
In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) or the Associate in Applied Science - T
(AAS-T). The different requirements for each degree are listed below

## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- MAT 103 or higher
- PSYC\& $100^{\text {Div }}$ General Psychology (PSY $1122^{\text {Div }}$, SOC\& $101^{\mathrm{DVV}}$, or other
humanities course that meets the diversity requirement)
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements ( 23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142, MATH\& 146 or MATH\& 151
- 5 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ or SOC\& $101^{\text {Div }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100, ASL\& 121, ASL\& 122, BIOL\& 160 , BIOL\& 175, BIOL\& 241, BIOL\& 242, BIOL\& 260, CHEM\& 110, CHEM\& 121, CHEM\& 131, GEOL\& 110 , HIST\& 146 , HIST\& 147 , HIST\& 148 , HUM\& 101, MUSC\& 105, PHYS\& 114, POLS\& 202, PSYC\& 100, PSYC\& 200, PSYC\& 220, SOC\& 101
- 3 credits in College Success: COLL 102

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
Employability Requirements: To become a licensed child care provider in Washington, you must participate in a Department of Early Learning (DEL) licensing orientation and apply for and receive licensure. State law requires DEL to run background checks on anyone who is authorized to care for or has unsupervised access to children in licensed child care facilities.
Program Length: This program is approximately 8-to-10 quarters long, depending on the time students need to satisfactorily complete all graduation requirements and hours of enrollment. All courses must be completed with a minimum of a "C" grade to graduate.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Successful completion of ENG 091 or equivalent.

## PROGRAM COURSE LIST

ECE 120 Interpersonal Skills for the ECE Professional ...................................................... 2
ECE 230 Inclusion in ECE .................................................................................................. 3

ECE 290CAP Portfolio Adventure ................................................................................... 2

ECED\& 105 Introduction to Early Childhood Education................................................... 5
ECED\& 107 Health, Nutrition \& Safety.................................................................................... 5
ECED \& 132 Infants \& Toddlers - Nurturing Care ................................................................. 3

ECED \& 170 Environments for Young Children.................................................................. 3
ECED\& 180 Language and Literacy Development........................................................... 3
ECED\& 190 Observation and Assessment......................................................................... 3


ECS 160 Music/Movement \& Creativity: Creative Art Curriculum.................................. 5


ECS 183 ECE Practicum III............................................................................................. 5


ECS 292 Theories of Child Development....................................................................... 3


EDUC\& 150 Child, Family and Community...................................................................... 3
ECE Practicum IV Elective (See list below) ................................................................................... 3
ECE Electives (See list below) ....................................................................................................... 6
TECHNICAL COURSE REQUIREMENTS ................................................................ 94

## AAT REQUIREMENTS

(CONTINUED FROM PREVIOUS PAGE)
Technical Course Requirements .....  94
ECE AAT General Education Requirements (See list above) ..... 18
TOTAL CREDITS FOR AAT COMPLETION. ..... 112
AAS-T REQUIREMENTS
Technical Course Requirements ..... 94
AAS-T Degree General Education Requirements (See list above) .....  23
TOTAL CREDITS FOR AAS-T COMPLETION ..... 117ECE Practicum IV Elective (Students must choose one of the followingPracticum IV Courses)
ECE 190 Practicum IV: Green. 3
ECE 194 .....  3
Practicum IV: The Emotionally Intelligent Child
ECE 198 .....  3
Practicum IV: Working with Families
ECE 219 .....  3
Practicum IV: Responsive Caregiving for Infants and Toddlers.
ECS 217 ..... 3
Pe Practicum IV Intants/Todders
ECS 230 ..... $\ldots$
ECE Practicum IV School Age
ECS 286 .....  3 Practicum IV Leadership
ECS 287 .....
Practicum IV Child Development
ECS 288 .....  3
ECS 297 Practicum IV Special Needs .....  3
ECE Electives (Students must complete a minimum of 6 elective credits)ECE 126Nature \& the Outdoor Classroom 2
ECE 132 Raising an Emotionally Intelligent Child. .....  1
Issues \& Trends Green ECE 134 .....  2
ECE 135 School Age Math, Science \& Technology .....  3
ECE 156 From Seed to Table: Gardening with Children .....  2
ECE 158
Just Recycle It! 2
ECED\& 120 Practicum: Nurturing Relationships .....  2
EDUC\& 134 Family Child Care Management.. .....  3
EDUC\& 136 School Age Care Management.. .....  3
ECED\& 139 Administration of Early Learning Programs. .....  3
ECS 202 Preschool Activities .....  2
ECS 206 Signing with Infants \& Toddlers .....  2
ECS 220 Curriculum for School Age 2
ECS 225 School Age Environment.. .....  2
ECS 260 Curriculum for Family Child Care ..... $\ldots . .2$
ECS 266 Leadership in Early Childhood Education. .....  4
ECS 290 Mentoring in ECE. .....  1

## EARLY CARE \& EDUCATION CREATING A GREEN CLASSROOM

## CERTIFICATE

Designed for beginning and experienced Early Care \& Education teachers who are eager to increase their skill in creating and maintaining sustainable (green) practices in their work with children of all abilities.
Classes are offered in the evenings with arranged practicum experience.
Employability Requirements: To become a licensed child care provider in Washington, you must participate in a Department of Early Learning (DEL) licensing orientation and apply for and receive licensure. State law requires DEL to run background checks on anyone who is authorized to care for or who has unsupervised access to children in licensed child care facilities.

Program Length: This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a "C" grade to graduate.

Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Successful completion of ENG 091 or equivalent.

## PROGRAM COURSE LIST

ECE 126 Nature \& the Outdoor Classroom .....  2
ECE 134 Issues \& Trends Green. .....  2
ECE 156 From Seed to Table: Gardening with Children. .....  2
ECE 158 Just Recycle It! ..... $\ldots . .2$ECED\& 107
ECED\& 170
Health, Safety \& Nutrition .....  5
ECS 151 ECE Curriculum: Math, Science \& Technology. 3
TOTAL CREDITS FOR COMPLETION ..... 19

## EARLY CARE \& EDUCATION EARLY CHILDHOOD FOUNDATION

## CERTIFICATE

This program is offered only to CPTC-affiliated centers in the community. It prepares students for entry-level positions in the Early Care \& Education field. Students participate in experiential learning in an approved local child care center.
ECED\& 100 provides students with the basic 30 -hour S.T.A.R.S. certification. ECS 121-127 prepares students for the CDA assessment. The program is designed for students to earn a certificate while working in the field.
Employability Requirements: To become a licensed child care provider in Washington, you must participate in a Department of Early Learning (DEL) licensing orientation and apply for and receive licensure. State law requires DEL to run background checks on anyone who is authorized to care for or has unsupervised access to children in licensed child care facilities.
Program Length: This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a "C" grade to graduate.

Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Proficiency in reading, writing, and understanding the English language is required. Students are required to take the Accuplacer assessment or equivalent before entry into the program.

## PROGRAM COURSE LIST

## ECE 120 <br> Interpersonal Skills for the ECE Professional ...... 2 <br> ECED\& 100 <br> Child Care Basics (STARS)

 3ECS 121 Introduction to the Early Childhood Profession ..... 2
ECS 122 Ways to Study How Children Grow/Learn .2
ECS 123 Self, Social and Positive Guidance. ..... ECS 124
ECS 125 Program Management$\ldots 2$ECS 126Professionalism...$\ldots . .2$
ECS $127^{\text {CAP }}$ CDA Capstone .....  2 .2
ECS 181 ECE Practicum I
ECS 182 ECE Practicum II. ..... 5
TOTAL CREDITS FOR COMPLETION ..... 29

## EARLY CARE \& EDUCATION EARLY CHILDHOOD LEADERSHIP

## CERTIFICATE

Designed for experienced Early Care \& Education teachers seeking leadership positions in their career field. Classes are offered in the evenings with arranged practicum experience.

Employability Requirements: To become a licensed child care provider in Washington, you must participate in a Department of Early Learning (DEL) licensing orientation and apply for and receive licensure. State law requires DEL to run background checks on anyone who is authorized to care for or who has unsupervised access to children in licensed child care facilities.

Program Length: This program is approximately two-to-four quarters long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a "C" grade to graduate.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Successful completion of ENG 091 or equivalent.

## PROGRAM COURSE LIST

ECED \& 139 Administration of Early Learning Programs.............................................................. 3
ECS 235 Issues \& Trends
ECS 266 Leadership in Early Childhood Education............................................................... 4
ECS 277 Professionalism \& Ethics................................................................................................ 2
ECS 286 Practicum IV Leadership............................................................................................. 3
ECS 290 Mentoring in ECE......................................................................................................... 1

TOTAL CREDITS FOR COMPLETION18

## EARLY CARE \& EDUCATION SCHOOL-AGE OUT-OFSCHOOL PROGRAM

## CERTIFICATE

Designed for staff/teachers of school-age children who are seeking a certificate for quality out-of-school programs.

Employability Requirements: To become a licensed child care provider in Washington, you must participate in a Department of Early Learning (DEL) licensing orientation and apply for and receive licensure. State law requires DEL to run background checks on anyone who is authorized to care for or who has unsupervised access to children in licensed child care facilities.

Program Length: This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a "C" grade to graduate.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Successful completion of ENG 091 or equivalent.

## PROGRAM COURSE LIST

ECE 135
ECED\& 190
ECS 220
ECS 225
ECS 230
ECS 292

School Age Math, Science \& Technology$\ldots$

Observation and Assessment...Curriculum for School Age . 2
School Age Environment. .....  2
ECE Practicum IV School Age .....  3
EDUC\& 115 Child Development. .....  .5
EDUC\& 130
EDUC\& 150
Guiding Behavior. ..... $\ldots$
TOTAL CREDITS FOR COMPLETION ..... 27

## EARLY CARE \& EDUCATION SPECIAL NEEDS

## CERTIFICATE

Designed for experienced Early Care \& Education teachers who are eager to increase their skill in working with children of all abilities. Explores the many facets of leadership positions, how to lead staff, and how to advocate for the needs of young children. Classes are offered in the evenings with an arranged practicum experience.

Employability Requirements: To become a licensed child care provider in Washington, you must participate in a Department of Early Learning (DEL) licensing orientation and apply for and receive licensure. State law requires DEL to run background checks on anyone who is authorized to care for or who has unsupervised access to children in licensed child care facilities.

Program Length: This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a "C" grade to graduate.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Successful completion of ENG 091 or equivalent. Students are required to take the Accuplacer assessment or equivalent before entry into the program. ASL\& 121 American Sign Language requires college-level English.

## PROGRAM COURSE LIST

ASL\& 121 American Sign Language I........................................................................................ 5
ECE 120 Interpersonal Skills for the ECE Professional .......................................................... 2
ECE 230 Inclusion in ECE ......................................................................................................... 3
ECED \& 190 Observation and Assessment..................................................................................... 3
EDUC\& 115 Child Development...................................................................................................... 5
EDUC\& 130 Guiding Behavior......................................................................................................... 3
EDUC\& $150 \quad$ Child, Family and Community................................................................................... 3

ECS 235 Issues \& Trends.............................................................................................................. 2

ECS 297 Practicum IV Special Needs..................................................................................... 3

TOTAL CREDITS FOR COMPLETION ..................................................................... 36

## EARLY CARE \& EDUCATION STATE INITIAL EARLY CHILDHOOD EDUCATION

## CERTIFICATE

## STEP 1: WASHINGTON STATE ECE STACKABLE CERTIFICATE

Students can earn this certificate as the starting point of their careers or to continue their professional development. The certificate focuses on competencies comparable to those of the Child Development Associate (CDA). This provides the foundation for the ECE State Certificate and associate degree. Courses include a 5 -credit Introduction to Early Childhood Education; a 5-credit Health, Safety, and Nutrition course; and a 2 -credit practicum to apply learning.

## (CONTINUED FROM PREVIOUS PAGE)

Employability Requirements: To become a licensed child care provider in Washington, you must participate in a Department of Early Learning (DEL) licensing orientation and apply for and receive licensure. State law requires DEL to run background checks on anyone who is authorized to care for or has unsupervised access to children in licensed child care facilities.
Program Length: To become a licensed child care provider in Washington, you must participate in a Department of Early Learning (DEL) licensing orientation and apply for and receive licensure. State law requires DEL to run background checks on anyone who is authorized to care for or has unsupervised access to children in licensed child care facilities.
Admission Dates: Fall quarter.
Prerequisite(s): ECED\& 100: Child Care Basics (STARS) or equivalent. Proficiency in reading, writing, and understanding the English language is required. Students are required to take the Accuplacer assessment or equivalent before entry into the program. Successful completion of ENG o91 or equivalent.

## PROGRAM COURSE LIST

ECED \& 105 Introduction to Early Childhood Education.............................................................. 5
ECED \& 107* Health, Nutrition and Safety..................................................................................... 5
ECED \& 120 Practicum: Nurturing Relationships.......................................................................... 2
TOTAL CREDITS FOR COMPLETION 12
*Articulated courses with high schools for dual enrollment

## EARLY CARE \& EDUCATION

## SHORT ECE CERTIFICATE OF SPECIALIZATION

## CERTIFICATE

## STEP 2: WASHINGTON STATE ECE STACKABLE CERTIFICATE (INITIAL CERTIFICATE PLUS THE FOLLOWING REQUIREMENTS)

This certificate builds on the Initial Certificate (for a total of 37 credits). At this point, professionals can choose one of five specializations: ECE general, infant-toddler care, school-age care, family child care, and ECE administration. For each specialization, students must take a 5 -credit Child Development course, plus a course aligned with the specific specialization.
Employability Requirements: To become a licensed child care provider in Washington, you must participate in a Department of Early Learning (DEL) licensing orientation and apply for and receive licensure. State law requires DEL to run background checks on anyone who is authorized to care for or has unsupervised access to children in licensed child care facilities.
Program Length: This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a "C" grade to graduate.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): ECED\& 100: Child Care Basics (STARS) or equivalent. Proficiency in reading, writing, and understanding the English language is required. Students are required to take the Accuplacer assessment or equivalent before entry into the program. Successful completion of ENG 091 or equivalent.

## COURSES FROM INITIAL CERTIFICATE

ECED\& 105

Introduction to Early Childhood Education...
.. .5

ECED \& 107 Health, Safety \& Nutrition ................................................................................. 5

ECED\& 120 Practicum: Nurturing Relationships.............................................................. 2

## PROGRAM COURSE LIST


ECE Specialization Elective (See list below)............................................................................. 3
TOTAL CREDITS FOR COMPLETION ..................................................................... 20
*Articulated courses with high schools for dual enrollment
ECE Specialization Elective (Students must choose one of the following)
ECED\& 132 Infants \& Toddlers: Nurturing Care...............................................................................
ECED \& 139 Administration of Early Learning Programs.................................................... 3

ECUC\& 134 Family Child Care Management..................................................................... 3
EDUC\& 136 School Age Care Management......................................................................... 3

## EARLY CARE \& EDUCATION

## WASHINGTON STATE ECE STACKABLE

## CERTIFICATE

Prepares students for careers in the Early Care \& Education field as lead and assistant childcare providers. Students participate in experiential learning at the Hayes Child Development Center on the Lakewood Campus or in approved local child care centers. The entire credential is broken down into three steps (Initial Certificate, Washington State Short Certificate of Specialization, and remaining ECE Washington State Certificate requirements).
ECED\& 100 provides students with the basic 30-hour S.T.A.R.S. certification. The program is designed for students to earn a certificate while working in the field.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities upon which technical skills are built and personal development is enhanced.

Employability Requirements: To become a licensed child care provider in Washington, you must participate in a Department of Early Learning (DEL) licensing orientation and apply for and receive licensure. State law requires DEL to run background checks on anyone who is authorized to care for or has unsupervised access to children in licensed child care facilities.
Program Length: This program is approximately four-to-six quarters long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a "C" grade to graduate.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): ECED\& 100: Child Care Basics (STARS) or equivalent. Proficiency in reading, writing, and understanding the English language is required. Students are required to take the Accuplacer assessment or equivalent before entry into the program. Successful completion of ENG 091 or equivalent.

## PROGRAM COURSE LIST

ECED\& 105
Introduction to Early Childhood Education............................................................ 5
ECED\& 107* Health, Nutrition and Safety........................................................................ 5
ECED\& 120 Practicum: Nurturing Relationships................................................................ 2
ECED \& 160 Curriculum Development................................................................................ 5
ECED\& 170 Environments for Young Children........................................................................ 3
ECED\& 180 Language and Literacy Development........................................................... 3
ECED\& 190 Observation and Assessment.......................................................................................
EDUC\& 115 Child Development. ..... $\ldots . .5$
EDUC\& 150 Child, Family and Community. .....  3
ECE Specialization Elective (See listing below). ..... 
English Composition (or higher) or Public Speaking ..... $\ldots .$.
Any 100-Level Math Class .....  5
TOTAL CREDITS FOR COMPLETION47
*Articulated courses with high schools for dual enrollment
ECE Specialization Elective (Students must choose one of the following)
ECED \& 132 Infants \& Toddlers - Nurturing Care. .....  3
ECED\& 139 Administration of Early Learning Programs$\cdots$
Guiding Behavior... EDUC\& 130 .....  3
EDUC\& 134 Family child Care ManagementEDUC\& 136 School Age Care Management.$\begin{array}{r}. . .3 \\ \hline\end{array}$
ELECTRICIAN LOW VOLTAGE FIRE/ SECURITY

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

Prepares students for positions in the electronic fire/security industry as low voltage electrician apprentices, service technicians, or installers.
Students participate in hands-on training with advanced equipment, techniques, and programming related to burglar alarms, fire alarms, card access, and closed-circuit TV. The program prepares students for careers as alarm-system installers and service technicians.
Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), and social sciences (psychology, sociology) that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

The Electrician Low Voltage Fire/Security Degree Program is approved as a Limited Energy (06) specialty electrical training program in the state of Washington. Upon successful completion of the program, graduates applying to become a Limited Energy (06) specialty electrician can be credited with 1,815 hours of work experience.

## Student Learning Outcomes:

Upon successful completion of the Electrician Low Voltage Fire/Security degree, students will:

- Correctly construct, program, and demonstrate an understanding of a Burglar Alarm System.
- Correctly construct, program, and demonstrate an understanding of a Card Access System.
- Correctly construct, program, and demonstrate an understanding of a Closed Circuit TV System.
- Pass various exams on National Electrical Codes, National Fire Codes, and Washington State Electrical Codes.
- Employers in Western Washington will be pleased with the education received by the students of EFST shown by feedback from the Advisory Committee.
- Correctly construct, program, and demonstrate an understanding of a Fire Alarm System.
- Demonstrate a competency in print reading and proper use of technical bulletins by the completion of various projects relating to these skills.
- Show technical proficiency by passing the National Certification Exam.
- Obtain an entry-level position in this field with the accumulation of 1089 hours for a certificate and 1815 hours for a degree.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy and the capstone project.

Program Length: This degree program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall, winter, spring, and summer quarters.
Prerequisite(s): Successful completion of the Electrician Low Voltage Fire/Security certificate, or by instructor's permission. A mandatory orientation is required before admission to the program.

## PROGRAM COURSE LIST

EFS 105 AC/DC Electricity: Basic Theory, Fractions \& Ohm's Law................................. 7
EFS 106 AC/DC Electricity: Series Parallel \& Combination Circuits............................. 7
EFS 107 AC/DC Electricity: Electrical Power \& Power Applications ............................. 7
EFS 108 National Electrical Code Print Reading......................................................... 7
EFS 109 National Alarm Installer Training Program...................................................... 7
EFS 110 CCTV Application \& Design.......................................................................... 7
EFS 118 National Electrical Codes............................................................................ 6

EFS 121 CCTV Field Service \& Installation.................................................................... 7
EFS 124 Washington Administrative Codes.............................................................. 2
EFS 207 Addressable Fire SLC Systems/Design ............................................................... 7
EFS 211 Biometrics Access ........................................................................................................
EFS 216 Advanced Voice Evacuation Fire Alarm Systems.......................................................7 7
EFS 221 Fire Codes, NICET, NFPA ............................................................................. 7

EFS 231CAP CCTV Digital Network Solutions.................................................................. 7

Any 100-Level Math Class...........................................................................................................................
PSY $112^{\text {oiv }}$ Psychology of the Workplace....................................................................... 5

Computer Literacy (Complete an approved computer literacy course or successfully pass the computer literacy exam)................................................................................................... 3

TOTAL CREDITS FOR AAT COMPLETION

## ELECTRICIAN LOW VOLTAGE FIRE/ SECURITY

## CERTIFICATE

Prepares students for positions as low voltage electrician apprentices specializing in the electronic fire/security industry as alarm-system installers and service technicians. Students participate in realistic hands-on training in the classroom on burglar alarms, fire alarms, card access, and closed-circuit TV.
Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), and social sciences (psychology, sociology) that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

The Electrician Low Voltage Fire/Security Certificate Program is approved as a Limited Energy (06) specialty electrical training program in the State of Washington.
Upon successful completion of the program, graduates applying to become a Limited Energy (06) specialty electrician can be credited with 1,089 hours of work experience.

Program Length: This certificate program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): A mandatory orientation is required before admission to the program.
PROGRAM COURSE LIST
EFS 105 AC/DC Electricity: Basic Theory, Fractions \& Ohm's Law.............................. 7
EFS 106 AC/DC Electricity: Series Parallel \& Combination Circuits................................ 7
EFS 107 AC/DC Electricity: Electrical Power \& Power Applications ............................ 7
EFS 108 National Electrical Code Print Reading ......................................................... 7
EFS 109 National Alarm Installer Training Program........................................................ 7
(CONTINUED FROM PREVIOUS PAGE)


## ENVIRONMENTAL SCIENCES \& TECHNOLOGY

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE ASSOCIATE IN APPLIED SCIENCE - T DEGREE

Provides the necessary skills for a wide range of positions in the environmental science field.
Students perform hands-on water-quality monitoring; soil, water, and air sampling; mineral identification; wetland delineation and restoration; geographic information system mapping; and simulated hazardous waste site cleanup operations.
Careers are available in both natural resource conservation and urban/ remediation fields. This program will assist students in preparing for positions with both public and private sector employers. Potential future job titles include environmental technician, natural resource technician, hazardous waste worker, hazardous material handler, fisheries technician, and storm water remediation operator.

## Student Learning Outcomes:

Upon successful completion of the Environmental Sciences \& Technology degree, students will:

- Interpret and apply environmental regulations to specific industries.
- Assess ecosystem health and design a restoration plan.
- Conduct themselves in a manner appropriate to the environmental profession.
- Manage workplace systems.
- Communicate effectively.
- Evaluate work quality and generate recommendations for continuous improvement.
- Assess hazardous and potentially hazardous sites and remediate if necessary.
- Use personal protective equipment in a variety of occupational settings.
- Collect, analyze, and evaluate environmental samples to industry standards.
- Demonstrate an understanding of human impact on the environment.

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science-T (AAS-T). The different requirements for each degree are listed below.

## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- Any 100 level math class
- PSYC\& $100^{\text {DIV }}$ General Psychology (PSY $112^{\text {DIV }}$, SOC\& $101^{\text {DIV }}$, or other humanities course that meets the diversity requirement)
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements ( 23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142 , MATH\& 146 or MATH\& 151
- 5 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ or SOC\& $101^{\text {DIV }}$
- 5 credits in social science, humanities, or science; for this program, this requirement is satisfied by the required program course GEOL\& 110
- 3 credits in College Success: COLL 102

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
Note: 5 credits of Social Science required (PSYC\& 100 OR SOC\& 101). GEOL\& 110 fulfills an AAS-T science requirement; therefore, only 15 additional credits of general education courses are required for the AAS-T degree.
Program Length: This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): None.

## PROGRAM COURSE LIST

ENV 109 Introduction to Ecology. .....  .4
ENV 135 Hazardous Waste Site Operations .....  8
ENV 141ENV 154ENV 157ENV 161ENV 162ENV 163
Site Characterization. .....  4
Environmental Site Assessment. .....  .4
Environmental Law I... .....  .5
General Chemistry with Lab.. ..... 6
Environmental Chemistry with Lab. .....  .6
Rural Technologies. .....  4
Issues in the Urban Environment.. ..... $\ldots .5$
Internship. ..... 10
Environmental Law II... .....  5
Environmental Science Capstone. .....  2
Hydrology.. .....  6
Introduction to Air Pollution .....  3
Environmental Critical Areas. ..... $\ldots . .7$
Introduction to Soils. .....  5
Watershed Analysis. .....  4
Hazardous Materials Transportation. .....  3
Environmental Geology with Lab. .....  5
GPS Technologies. .....  .2
GEO 215102
AAT REQUIREMENTS
Technical Course Requirements. ..... 102
AAT General Education Requirements (See list above) ..... 18
TOTAL CREDITS FOR AAT COMPLETION ..... 120
AAS-T REQUIREMENTS
Technical Course Requirements ..... 102
Additional AAS-T General Education Requirements (See list above) ..... 18
TOTAL CREDITS AAS-T COMPLETION. ..... 120

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

The master esthetics program prepares students for entry-level positions in salons, day spas, or medical settings such as medi-spas, dermatology offices, or plastic surgery centers. Future skin care professional employment may include positions as estheticians, sales representatives for product lines, or makeup artists.
Students participate in realistic training through the student-operated clinic on campus. Students perform services on live models. Services performed include facials, temporary hair removal, makeup, body wrap techniques, chemical peels, electricity therapies, and
microdermabrasion. Curriculum includes all related first aid, safety, and sanitation procedures.
Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

## Student Learning Outcomes:

Upon successful completion of the Esthetic Sciences degree, students will:

- Demonstrate written and practical skills required for the application process and examination to obtain state licensing.
- Demonstrate managerial skills and maintain current knowledge of state laws and industry standards that is necessary to operate in an existing salon or retail business, and/or establish a new small business.
- Demonstration of professional behavior and attire, accountability, integrity, and honesty.
- Operate, handle, and store tools/implements and equipment in a safe and sanitary manner.
- Apply product knowledge of the industry in a retail sales and service environment.
- Employ acquired interdisciplinary skill sets to educate clientele via consultation.
- Perform employability standards, such as customer service, communication and listening skills, performance paradigms (e.g., adaptability, responsibility, punctuality, cooperation, etc.), and work ethics.
- Employ demonstrable strategies to build and retain clientele.
- Perform basic practical skills in the areas of skin care, hair removal, makeup, and body treatments.
- Perform the basic critical skills to determine proper skin care, hair removal, makeup, and body treatments for the individual client image and self-care.
- Apply learned theory, technical information, and related matter to assure sound judgments, decisions, and procedures.
- Apply learned theory, manipulative skills, and analytical skills to obtain licensure and competency in entry-level positions in esthetics and/or related fields.
Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
Employability Requirements: To qualify for an esthetician's license from the Washington State Department of Licensing, a student must successfully complete the technical courses offered in the program, complete 1,200 hours of technical instruction, and pass both the written and practical exams for the Department of Licensing.
Program Length: This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.

Prerequisite(s): A mandatory orientation is required before admission to the program.
Accreditation: This school is licensed under chapter 18.16 RCW.
Inquiries, concerns, or complaints regarding this school can be made to the Department of Licensing.

## Mailing Address:

Professional Licensing Support Services
Department of Licensing
PO Box 9026
Olympia, WA 98507-9026
Phone: 360-664-6645
Email: plssunit@dol.wa.gov

## PROGRAM COURSE LIST

ES 105 Anatomy and Physiology for Estheticians.......................................................... 2
ES 110 Histology and Physiology of the Skin............................................................... 3
ES 113 Introduction to Cosmetic Chemistry..................................................................... 3

ES 116 Medical Chart Notation and Medical Terminology for Estheticians............... 4

ES 120 Skin Diseases and Disorders....................................................................... 5
ES 123 Bacteriology, Salon Safety and Sanitation ................................................. 4
ES 130 Makeup Applications............................................................................. 2
ES 132 Skin Care and Body Treatments ...................................................................... 4
ES 134 Machine Facials................................................................................................................
ES 136 Microdermabrasion and Superficial Peels.................................................. 4
ES 137 Spa/Clinical Operations..................................................................................................


ES 145 Corrective Concealing Makeup..................................................................................
ES 149 Laser Theory and Applications.........................................................................................
ES 150 Medium Depth Peels.................................................................................. 2

ES 154 Advanced Skin Care and Massage Techniques.......................................... 5

ES 158 State Board Prep.................................................................................... 2
ES 159 Introduction to Business Planning and Professional Development.................... 1
CMST\& 220 Public Speaking or ENGL\& 101 .....................................................................................
MAT 111 Math for Cosmo/Esth Professionals (preferred) or any 100-level Math Class.
General Psychology (or other social science or humanities class) ................................................ 5
BIOL\& 175 Human Biology w/Lab or BIOL\& 160 .......................................................... 5
COLL 102 College Success for All...................................................................................... 3
TOTAL CREDITS FOR AAT COMPLETION
103

## ESTHETIC SCIENCES

MASTER ESTHETICIAN

## CERTIFICATE

The evening certificate program prepares a currently-licensed esthetician to gain the knowledge and skill set for becoming a master esthetician in the State of Washington. Courses include business planning, advanced skin care services, laser theory, and preparation for state board exams. Additionally, courses will encompass hands-on components in a student-operated clinic. Clover Park Technical College Esthetic Sciences program is a highly-recognized and respected leader in advanced technical training.
Employability Requirements: To qualify for a master esthetician's license from the Washington State Department of Licensing, a student must successfully complete the technical courses offered in the program, complete 600 hours of technical instruction, and pass both the written and practical exams.
Program Length: This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## (CONTINUED FROM PREVIOUS PAGE)

Admission Dates: Dependent on enrollment.
Prerequisite(s): Student must be currently licensed by the Washington State Department of Licensing as an esthetician. High school diploma or equivalency required. A mandatory orientation is required before admission to the program.

## PROGRAM COURSE LIST

ES 202 Advanced Esthetic Theory...................................................................................... 2
ES 204 Wound Healing/Inflammation in Esthetics ................................................... 2
ES 206 Advanced Cosmetic Chemistry .......................................................................... 2
ES 208 Advanced Exfoliation Procedures.................................................................... 4
ES 210 Evening Clinical Applications I............................................................................. 3
ES 218 Medium Depth Peels................................................................................ 2
ES 220 Intro to Assessment and Business Practice .................................................... 2

ES 224 Evening Clinical Applications II..................................................................... 5
ES 228 Evening State Board Preparation...................................................................... 4
ES 230 Corrective Concealing Makeup................................................................ 2
ES 232 Advanced Assessment and Business Practice ................................................... 3
ES 234 Pre/Post Procedures................................................................................ 2
ES 236 Evening Clinical Applications III......................................................................... 2
TOTAL CREDITS FOR COMPLETION ..................................................................... 39

## GRAPHIC TECHNOLOGIES

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

ASSOCIATE IN APPLIED SCIENCE - T DEGREE
Prepares students for careers within commercial printing companies, web design companies, sign companies, quick print and copy shops, in-plant shops, specialty printing companies, advertising, ePublishing, screen printing, digital imaging, magazine, newspaper, and book printing and packaging companies.
With rapid technological expansion and broadening of the scope of services provided by the Graphic Communications industry today, companies have expanded services to include creative design, e-commerce, web page design and hosting, mailing, variable data, fulfillment, vehicle wrapping, and a host of services well beyond the core printing model.
Innovations in computer technology continue to rapidly change and expand the field of graphics. Therefore, the following courses of study may be subject to change in order to offer training based on current industry standards.

## Student Learning Outcomes:

Upon successful completion of the Graphic Technologies degree, students will:

- Demonstrate professional graphic industry standards and methods to qualify for employment or transfer to a four-year school.
- Demonstrate visual ideation and creativity.
- Manage Apple software on a Macintosh computer.
- Demonstrate a mastery of the Adobe suite: Photoshop, InDesign, Illustrator, and Acrobat.
- Show proficiency in the choice and use of software applications.
- Build multi-page websites applying basic HTML, JavaScript and CSS.
- Utilize typography in graphic communications.
- Apply color theory to design and production.
- Illustrate branding/logo design/brand identity.
- Demonstrate design, production, and project workflow.
- Exhibit characteristics of workplace ethics, responsibility, and accountability.
- Make use of effective communications in a design/sales/prepress environment.
- Manifest critical thinking skills focusing on problem solving, effective reasoning, and establishment of personal and team goals.
- Produce a professional job-hunting package culminating in a portfolio and professional presentation skills.
In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science-T (AAS-T). The different requirements for each degree are listed below.


## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- Any 100 level math class
- PSYC\& $100^{\text {Div }}$ General Psychology (PSY $1122^{\mathrm{DVV}}$, SOC\& $101^{\mathrm{DVv}}$, or other humanities course that meets the diversity requirement)
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements ( 23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142 , MATH\& 146 or MATH\& 151
- 5 credits in a social science that meets the diversity requirement: PSYC \& $100^{\text {DIV }}$ or SOC\& $101^{\text {DIV }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100, ASL\& 121, ASL\& 122, BIOL\& 160, BIOL\& 175 , BIOL\& 241, BIOL\& 242, BIOL\& 260, CHEM\& 110, CHEM\& 121, CHEM\& 131, GEOL\& 110, HIST\& 146, HIST\& 147, HIST\& 148, HUM\& 101, MUSC\& 105, PHYS\& 114, POLS\& 202, PSYC\& 100 , PSYC\& 200, PSYC\& 220, SOC\& 101
- 3 credits in College Success: COLL 102

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
Program Length: This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): None.

## PROGRAM COURSE LIST

GTC 110 Art, Design \& Visual Thinking ................................................................................... 5
GTC $123^{\mathrm{CL}}$ Macintosh Operations \& Image Acquisition ......................................................... 5

GTC 143 Electronic Publishing \& Layout................................................................................... 5
GTC 149 Digital Imaging II: Photoshop .................................................................................. 5
GTC 164
GTC 169
GTC 174
GTC 203
GTC 209
GTC 210
GTC 223
GTC 225 Advanced Page Layout Principles.......................................................................... 5
GTC 254 Cap Capstone Class........................................................................................................... 5
GTC 260 Web Animation Design .............................................................................................. 5
GTC 264 Paper, Pricing \& Estimating ........................................................................................ 5
GTC 265 Web Programming Basics......................................................................................... 5
GTC 273 Web Graphic Design and User Experience......................................................... 5
GTC 276 InDesign II................................................................................................................... 5
GTC 278 Independent Study or GTC 280 Internship........................................................... 4
TECHNICAL COURSE REQUIREMENTS ..... 99
AAT REQUIREMENTS
Technical Course Requirements. ..... 99
AAT General Education Requirements (See list above) ..... 18
TOTAL CREDITS FOR AAT COMPLETION ..... 117
AAS-T REQUIREMENTS
Technical Course Requirements ..... 99
AAS-T Degree General Education Requirements (See list above) .....  23
TOTAL CREDITS FOR AAS-T COMPLETION ..... 122

## HEALTH UNIT COORDINATOR

## CERTIFICATE

Health Unit Coordinators are an integral and valuable part of the medical team, providing such services as transcribing physicians' orders, scheduling diagnostic studies and appointments for follow-up care, ordering and maintaining supplies, and maintaining clerical and patient records. This program prepares students for positions as activity coordinators at nursing unit desks. Students will participate in realistic training in the classroom and clinical settings, practicing the responsibilities of the health unit coordinator. Students learn the competencies needed in communications, human relations, anatomy and physiology, medical terminology, health unit coordinator tasks, and unit management. As the communicator for the hospital unit, it is essential that the student has the ability to read, write, understand, and speak English, along with the ability to speak clearly to communicate instructions, directions, and telephone contacts. Health unit coordinators are sometimes referred to as HUC/monitor technicians, patient access technicians, patient assistance coordinators, administrative support partners, front desk receptionists, or scheduling coordinators.

## Student Learning Outcomes:

Upon successful completion of the Health Unit Coordinator certificate, students will:

- Demonstrate correct and appropriate communication in the medical industry. Operate the nursing unit communication system.
- Maintain the patients' charts, maintain the nursing unit supplies, and perform the tasks for patient admission, transfer, discharge, and preoperative and postoperative procedures.
- Practice and demonstrate the technical proficiency skills to function as an entry-level member of a health care team.
- Practice and demonstrate within the professional framework of the Health Unit Coordinating.
- Interact effectively with the nursing and medical staff, patients, visitors, and other hospital departments the functions, responsibilities, qualifications, and accountability, reflecting autonomy of practice.
- Demonstrate the ability to transcribe physicians' orders, schedule diagnostic studies and appointments for follow-up care, order and maintain supplies, and maintain clerical and patient records.
Physical Activity Requirements: It is essential that Health Unit Coordinator students are able to perform a number of physical activities during the clinical portion of the program. This includes walking up and down stairs, lifting 20 lbs. of office supplies, and carrying office supplies and patient charts. Students must also have the ability to sit 75 percent of the time to perform the majority of duties. The clinical experience places students under considerable mental and emotional stress as they undertake responsibilities and duties that impact patients' lives. Some hospitals may require a drug test before the student is permitted to practice in the hospital. Most clinical sites enforce a no-smoking policy.

Smoking at a clinical site may hinder completion of the program.
Employability Requirements: High School diploma or equivalent, seven-hour HIV/Blood Borne Pathogens training, pass a criminal background check, current immunizations. Some employers also require drug screens and enforce a no-smoking or nicotine-free environment. Employees must pass a typing test with the ability to type 35 words per minute. Physical requirements can vary by employer. Successful graduates are eligible to take the certification exam by the National Association of Health Unit Coordinators. Persons with some types of criminal convictions may not be eligible for licensure.
Program Length: This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## Admission Dates:

Day Program: Fall and spring quarters.
Evening Program: Summer and winter quarters.
Prerequisite(s): Students must attend mandatory orientation/ advising meeting with instructor. Students are required to display basic computer skills that include, but are not limited to, using email, typing 35 WPM, navigating the Internet, word processing, and inputting data into a spreadsheet and database. Students must obtain a current CPR card for health care providers. In order to participate in the clinical aspect of the program, students must receive during the HUC 108 course a "No Record On File" report from a certified background check related to crimes against persons. A non-refundable fee is charged to each student for the background check. Students must have current immunizations or laboratory verification of immune status. Immunizations could include, but are not limited to, Hepatitis B series, Tetanus/Diphtheria, Tuberculosis Test, Measles/Mumps/Rubella, Varicella, and yearly flu as required by contracts with clinical facilities and CDC recommendations.
Each student is required to carry personal health/medical insurance throughout the program and their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office.
No student will be allowed at clinical sites without proof of insurance, complete immunizations on file, and having successfully passed a drug screen. Proof of immunizations should be submitted the first week of class unless arrangements have been made with the instructor.
Must be a high school graduate or have a high school equivalency diploma by completion of program. Students must be at least $171 / 2$ years of age to begin the program.

## PROGRAM COURSE LIST

HUC 106 Anatomy \& Physiology for Health Unit Coordinator........................................ 3
HUC 108 Introduction to Health Unit Coordinating......................................................... 6

HUC 113 Introduction to Communication in the Health Unit Coordinator Role ............... 1
HUC 114 Unit Coordinator Tasks \& Procedures I......................................................... 7
HUC 118 Advanced Communications Application $\quad$ in the Health Unit Coordinator Role.............................................................. 2
HUC 120 Unit Management I.................................................................................. 3
HUC 122 Unit Management II.................................................................................. 3
HUC 126 Legal/Ethical Aspects of Unit Coordinating ................................................ 2
HUC 132 Clinical Experience ..................................................................................... 7
HUC 204 Electrocardiogram Monitor Technician.............................................................. 3

TOTAL CREDITS FOR COMPLETION ..................................................................... 44
Highly Recommended Class:
(This class could be taken while waiting to start the program)
CAS 105 Keyboarding (or Orientation to Computers and MS Office)............................................. 3

## HEATING \& AIR CONDITIONING REFRIGERATION SERVICE TECHNICIAN

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

Prepares students for positions in the heating, air conditioning, and refrigeration industry. Graduates will be prepared for entry-level positions as service technicians, building maintenance technicians, equipment assemblers, and start-up residential and light commercial installers. Students will participate in work-based training through realistic training activities on campus.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

This program is approved as an HVAC/Refrigeration (06A) specialty electrical training program in the state of Washington.
Upon successful completion of the program, graduates applying to become an HVAC/Refrigeration (06A) specialty electrician can be credited with an estimated 1,178 hours of work experience. This program is not applicable to any other electrical specialty or sub-category.

## Student Learning Outcomes:

Upon successful completion of the Heating \& Air Conditioning Refrigeration Service Technician degree, students will:

- Inspect, diagnose, disassemble, repair, replace, and service various types of residential and light commercial heating/refrigeration equipment with a high degree of accuracy and in a timely manner. After identifying supply sources and costs, write an estimate, including service, parts, and labor, that is suitable for customers and billing purposes.
- Resolve customer needs, complaints, questions, and challenges regarding heating, air conditioning, or refrigeration equipment.
- Access manufacturing technical support and wholesale supplier technical support to apply manufacturers' specifications in repair and replacement of heating, air conditioning, or refrigeration equipment.
- Work safely and responsibly, adhering to shop safety and environmental standards and best practices.
- Correctly troubleshoot HVAC/R problems in computer fault simulation programs.
- Communicate professionally, courteously and effectively with customers, fellow technicians, supervisors, and suppliers.
- Present proof of national certifications in basic electrical circuits, basic electrical diagnostics, principles of gas combustion, gas furnaces, electric furnaces, heat pumps, low temperature refrigeration systems, and medium temperature refrigeration systems.
- Work independently and in groups to service, repair, test, and maintain various types of residential and light commercial heating/refrigeration equipment.
- Use HVAC/R diagnostic equipment and tools skillfully. Use a multi meter and reading electrical schematics.


## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- Any 100 level math class
- PSYC\& $100^{\text {Div }}$ General Psychology (PSY $1122^{\text {Div }}$, SOC\& $101^{\mathrm{DIV}}$, or other humanities course that meets the diversity requirement)
- COLL 102 College Success for All

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project. Students are required to pass seven nationally recognized certification exams during the program. All courses must be completed with a minimum "C" grade to receive the certificate.

Program Length: This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters. Prerequisite(s): None.

## PROGRAM COURSE LIST


HAC 105 Electrical Circuits....................................................................................................... 4
HAC 120 Advanced Controls \& Troubleshooting ................................................................... 4
HAC 162 Electric Motors \& Their Applications....................................................................... 4
HAC 163 Refrigeration Controls................................................................................................ 3
HAC 164 Electric Motors \& Troubleshooting........................................................................... 3
HAC 169 Advanced Motor Controls....................................................................................... 2
HAC 170 Heating I.................................................................................................................... 7
HAC 175 Heating I Lab............................................................................................................. 5
HAC 181 Heating II.................................................................................................................... 6
HAC 184 Heating II Lab............................................................................................................ 4
HAC 202 Advanced Refrigeration.......................................................................................... 10
HAC 230 EPA Refrigerant Certification.................................................................................... 1

HAC 242 Basic Refrigeration I Lab .......................................................................................... 5
HAC 246 Basic Refrigeration II................................................................................................. 6
HAC 249 Job Readiness............................................................................................................... 5

HAC 257CAP Commercial Refrigeration/Advanced Refrigeration ............................................ 7
Computer Literacy Requirements (Complete an approved computer literacy course or successfully pass the computer literacy exam). .3
TECHNICAL COURSE REQUIREMENTS . ..... 94
AAT GENERAL EDUCATION REQUIREMENTS
Technical Course Requirements ..... 94
AAT General Education Requirements (See list above) ..... 18
TOTAL CREDITS FOR AAT COMPLETION ..... 112

Note: HAC 102-169 are prerequisites for Heating \& Refrigeration.

## Highly Recommended Class

(class could be taken while waiting to start the program) CAS 105 Keyboarding (or Orientation to Computers and MS Office).. ... 3

# HEATING \& AIR CONDITIONING/ REFRIGERATION SERVICE TECHNICIAN <br> <br> BASIC HVAC/ <br> <br> BASIC HVAC/ <br> REFRIGERATION SERVICE TECHNICIAN 

## CERTIFICATE

Provides students with the knowledge and skills necessary for entrylevel employment in HVAC service and maintenance.
Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills. Students are required to pass six nationally recognized certification exams during the program. All courses must be completed with a minimum "C" grade to receive the certificate.

Program Length: This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): None.

## (CONTINUED FROM PREVIOUS PAGE)

## PROGRAM COURSE LIST

HAC 102 Basic Electricity.
Basic Electricity..........................................................................................................
HAC 105 Electrical Circuits.. .. .4
HAC 120 Advanced Controls \& Troubleshooting ........................................................ 4
HAC 162 Electric Motors \& Their Applications................................................................ 4
HAC 163 Refrigeration Controls.............................................................................. 3
HAC 164 Electric Motors \& Troubleshooting............................................................... 3
HAC 169 Advanced Motor Theory............................................................................. 2
HAC 170
HAC 175
HAC 181
HAC 184
HAC 230
HAC 237
HAC 242
HAC 246
Heating I..
Heating I Lab........................................................................................ 5
Heating II..... 6

Heating II Lab...
..... 4
PA Refrigerant Certification. ..... $\begin{array}{r}. . .1 \\ \hline\end{array}$

Basic Refrigeration I
Basic Refrigeration II

Basic Retrigeration 5

HAC $255^{\text {CAP }}$ 6
English Composition (or higher) or Public Speaking ..... $\ldots .$.
Any 100-Level Math Class. .....  5
General Psychology (or other social science or humanities class) .....  5
COLL 102 College Success for All .....  3
TOTAL CREDITS FOR COMPLETION87

Note: HAC 102-169 are prerequisites for Heating \& Refrigeration.

## HEATING \& AIR CONDITIONING/ REFRIGERATION SERVICE TECHNICIAN REFRIGERATION SPECIALIST

## CERTIFICATE

Provides students with the knowledge and skills necessary for entrylevel employment in Refrigeration service and maintenance.
Students are required to pass one (1) state recognized certification and four (4) nationally recognized certification exams during the program. All courses must be completed with a minimum "C" grade to receive the certificate.

Program Length: This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

Admission Dates: Summer and winter quarters.
Prerequisite(s): None.

## PROGRAM COURSE LIST

| HAC 102 | Basic Electricity. |
| :---: | :---: |
| HAC 105 | Electrical Circuits............................................................................. 4 |
| HAC 120 | Advanced Controls \& Troubleshooting ................................................. 4 |
| HAC 162 | Electric Motors \& Their Applications.. |
| HAC 164 | Electric Motors \& Troubleshooting............................................................. 3 |
| HAC 230 |  |
| HAC 237 |  |
| HAC 242 | Basic Refrigeration I Lab ................................................................... 5 |
| HAC 246 | Basic Refrigeration II............................................................................... 6 |
| HAC $255{ }^{\text {CAP }}$ | Basic Refrigeration II Lab .................................................................... 3 |
| TOTAL CRE | FOR COMPLETION .............................................................. 42 |

Note: HAC 102, HAC 105, HAC 120, HAC 162, and HAC 164 are prerequisites for HAC 237 Basic Refrigeration I.

## HEMODIALYSIS

## HEMODIALYSIS TECHNICIAN

## CERTIFICATE

Prepares students for employment as hemodialysis technicians in outpatient settings such as hospitals or dialysis centers.
Focuses on the hemodialysis technician's role of providing basic renal care for clients under the supervision of a registered nurse or physician.
Students participate in theoretical and practical preparation in the duties and responsibilities of a hemodialysis technician. The program includes a practicum in a dialysis facility to provide students an opportunity to develop and practice the skills of the hemodialysis technician and participate as a team.
Clinical hours vary, depending on the facility assigned; students may be assigned to day or evening shifts. Clinical sites are located throughout Western Washington.

## Student Learning Outcomes:

Upon successful completion of the Hemodialysis Technician certificate, students will:

- Attain entry-level skills to perform venipuncture while understanding the importance of vascular access.
- Have completed all modules in the online classroom with an 80 percent or better score.
- Comply with government CMS standards and maintaining the safety of the patient.
- Define the basic principles of diffusion and osmosis relating to dialysis; will be able to identify normal kidney function.
- Demonstrate appropriate theory and principles as they relate to the end stage renal failure and its complications with Hemodialysis.
- Demonstrate the ability to set up/operate the dialysis machine per policy and procedure.
- Complete computer patient charting.
- Perform dialysis procedures in a professional manner.
- Prepare and mix solutions for a dialysis treatment.

Physical Activity Requirements: This occupation requires medium physical activity and lifting/handling objects weighing 10-25 lbs. (occasionally up to 50 lbs .). Technicians are often standing for long periods of time. For safety and protection of patients, student technicians must be able to perform basic cardiac life support, including CPR, and function in stressful and/or emergency situations. Must be able to safely assist a patient in moving from a bed to a chair, commode, or cart.
Employability Requirements: Certified hemodialysis technicians must complete and pass approved program and certification exam. Graduates must meet state eligibility requirements, including a criminal background check. Persons with some types of criminal convictions may not be eligible for certification. Seven hours of AIDS education and training as required under WAC 246-827. Current cardiopulmonary resuscitation (CPR) certification is also required.
Program Length: This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## Admission Dates:

Day Program: Fall and spring quarters.
Prerequisite(s): Documentation of immunizations, including
Hepatitis B series plus positive titer; Tetanus/Diphtheria; 2 step TB test; Measles/Mumps/Rubella (two injections or one injection plus a positive titer for measles, mumps, and rubella); Varicella immunization or positive titer; annual influenza immunization; and H1N1 immunization.

## (CONTINUED FROM PREVIOUS PAGE)

Immunization requirements may change based on CDC guidelines and/ or clinical facility policies. All immunization records will be uploaded to Certified Background. All immunizations/prerequisite(s) must be completed before clinical placement (third quarter).
Students are required to carry personal health/medical insurance throughout their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office. No student will be allowed at clinical sites without proof of insurance.
Students must maintain an 80 percent or above in all tech courses to continue in the program.
Students must have a high school diploma or transcript or high school equivalency diploma prior to program entry. In order to participate in the clinical aspects of the program the student must receive a "No Record On File" report related to crimes against persons from the Washington State Patrol and meet the requirements for the facility that they may be assigned to. (Some clinic sites require that you pass a drug screening and their own background checks.) A non-refundable fee is charged to each student for the background check.
Successful completion of ENG 091 or equivalent and placement scores showing readiness to go into MAT 092 or equivalent.

## PROGRAM COURSE LIST

HDT 106 Patient Calculations..................................................................................................... 2
HDT 108 Health Information Technology in Patient Services................................................ 2
HDT 116 Computer Applications/Keyboarding .................................................................... 2
HDT 123 Hemodialysis Terms/Anatomy \& Physiology ......................................................... 2
HDT 130 Hemodialysis Principles \& Procedures L.................................................................. 5
HDT 142 Water Treatment for Hemodialysis ......................................................................... 2
HDT 150
Vascular Access.
Professional Interaction ............................................................................................... 3
HDT 151
HDT 153
HDT 160
Hemodialysis Principles \& Procedures II.
Clinical Practicum I... $\ldots . .5$

HDT 165 Clinical Practicum II..................................................................................................... 6
PHLEB 114 Phlebotomy Program .................................................................................................. 4
COLL 102 College Success for All............................................................................................ 3
TOTAL CREDITS FOR COMPLETION 44

## HUMAN SERVICES

ASSOCIATE OF APPLIED TECHNOLOGY DEGREE
ASSOCIATE IN APPLIED SCIENCE - T DEGREE
Prepares students for a variety of entry- and mid-level positions within the field of human services, which focuses on helping others gain the skills to help themselves.
Students will participate in both classroom instruction and a community-based internship experience with a local human services provider. Students who intern at these agencies serve a variety of populations, including the mentally ill, the developmentally disabled, seniors, persons living with HIV/AIDS, homeless, incarcerated adults, at-risk youth, pregnant and parenting teens, foster families, persons with substance abuse issues, and numerous other specialty areas. Students are responsible for choosing and securing their own internship placement and are primarily eligible for employment in the area in which they choose to complete their internship experience. Internship site choice requires instructor's approval.

## Student Learning Outcomes:

Upon successful completion of the Human Services degree, students will:

- Adhere to the ethical guidelines established by the NOHS, ACA, APA, and NASW, as well as adhere to federal, state, and local laws.
- Utilize critical thinking skills to effectively assess and apply skills \& strategies needed to facilitate community resources and support systems to meet the needs of the client.
- Identify and explain population-specific needs and strengths from a multicultural competency standpoint.
- Demonstrate knowledge and sensitivity to diversity when interacting with individuals and families by adapting their helping approach to the needs of the client's culture and by being a culturally competent practitioner within the community where they practice.
- Facilitate the process of referral to support systems and community resources to meet the needs of the client.
- Demonstrate knowledge of the basic concepts, theories, and strategies used in human services delivery systems.
- Use interpersonal and written communication skills to effectively communicate with peers, faculty, clients, and community agencies.
- Utilize information management skills to write case notes and manage confidential documents in accordance with federal and state guidelines.
- Maintain professional behavior by adherence to personal boundaries, professional attitude, leadership style, project management, speech, and attire.
- Proficiently use technology as it applies to the human services field.
- Develop respectful professional relationships through proper utilization of empathetic and objective therapeutic communication skills.
- Resolve conflict and crisis situations in a professional manner.
- Identify and practice within the job-specific scope of practice for human services professionals.
- Identify and implement service delivery functions such as outreach, engagement, assessment, planning, accessing resources, referral, coordination, advocacy, process methods, interventions and modalities.
For an AAT or AAS-T degree, students may complete one of the following specialty options: 1) Human Services Generalist or 2) Human Services Chemical Dependency. The Human Services Generalist option can be completed in as little as six quarters, while the Human Services Chemical Dependency option will require a minimum of eight quarters, plus prerequisites and general education courses. Program completion generally takes $1.5-2$ years to satisfy all degree requirements. Students receiving a "C-" or below in a Human Services class must repeat the class in order to satisfy the Human Services program requirements for graduation.
In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.
The different requirements for each degree are listed below.


## AAT Degree General Education Requirements (28 credits):

- ENGL\& 101 English Composition
- CMST\& 220 Public Speaking or ASL\& 121 American Sign Language
- MAT 103 Business Mathematics
- PSYC\& $100^{\text {DIV }}$ General Psychology
- SOC\& $101^{\mathrm{DIV}}$ Introduction to Sociology
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements (33 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 146


## (CONTINUED FROM PREVIOUS PAGE)

- 10 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ and SOC\& $101^{\text {DIV }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100, ASL\& 121, ASL\& 122, BIOL\& 160, BIOL\& 175, BIOL\& 241, BIOL\& 242, BIOL\& 260, CHEM\& 110, CHEM\& 121, CHEM\& 131, GEOL\& 110, HIST\& 146, HIST\& 147, HIST\& 148, HUM\& 101, MUSC\& 105, PHYS\& 114, POLS\& 202, PSYC\& 100, PSYC\& 200, PSYC\& 220, SOC\& 101
- 5 credits in CMST\& 220 Public Speaking
- 3 credits in College Success: COLL 102

Employability Requirements: A background check will be conducted in the first quarter of the program to screen for prior convictions prior to internship placement for advising purposes. If pursuing the CD certificate, students will apply directly to the Department of Health for state certification. Persons with some types of criminal convictions may not be eligible for employment at the discretion of the individual employer.
Program Length: The Human Services core classes take six-to-eight quarters to complete, depending on the degree option. The length for the completion of the associate degree may vary depending on the time students need to satisfactorily complete all prerequisites, electives, and general academic classes to meet degree requirements, and may vary between one-and-a-half and two years.
Admission Dates: Fall and spring quarters.
Prerequisite(s): Prospective students must attend a mandatory orientation/advising meeting with the instructors prior to being admitted. Students must be high school graduates or have passed a high school equivalency test. Students must be over the age of 18 and agree to the background check in the first quarter. Successful completion or transfer of the following courses is required before enrollment in Human Services courses: ENGL\& 101, PSYC \& 100, COLL 102, and any 100 -level Computer Applications class of 3 credits or more.
*Students must have an internship site secured no later than the end of the first week of the quarter for the Internship I, II, and III courses Students are advised that a "No Record On File" report related to crimes against persons is generally required by agencies offering internship or employment. Students understand that some internship sites may not be available due to certain records. A non-refundable fee is charged to each student for the background check. Students who do not meet the internship site requirement within the specified timeline will be dropped from the course.

## PROGRAM COURSE LIST

| HS 115 | Therapeutic Communication Skills .................................................................. 5 |
| :---: | :---: |
| HS 120 | Soft Skills for the Human Services Professional............................................... 3 |
| HS 125 | HIV/AIDS/Blood-borne Pathogens \& Brief Risk Intervention for the Chemically Dependent $\qquad$ |
| HS 127 | Introduction to Human Services ..................................................................... 5 |
| HS 152 | Internship I .................................................................................................... 3 |
| HS 222 | Applied Counseling for the Human Services Professional .............................. 5 |
| HS 225 | Survey of Community Resources .................................................................... 3 |
| HS 226 | Mental Health Assessment \& Evaluation ........................................................ 5 |
| HS 227 | Behavioral Health \& Wellness ...................................................................... 5 |
| HS 230 | Case Management ........................................................................................ 5 |
| HS 234 ${ }^{\text {DV }}$ | Culturally Competent Practice ....................................................................... 5 |
| HS 237 | Law \& Ethics for Human Services .................................................................. 3 |
| HS 241 | Dynamics of Violence ..................................................................................... 5 |
| HS 245 | Internship II ..................................................................................................... 3 |

## Option 1: Human Services Generalist:

HS 215 Human Development for the Human Services Professional .....  5
Survey of Addiction HS 240 .....  5
Group Process HS 246 .....  3
HS 255 Internship III .....  3
Human Services Electives (See list below) .....  8
TECHNICAL COURSE REQUIREMENTS FOR HS GENERALIST ..... 80

## Option 2: Human Services Chemical Dependency

PSYC\& 200 Lifespan Psychology ................................................................................... 5
PSYC\& 220 Abnormal Psychology............................................................................... 5

HSCD 150 The Neuro-Pharmacology of Addition ....................................................... 5
HSCD 155 Chemical Dependency \& Counseling I: Individuals \& Groups ......................... 5
HSCD 180 Law \& Ethics for Chemical Dependency Professionals ..................................... 5
HSCD 215 Case Management \& Recordkeeping for the CDP ........................................ 5
HSCD 227 Chemical Dependency Assessment \& Evaluation ............................................... 3
HSCD 229 Suicide Prevention for the CDP ..................................................................... 1
HSCD 235 Chemical Dependency Practicum ...................................................................... 3
HSCD 249 Chemical Dependency \& Counseling II: Adolescents \& Families ................... 5
HSCD 251 Relapse Prevention..................................................................................... 3
TECHNICAL COURSE REQUIREMENTS FOR HS CHEMICAL DEPENDENCY 106
HUMAN SERVICES AAT GENERAL EDUCATION REQUIREMENTS
Technical Course Requirements ........................................................................80-106
Computer Literacy Requirement .................................................................................. 3
Human Services AAT General Education Requirements (See list above) ................ 28

TOTAL CREDITS FOR AAT COMPLETION ....................................................111-131
HUMAN SERVICES AAS-T GENERAL EDUCATION REQUIREMENTS
Technical Course Requirements.
80-106
Computer Literacy Requirement ................................................................................. 3
Human Services AAS-T General Education Requirements (See list above)............ 33

TOTAL CREDITS FOR AAS-T COMPLETION
$.116-142$
Approved Human Services Electives (8 Credits Needed)
PSYC\& 200 Lifespan Psychology .............................................................................. 5
PSYC\& 220 Abnormal Psychology ...............................................................................................................
ASL\& 121 American Sign Language I ....................................................................... 5
LEADR Any LEADR Course(s)....................................................................................... $1-6$
HS HSCD Any HSCD Course..........................................................................................................

## HUMAN SERVICES

CHEMICAL DEPENDENCY OPTION

## CERTIFICATE

Provides specialized knowledge and training about the generalist scope by introducing students to core concepts related to chemical dependency prevention and treatment for individuals, adolescents, groups, and families.
The certificate will provide students with the academic and technical training background to understand content, models, theories, and research relevant to working with chemically dependent persons and their families and will prepare students for specialized entry-level employment. It is ideal for working professionals who already have a degree but are in need of the specific coursework to obtain state credentials. The required certificate coursework covers the required content areas for the chemical dependency professional credential issued by the Washington State Department of Health (See RCW 246.811 Washington Administrative Code [WAC] Chapter 246-811).
Employability Requirements: Persons with some types of criminal convictions may not be eligible for employment as determined by the Washington State Department of Health.

Employability for the Chemical Dependency Professional Trainee (CDP-T) and Chemical Dependency Professional (CDP) is at the discretion of the Department of Health. The WA State DOH requires a background screening upon application for the CDP-T professional.

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Students wishing to become a CDP are advised to apply in quarter one of their program for the CDP-T through the WA State Department of Health to ensure enough time for the DOH background check and processing in time to utilize the CDP-T credential in quarter three of the program.
Program Length: This concentrated certificate program is three quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Degree program completion generally takes 1.5-2 years to satisfy all degree requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): This certificate is designed for employed human services professionals who are working to obtain their chemical dependency state credential, as well as students completing the human services degree at Clover Park Technical College. Students pursuing the certificate outside of Clover Park Technical College's degree program must have a completed degree from another institution.
A criminal background check is performed for all students enrolled in a human services internship class for the degree program in the first quarter. A non-refundable fee is charged to each student for the background check. Students with certain types of criminal convictions may not be eligible to participate at certain internship sites.

Note: The Human Services background check does not take the place of the CDP-T application. Students are expected to have their CDP-T credential in place before Quarter Three of the program and HSCD 235 CD Practicum.

## PROGRAM COURSE LIST

PSYC\& 220 Abnormal Psychology............................................................................................... 5
PSYC\& 200 Lifespan Psychology................................................................................. 5
HS 125 HIV/AIDS/Blood-borne Pathogens \& Brief Risk Intervention for the Chemically Dependent..... Introduction to Addictions..
HSCD 134
HSCD 150
HSCD 155
HSCD 180
HSCD 215
HSCD 227
HSCD 229
HSCD 235
HSCD 249
The Neuro-Pharmacology of Addition...
Chemical Dependency \& Counseling I. Individuals \&roup
Law \& Ethics for Chemical Dependency Professionals.................................. 5
Case Management \& Recordkeeping for the CDP
Chemical Dependency Assessment \& Evaluation...
Suicide Prevention for the CDP.
Chemical Dependency Practicum

TOTAL CREDITS FOR COMPLETION ....................................................................... 51
Note: PSYC\& $100^{\text {DIV }}$ is a prerequisite to PSYC\& 200 and 220.

## INTERIOR DESIGN

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

## ASSOCIATE IN APPLIED SCIENCE - T DEGREE

This program prepares students to work for design and architectural firms, home-furnishing venues, and contractors.
This program is for creative individuals who desire a career in the dynamic profession of interior design. Hospitality, residential, kitchen and bath, and sustainable design are just a few of the many paths an interior designer may pursue. The instructors are active in the design community, bring realistic projects to the classroom, and are committed to providing the most current materials and standards of the interior design profession.
In addition to the degree program, a Kitchen and Bath certificate option is offered every spring and fall quarter. A Sustainable Interior Design certificate option is offered every quarter. New students or continuing program students may enroll for either option.

## Student Learning Outcomes:

Upon successful completion of the Interior Design degree, students will:

- Use the basic elements and principles of design to develop design
solutions that enhance the quality of life and culture of the occupants.
- Develop design solutions in response to the building shell, physical location, and social context of the project.
- Apply the principles of environmental sustainability as they relate to interior environments.
- Create functional design solutions that effectively integrate furnishings, finishes, and other interior products.
- Employ current codes, standards, and design guidelines to promote the health, safety, and welfare of building occupants.
- Produce organized contract documents, including coordinated interior drawings and specifications.
- Effectively communicate a design concept through visual, written, and oral means.
- Use industry-standard technologies to develop and present concepts and designs for interiors.
- Professionally present design work and qualifications to industry and clients.
In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science-T (AAS-T). The different requirements for each degree are listed below.


## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- Any 100 level math class
- PSYC\& $100^{\text {DIV }}$ General Psychology (PSY $112^{\text {DIV }}$ or SOC\& $\left.101^{\text {DIV }}\right)$
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements ( 23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142, MATH\& 146 or MATH\& 151
- 5 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ or SOC\& $101^{\text {DIV }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100, ASL\& 121, ASL\& 122, BIOL\& 160, BIOL\& 175, BIOL\& 241, BIOL\& 242, BIOL\& 260, CHEM\& 110, CHEM\& 121, CHEM\& 131, GEOL\& 110, HIST\& 146, HIST\& 147, HIST\& 148, HUM\& 101, MUSC\& 105, PHYS\& 114, POLS\& 202, PSYC\& 100, PSYC\& 200, PSYC\& 220, SOC\& 101
- 3 credits in College Success: COLL 102

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
Program Length: The degree program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): None.

## PROGRAM COURSE LIST

DSN 105 Drafting l................................................................................................................... 6
DSN 119 Interior Design \& the Creative Design Process.............................................. 4
DSN 121 Drafting II.............................................................................................. 5
DSN 123 Materials, Methods and Techniques of Interior Design................................... 4


## (CONTINUED FROM PREVIOUS PAGE)

DSN 132 Lighting ..... $\ldots .5$
DSN 136 Introduction to Drawing \& Rendering .....  4
DSN 140 Textiles. .....  4
Residential Planning, Design \& Exterior Spaces. DSN 145 .....  .5
Furniture \& Cabinet Design DSN 152 .....  .2
DSN 153 ..... DSN 158DSN 159DSN 204DSN 216
History of Interiors .....  4DSN 225Intro to Technology for Interior Designer
CAD I...niroduction to Commercial Interior Design .4
Design IDSN 227 5DSN 231DSN 236Commercial Specifications .5
Historic Preservation 20th Century Design \& Philosophy 4DSN $239^{\circ}$DSN 241DSN 245Design II.$\ldots . .3$
4 5
Internship.
DSN 251 Contract Furniture .....  .3
DSN $266^{\circ}$ Portfolio/Professional Presentation. .....  7
TECHNICAL COURSE REQUIREMENTS ..... 105
AAT REQUIREMENTS
Technical Course Requirements ..... 105
AAT General Education Requirements (See list above) ..... 18
TOTAL CREDITS FOR AAT COMPLETION ..... 123
AAS-T REQUIREMENTS
Technical Course Requirements ..... 105
AAS-T Degree General Education Requirements (See list above) ..... 23
TOTAL CREDITS FOR AAS-T COMPLETION ..... 128
Optional Electives
DSN 202 Elements of Kitchen and Bath Design. .5
DSN 206 20/20 Drafting. .....  5
DSN 208 Materials and Estimating .....  4
DSN 211 Business Procedures and Sales .....  4
DSN 215 Sustainable Design: An Overview.
DSN 224 Sustainability for Residential \& Commercial Applications .....  4
DSN 226 Sustainable Strategies in Design. .....  .5
DSN 229 Sustainable Interiors \& the Integrated Design Process. ..... (.................................
DSN 265 Independent Study. ..... $\ldots . .3$
DSN 270 Independent Study .....  4
DSN 275 Independent Study.. .....  5

## INTERIOR DESIGN

## KITCHEN \& BATH

## CERTIFICATE

This certificate program covers the principles and elements of design for kitchen and bathroom interiors.
Program Length: One quarter.
Admission Dates: Fall and Spring quarters. This is an evening program with hybrid and online components.
Prerequisite(s): None.

## PROGRAM COURSE LIST

DSN 202
Elements of Kitchen \& Bath Design

DSN 206

DSN 208
DSN 211 Materials \& Estimating.................................................................................... 4 Business Procedures \& Sales ..................................................................... 4 .4

## TOTAL CREDITS FOR COMPLETION

INTERIOR DESIGNSUSTAINABLE INTERIORDESIGN
## CERTIFICATE

This certificate program covers sustainable design topics of the built environment, with a focus on interiors.
Program Length: One quarter.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): None.

## PROGRAM COURSE LIST

DSN 215 Sustainable Design: An Overview .....  5
DSN 224 Sustainability for Residential \& Commercial Applications. .....  4
DSN 226 Sustainable Strategies in Design .....  5
DSN 229 Sustainable Interiors \& the Integrated Design Process.. .....  519

## MANUFACTURING TECHNOLOGIES

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

Provides students with the knowledge and skills necessary for employment in the manufacturing/metalworking industry as a machinist, machinist apprentice, or machinist helper.
Responsible for setting up and operating conventional machine tools and Computer Numerical Control (CNC) machine tools.
Advanced students will be proficient in programming, setting up, and operating CNC machining centers. Students will develop proficiency in blueprint reading, shop math, precision measuring, CAD/CAM (Computer-Aided Drawing \& Computer-Aided Machining), and CNC turning centers and milling machines.

## Student Learning Outcomes:

Upon successful completion of the Manufacturing Technologies degree, students will:

- Select materials necessary to plan and manufacture parts that meet essential customer specifications.
- Evaluate work, analyze quality, and generate recommendations for continuous improvement.
- Communicate effectively and professionally both verbally and through written documents, including illustration.
- Use time management skills to recommend improvements and create customer requirement using blueprint specifications.
- Apply problem-solving and decision-making skills to overcome obstacles in completing objectives.
- Utilize online training recourses; apply knowledge to master task on project work pieces in the lab environment, including safety in the workplace.
Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.
Students pursuing an AAT or AAS-T degree must complete all college


## (CONTINUED FROM PREVIOUS PAGE)

degree requirements prior to graduation. This includes courses that meet the capstone-project, diversity, and computer-literacy requirements.
Program Length: This program is approximately six-to-seven quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## Admission Dates: <br> Day program: Summer, fall, winter, and spring quarters, or by instructor's permission. <br> Prerequisite(s): None.

## PROGRAM COURSE LIST

MCH 101 Orientation/Machine Shop Safety.................................................................... 2
MCH 105* Shop Math/Blueprint I.................................................................................. 6
MCH 107 Shop Math/BlueprintII............................................................................. 6
MCH 109 Shop Math/Blueprint III................................................................................. 6
MCH 111 Shop Machines \& Tools.................................................................................
MCH 117* Lathes I....................................................................................................

MCH 122 Lathes \& Mills II........................................................................................ 8
MCH 125 Lathes \& Mills III....................................................................................................... 10

MCH 129 Surface Grinding........................................................................................ 4
MCH 133 Tool \& Cutter Grinding .............................................................................. 5
MCH 202 Introduction to CNC..................................................................................... 7
MCH 211 Intermediate CNC.................................................................................. 10
MCH 21 baA $_{\text {CAP }}$ Advanced CNC................................................................................... 12
MCH 219 Career Opportunities............................................................................... 4

MCH 229 Metallurgy \& Heat Treatment........................................................................ 4
MCH 231 CAP Manufacturing Resources \& Research................................................................ 4

MAT 105 Mathematics for Industrial Professionals...................................................... 5
General Psychology (or other social science or humanities class) ................................................... 5
Computer Literacy Requirements (Complete an approved computer literacy course
or successfully pass the computer literacy exam)..
COLL 102 College Success for All............................................................................................. 3
TOTAL CREDITS FOR AAT COMPLETION
*Articulated courses with high schools for dual enrollment.
Optional Courses



MCH 240 Training \& Practice..................................................................................10
Note: MCH 240 Training \& Practice is designed for specific skills enhancement with the purpose of reentering the manufacturing workforce. Mutually agreedupon goals will be set and paid for at an hourly rate.

## MANUFACTURING TECHNOLOGIES

 CNC PROGRAMMER/CATIA
## CERTIFICATE

Provides students with knowledge and understanding of CATIA for employment advancement as a Computer Numerical Control (CNC) programmer in the manufacturing industry.
Students will develop proficiencies in basic to more advanced functions of CATIA, including organization and navigation of model and assembly functions, managing profiles, saving parts in a CATIA environment, creating simple and complex parts and assemblies, understanding of CATIA's product hierarchy principles, and utilization of different tools and techniques for designing products using a variety materials. Students will also develop skills in programming, preparing, and operating CNC machining centers. Students will utilize knowledge in blueprint reading, shop math, precision measuring, and CAD/CAM
(Computer-Aided Drawing \& Computer-Aided Machining) to interpret data from CATIA and evaluate machining codes to manufacture designed products.
Program Length: This program is approximately three quarters long, depending on the time students need to satisfactorily complete all certificate requirements.
Admission Dates: Summer, fall, winter, and spring quarters, or by instructor's permission.
Prerequisite(s): Instructor's permission.

## PROGRAM COURSE LIST

MCH 202 Introduction to CNC. .....  .7
MCH 201 CATIA I .....  .5
MCH 211 Intermediate CNC. .....  10
MCH 203 CATIA II... .....  3
MCH 216 Advanced CNC. .....  12
MCH 206 CATIA III.. .....  3
COLL 102 College Success for All. .....  3
TOTAL CREDITS FOR COMPLETION ..... 43
Optional Course
MCH 240 Training \& Practice ..... $1-10$

# MANUFACTURING TECHNOLOGIES MACHINIST APPRENTICE 

## CERTIFICATE

Provides students with the knowledge and skills necessary for employment as a machinist apprentice in the manufacturing/metalworking industry.
Responsible for setting up and operating conventional machine tools and Computer Numerical Control (CNC) machine tools.

Students will develop proficiency in blueprint reading, shop math, precision measuring, conventional lathes and mills, surface and tool-cutter grinding, general shop machines, CAD/CAM (ComputerAided Drawing \& Computer-Aided Machining), and CNC-turning centers and milling machines.
Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

Program Length: This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters, or by instructor's permission.
Prerequisite(s): None.

## PROGRAM COURSE LIST

MCH 101 Orientation/Machine Shop Safety. .....  2
MCH 105* Shop Math/Blueprint I. .....  .6
MCH 107 Shop Math/Blueprint II. .....  6
MCH 109 Shop Math/Blueprint III. .....  .6
MCH 111 Shop Machines \& Tools .....  6
$\mathrm{MCH} 117^{*}$ Lathes I. .....  6
$\mathrm{MCH} 121^{*}$ Mills I. .....  6
MCH 122 Lathes \& Mills II. .....  8
MCH 125 Lathes \& Mills III. ..... 10
MCH 126 Lathes \& Mills IV .....  8
MCH 129 Surface Grinding. .4
MCH 133 Tool \& Cutter Grinding .....  .5
MCH 202 Introduction to CNC. .....  .7
English Composition (or higher) or Public Speaking. .....  .5

Any 100-Level Math Class.. 5
General Psychology (or other social science or humanities class). .....  5
COLL 102 College Success for All. .....  3
TOTAL CREDITS FOR COMPLETION ..... 98
*Articulated courses with high schools for dual enrollment.Optional CourseMCH 240 Training \& Practice.$1-10$
Note: MCH 240 Training \& Practice is designed for specific skills enhancementwith the purpose of reentering the manufacturing workforce. Mutually agreed-upon goals will be set and paid for at an hourly rate.
MANUFACTURING TECHNOLOGIES MACHINIST HELPER
CERTIFICATE

Provides students with the knowledge and necessary skills for employment in the manufacturing/metalworking industry. Students may enter the industry as a machinist helper responsible for helping set up and operate conventional machine tools.
Students will develop proficiency in blueprint reading; shop math; precision measuring; conventional lathes and mills; surface, tool, and cutter grinding; and general shop machines.

Program Length: This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters, or by instructor's permission.
Prerequisite(s): None.

## PROGRAM COURSE LIST

| MCH 101 | Orientation/Machine Shop Safety.. |
| :---: | :---: |
| MCH 105* | Shop Math/Blueprint I. |
| MCH 111 | Shop Machines \& Tools.. |
| MCH 117* | Lathes I... |
| MCH 121* | Mills I.. |
| COLL 102 | College Success for All. |
| TOTAL CREDITS FOR COMPLETION ... |  |
| *Articulated courses with high schools for dual enrollment. |  |
| Optional Course |  |
| MCH 240 T | \& Practice.. |

Note: MCH 240 Training \& Practice is designed for specific skills enhancement with the purpose of reentering the manufacturing workforce. Mutually agreedupon goals will be set and paid for at an hourly rate.

## MASSAGE

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

Prepares successful students for employment and practice in a variety of workplace settings. Graduates from this program are qualified for positions at spas, clinics, hospitals and successful private practices.
Students develop a strong foundation in Swedish massage and deep tissue techniques. Clinical massage students benefit from advanced training in treatment applications and assessment. Teaching techniques are varied, addressing a wide variety of learning styles.
All students enrolled in the program are required to participate in the exchange of applied massage techniques in a supervised and professional setting. As part of the participation, students must be able to stand for up to two hours to perform massages. In addition, students
must be able to support and smoothly move the limbs of their partner's body, including the head and neck. Participation in the student-operated massage clinic allows students to gain experience in the profession while under instructor supervision.

Topics covered include, but are not limited to, massage theory and practice, anatomy, physiology, pathology, kinesiology, orthopedic assessment, pregnancy massage, sports massage, deep tissue, myofascial techniques, lymphatic drainage, on-site seated massage, hydrotherapy, hot-stone massage, and mini-spa applications.
Business classes introduce the skills and theories necessary for successful employment, such as professional ethics, goal setting, business planning, insurance billing, networking and communicating with health care professionals, marketing, job networking, resume writing, and interviewing.

## Student Learning Outcomes:

Upon successful completion of the Massage Studies degree, students will:

- Be prepared to successfully pursue a career in Massage Therapy; either as an employee or self-employed therapist.
- Effectively communicate, both verbally and in writing, with clients and other health care professionals.
- Document and justify treatment choices for different skeletal-muscular pathologies.
- Perform and evaluate a kinesiology assessment.
- Safely and effectively perform a variety of Massage techniques specific to client wants and needs.
- Evaluate work quality and generate recommendations for continuous improvement.
- Qualify to sit for a Washington State approved Certification Exam for Massage.
- Participate in a clinical setting as a responsible and ethical professional.

Included in the associate degree program are academic courses in communication (English composition, speech), quantitative reasoning (math), and social sciences (psychology, sociology) that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills. These classes are offered at various times outside the regular Massage program hours.
Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
Physical Activity Requirements: This occupation requires medium physical activity and lifting/handling objects weighing 10-25 lbs. (occasionally up to 50 lbs .). Massage practitioners are often standing and bending for long periods of time (up to two hours) while performing massages. This profession tends to stress the wrists, shoulders, back, and neck of practitioners.
Employability Requirements: Graduates are able to apply for licensure from Washington after passing the Federation of State Massage \& Bodywork Licensing Examination (MBLEx). State requirements include completion of a minimum 500-hour program, passing the exam, and applying for licensure. A Washington State Patrol background check will be conducted to screen for prior convictions prior to state licensing. Persons with some types of criminal convictions may not be eligible for licensure.
Program Length: The associate degree program may take up to eight quarters, depending on the time students need to satisfactorily complete all graduation requirements. Some students attending full-time day courses complete in four quarters.

## Admission Dates:

Day program: Fall quarter.

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Evening Program: Spring quarter.
Prerequisite(s): A medical statement of health status from a primary care provider stating that the student is able to safely participate in all aspects of the class is required to enter the program. That statement must be submitted to the instructor during the first week of class.
Potential students entering the program must test at college level (283 or higher) in reading on the Accuplacer or equivalent or have completed ENG 094. Students must also have documentation of training in standard first aid and CPR and a four-hour HIV/AIDS/blood-borne pathogens class prior to progressing to second quarter. A Washington State Patrol check will be required during the first quarter of study to progress to the second quarter. Some results from the background check may prevent individuals from participating in certain classes.

## PROGRAM COURSE LIST

MASST 110
Anatomy, Physiology \& Pathology I. .5
MASST 111 Anatomy, Physiology \& Pathology II.

MASST 112
Swedish Massage Theory... .. 5

MASST 115 Clinical Massage Techniques......................................................................................... 4
MASST 115 Clinical Massage Techniques......................................................................................... 4 .. .4

MASST 116 Complementary Massage Modalities I.................................................................. 3
MASST 120 Swedish Massage Practice......................................................................................... 4
MASST 123 Clinical Application of Massage Therapy ............................................................. 4
MASST 126 Kinesiology: Upper Extremity ................................................................................... 2

MASST 131 Assessment \& Treatment of the Back ........................................................................ 2
MASST 132 Deep Tissue Massage Theory.................................................................................. 3
MASST 135 Deep Tissue Massage Practice................................................................................ 4
MASST 136 Complementary Massage Modalities II................................................................. 2
MASST 137 Kinesiology: Head and Neck................................................................................... 1
MASST 139 Clinical Massage Business \& Ethics ........................................................................ 1

MASST 145 Orthopedic Assessment........................................................................................... 4
MASST 146 Kinesiology: Lower Extremity................................................................................... 2
MASST 147 Clinical Massage Anatomy \& Physiology I........................................................... 3
MASST 150 Clinical Massage Theory: Special Populations..................................................... 4
MASST 148 Massage Business \& Ethics II .................................................................................... 1
MASST 151 Clinical Massage Practice: Special Populations................................................... 3
MASST 153 Assessment \& Treatment: Upper Extremity.............................................................. 2
MASST 155 Assessment \& Treatment: Lower Extremity............................................................... 2
MASST 157 Assessment \& Treatment: Head \& Neck................................................................. 2
MASST 158 Practicum l.................................................................................................................... 3
MASST 159 Clinical Massage Business \& Ethics II...................................................................... 1
MASST 160CAP Practicum II................................................................................................................... 3
MASST 162 Student Clinic ............................................................................................................ 2
MASST 163 Clinical Massage Anatomy \& Physiology II........................................................... 3

Any 100-Level Math Class.......................................................................................................................... 5
PSYC\& 100 DIV General Psychology................................................................................................... 5
Computer Literacy Requirements (Complete an approved computer literacy course
or successfully pass the computer literacy exam) ...................................................................................... 3
COLL 102 College Success for All ............................................................................................ 3
TOTAL CREDITS FOR AAT COMPLETION.

## MASSAGE

## CLINICAL MASSAGE PRACTITIONER

## CERTIFICATE

This certificate provides advanced study for Licensed Massage Practitioners (LMP) and students who have completed the Swedish Practitioner portion of the Massage Studies program.
Successful students will graduate with a firm understanding of the injury and disease process and will possess the knowledge and treatment techniques to assess and effectively treat their clients.
Physical Activity Requirements: This occupation requires medium
physical activity and lifting/handling objects weighing 10-25 lbs. (occasionally up to 50 lbs .). Massage practitioners are often standing and bending for long periods of time (up to two hours) while performing massages. This profession tends to stress practitioners' wrists, shoulders, back, and neck.
Employability Requirements: Graduates are able to apply for licensure from Washington state after passing the Federation of State Massage \& Bodywork Licensing Examination (MBLEx). State requirements include completion of a minimum 500-hour program, passing the exam, and applying for licensure. A Washington State Patrol background check will be conducted to screen for prior convictions prior to state licensing. Persons with some types of criminal convictions may not be eligible for licensure.
Program Length: This certificate can be completed in just over two quarters for those students in our day (full-time) section. Evening students can transfer to days in spring to pursue the clinical certificate.

## Admission Dates:

Day program: Spring quarter.
Evening Program: Winter quarter.
Not all classes are offered in the evening.
Prerequisite(s): Successful completion of the Swedish Massage Practitioner program, completion of a similar program from another accredited institution, or current license as a Washington State massage therapist.

## PROGRAM COURSE LIST

MASST 115 Clinical Massage Techniques....................................................................... 4
MASST 123 Clinical Application of Massage Therapy ................................................... 4

MASST 139 Clinical Massage Business \& Ethics............................................................... 1
MASST 145 Orthopedic Assessment................................................................................ 4
MASST 147 Clinical Massage Anatomy \& Physiology I........................................................ 3
MASST 150 Clinical Massage Theory: Special Populations............................................... 4
MASST 151 Clinical Massage Practice: Special Populations............................................. 3
MASST 153 Assessment \& Treatment: Upper Extremity..................................................... 2
MASST 155 Assessment \& Treatment: Lower Extremity..................................................... 2
MASST 157 Assessment \& Treatment: Head \& Neck.......................................................... 2
MASST 158 Practicum l............................................................................................ 3
MASST 159 Clinical Massage Business \& Ethics II........................................................... 1

MASST 163 Clinical Massage Anatomy \& Physiology II.................................................. 3
TOTAL CREDITS FOR COMPLETION

## MASSAGE

## SWEDISH PRACTITIONER

## CERTIFICATE

The Swedish Practitioner certificate prepares the successful student to enter the massage profession with the knowledge and skills to perform full-body Swedish massage and deep tissue massage.
Completion of this certificate satisfies the Washington Department of Health hours and content requirement, allowing the graduate to take the certification exam and apply for Washington State licensure. In addition to massage theory and practice, we will also be covering all the systems in the body, with emphasis on the muscular system, and successful business practices.
Physical Activity Requirements: This occupation requires medium physical activity and lifting/handling objects weighing 10-25 lbs. (occasionally up to 50 lbs .). Massage practitioners are often standing and bending for long periods of time (up to two hours) while performing massages. This profession tends to stress practitioners' wrists, shoulders, back, and neck. Students in the program must be able to support a limb or the head and neck and move it smoothly and safely

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through the available range of motion.
Employability Requirements: Graduates are able to apply for licensure from Washington after passing the Federation of State Massage \& Bodywork Licensing Examination (MBLEx). State requirements include completion of a minimum 500-hour program, passing the exam, and applying for licensure. A Washington State Patrol background check will be conducted to screen for prior convictions prior to state licensing. Persons with some types of criminal convictions may not be eligible for licensure.
Program Length: This certificate can be completed in just over two quarters for those students in our day (full-time) section, or three quarters for our evening students.

## Admission Dates:

Day Program: Fall quarter.

## Evening Program: Spring quarter

Prerequisite(s): A medical statement of health status from a primary care provider stating that the student is able to safely participate in all aspects of the class is required to enter the program. That statement must be submitted to the instructor during the first week of class Potential students entering the program must test at college level (283 or higher) in reading on the Accuplacer assessment or equivalent or have completed ENG 094. Students must have documentation of training in standard first aid and CPR and a four-hour HIV/AIDS/blood-borne pathogens class prior to progressing to second quarter. A Washington State Patrol check will be required during the first quarter of study. Some results may prevent individuals from participating in certain classes.

## PROGRAM COURSE LIST

MASST 111MASST 112MASST 116MASST 120MASST 126MASST 130MASST 132MASST 135MASST 136MASST 137                            Anatomy, Physiology \& Pathology I.
                        I.......
        Anatomy, Physiology \& Pathology II..
        I...........
        Swedish Massage Theory..
        Complementary Massage Modalities I.
        Swedish Massage Practice...
        Kinesiology: Upper Extremity
        Kinesiology: Trunk.
        Deep Tissue Massage Theory
        Deep Tissue Massage Practice.
        Complementary Massage M
        Complementary Massage Modalities II
        Kinesiology: Head and Neck.
        Massage Business \& Ethics I..
        Massage Business \& Ethics II.
        Kinesiology: Lower Extremity.
        Student Clinic.
    College Success for All.
    COLL 102
TOTAL CREDITS FOR COMPLETION44

## MECHATRONICS

## ASSOCIATE IN APPLIED SCIENCE - T DEGREE

Mechatronics is a multidisciplinary approach combining mechanical engineering, electrical engineering, process control engineering, and software engineering into an integrated skill set for construction, repair, and optimization of complex industrial equipment. This makes it applicable to a wide range of growing industries including automation and robotics, advanced manufacturing, aerospace and transportation systems, process control, logistics and supply chain management, and agriculture.
Clover Park Technical College's AAS-T Mechatronics degree provides the skills needed to succeed in this exciting field. The program begins with courses that establish a solid base of technical skills and an understanding of the various disciplines that make up mechatronics as well as lean manufacturing and quality standards. Courses are taught with an eye toward linking disciplines together for larger mechatronic systems. Subsequent courses then build expertise in the foundational
skills while increasingly integrating all skills into the design, construction, optimization, maintenance, and repair of full mechatronics systems.

## Student Learning Outcomes:

Upon successful completion of the Mechatronics degree, students will:

- Understand the necessary steps to plan, execute, and control a mechatronic system.
- Program, calibrate, configure, test, start up, and operate a mechatronic system.
- Understand mechatronics as the integration of multiple disciplines in industrial processes.
- Identify major application areas for mechatronics.
- Apply mechatronics in various manufacturing, scientific, and technical applications.
- Research and apply emerging and future mechatronics technologies.


## AAS-T Degree General Education Requirements (23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142, MATH\& 146 or MATH\& 151
- 5 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ or SOC\& $101^{\text {Div }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100, ASL\& 121, ASL\& 122 , BIOL\& 160 , BIOL\& 175 , BIOL\& 241, BIOL\& 242 , BIOL\& 260 , CHEM\& 110, CHEM\& 121 , CHEM\& 131, GEOL\& 110, HIST\& 146, HIST\& 147, HIST\& 148, HUM\& 101, MUSC\& 105, PHYS\& 114, POLS\& 202, PSYC\& 100, PSYC\& 200, PSYC\& 220, SOC\& 101
- 3 credits in College Success: COLL 102

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
Program Length: The program is approximately seven quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): To enter the program, a student must be eligible to take college-level English and college-level psychology, or another social science or humanities course.
This program assumes that students will be able to enroll in, or will have passed, MATH\& 141 by the start of the third quarter of the program. Any developmental coursework that a student may be required to take to achieve this may increase the program length and is not reflected in credit counts as shown below. Math sequences to meet this requirement must be planned with your advisor prior to program enrollment.
Students must be at least $17^{1 / 2}$ years of age at the start of the program.

## PROGRAM COURSE LIST

Quarter 1-Preparation

FSME 111 Quality Principles, Inspection and Test................................................................... 5
FSME 112 Fabrication Fundamentals I..................................................................................... 5
FSME 113 Fabrication Fundamentals II...................................................................................... 5
Program Core
MEC 115 DC Circuits ....
MEC 116 AC Circuits ....n man
MEC 120 Computer Aided Design I......................................................................................... 5

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MEC 125 Hydraulics and Pneumatics............................................................................ 5
MEC 128 Applied Statics and Strengths of Materials....................................................... 5
MEC 130 Electric Motors and Drives ......................................................................................
MEC 132 Lean Manufacturing................................................................................ 5
MEC 135 Digital Electronics and Networks ............................................................... 5
MEC 140 CL Computer Programming and Logic............................................................. 5
MEC 150 Mechanical Systems.................................................................................... 5
MEC 160 ${ }^{\text {Cl }}$ Programmable Controls I.................................................................................. 5
MEC 163 Industrial Survey ................................................................................................................
MEC 173 Applied Mechatronics.................................................................................. 5
MEC 289CAP Internship or
MEC 290CAP Mechatronics Capstone Project................................................................. 5

AAS-T General Education Requirements (see list below) ................................................................. 23

TOTAL CREDITS FOR AAS-T COMPLETION

## Technical Electives:

Students must take 10 or more credits from the following courses. Other related courses may be approved by faculty.
MEC 121 Computer Aided Design II.......................................................................... 5
MEC 165 Robotics ......................................................................................................... 5

MEC 200 Programmable Controls II......................................................................... 5
MEC 210 Metrology and Calibration....................................................................... 5


MEC 282 Independent Study II...................................................................................... 2-5
MEC 289CAP Internship/Work Experience................................................................................ 5

## MECHATRONICS

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

Mechatronics is a multidisciplinary approach combining mechanical engineering, electrical engineering, process control engineering, and software engineering into an integrated skill set for construction, repair, and optimization of complex industrial equipment. This makes it applicable to a wide range of growing industries including automation and robotics, advanced manufacturing, aerospace and transportation systems, process control, logistics and supply chain management, and agriculture.
Clover Park Technical College's AAS-T Mechatronics degree provides the skills needed to succeed in this exciting field. The program begins with courses that establish a solid base of technical skills and an understanding of the various disciplines that make up mechatronics as well as lean manufacturing and quality standards. Courses are taught with an eye toward linking disciplines together for larger mechatronic systems. Subsequent courses then build expertise in the foundational skills while increasingly integrating all skills into the design, construction, optimization, maintenance, and repair of full mechatronics systems.

## Student Learning Outcomes:

Upon successful completion of the Mechatronics degree, students will:

- Understand the necessary steps to plan, execute, and control a mechatronic system.
- Program, calibrate, configure, test, start up, and operate a mechatronic system.
- Understand mechatronics as the integration of multiple disciplines in industrial processes.
- Identify major application areas for mechatronics.
- Apply mechatronics in various manufacturing, scientific, and technical applications.
- Research and apply emerging and future mechatronics technologies.


## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- MAT 105 Mathematics for Industrial Professionals
- PSYC\& $100^{\text {DIV }}$ General Psychology (PSY $1122^{\mathrm{DV}}$, SOC \& $101^{\mathrm{DVV}}$, or other transferable social science or humanities course that meets the diversity requirement)
- COLL 102 College Success for All *must be taken in first 2 quarters Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone-project, diversity, and computer-literacy requirements.
Program Length: This program is approximately five quarters long, depending on the time students need to satisfactorily complete graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): To enter the program, a student must be eligible to take college-level English and college-level psychology, or another social science or humanities course.

Any developmental coursework that a student may be required to take to achieve this may increase the program length and is not reflected in credit counts as shown below. Math sequences to meet this requirement must be planned with your advisor prior to program enrollment.
Students must be at least $17^{1 / 2}$ years of age at the start of the program.

## PROGRAM COURSE LIST

## Quarter 1 - Preparation

FSME 101 Workshop Safety .................................................................................... 3
FSME 111 Quality Principles, Inspection and Test........................................................... 5

FSME 113 Fabrication Fundamentals II......................................................................... 5

## Program Core

MEC 115 DC Circuits ............................................................................................. 5

MEC 120 Computer Aided Design I............................................................................................
MEC 125 Hydraulics and Pneumatics.........................................................................................


MEC 135 Digital Electronics and Networks................................................................ 5
MEC 140CL Computer Programming and Logic..................................................................... 5
MEC 150 Mechanical Systems....................................................................................................
MEC 160 Programmable Controls I............................................................................... 5
MEC 289 Internship or
MEC 290CAP Mechatronics Capstone Project.......................................................................... 5
Mechatronics AAT Technical Electives (See list below) ................................................................ 5
AAT General Education Requirements (See list above)............................................................ 18
TOTAL CREDITS FOR AAT COMPLETION.............................................................. 96
Technical Electives:
Students must take 5 or more credits from the following courses. Other related courses may be approved by faculty.
MEC 121 Computer Aided Design II.......................................................................... 5
MEC 128 Applied Statics and Strengths of Materials....................................................... 5
MEC 163 Industrial Survey ...............................................................................................................
MEC 165 Robotics ..........................................................................................................................
MEC 173 Applied Mechatronics.............................................................................. 5

MEC 210 Metrology and Calibration......................................................................... 5

MEC 281 Independent Study I.........................................................................................-2-5

MEC 289 Internship.......................................................................................................................

# MECHATRONICS <br> FUNDAMENTAL SKILLS FOR MANUFACTURING AND ENGINEERING 

## CERTIFICATE

The Fundamental Skills for Manufacturing and Engineering (FSME) certificate is designed to provide students with a foundational set of skills and background knowledge that will equip them for an entry-level position in a manufacturing organization and provide a solid foundation for further technical studies.
Students will learn about occupational safety and health workers in manufacturing and engineering workshops; how to interpret manufacturing drawings and schematics; how to take measurements and analyze data; the properties of common materials used in manufacturing; and the quality principles and terminology employed in modern industry. Basic workshop skills needed to fabricate parts and structures will be covered, and students will be introduced to more advanced manufacturing and engineering fabrication techniques including welding, the use of machine tools, composites, and electrical wiring.
Program Length: This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters. Prerequisite(s): None.

## PROGRAM COURSE LIST

| FSME 101 | Workshop Safety. |
| :---: | :---: |
| FSME 111 | Quality Principles, Inspection and Test................................................ 5 |
| FSME 112 | Fabrication Fundamentals I.. |
| FSME 113 | Fabrication Fundamentals II.. |

## MECHATRONICS

MECHATRONICS CO-OP

## CERTIFICATE A - POWER

Mechatronics is a multidisciplinary approach combining mechanical engineering, electrical engineering, process control engineering, and software engineering into an integrated skill set for construction, repair, and optimization of complex industrial equipment. This makes it applicable to a wide range of growing industries, including automation and robotics, advanced manufacturing, aerospace and transportation systems, process control, logistics and supply chain management, and agriculture.
Certificate A is a special type of program, called a "Co-Operative Certificate," in which employees can gain defined skills that help meet their professional talent needs. Employers may offer workers in a co-op certificate program release time (2 days per week) to attend class and engage in studies. Frequently, employers also help fund tuition and other expenses of participating workers. Degree program prerequisites for the Fundamental Skills for Manufacturing \& Engineering courses are waived for certificate students. As such, prospective co-op certificate students must demonstrate current employment in a relevant field in industry before admission to the program.
Certificate A focuses on the powering and construction of mechatronic systems. Courses will provide the employee/student with the necessary
instruction and guidance to acquire broad skills in areas such as $\mathrm{AC} / \mathrm{DC}$ circuits, mechanical systems, motors and drives, and computer programming. Students will then benefit from immediately applying those skills on the job with their employer.

Admission Dates: Summer, fall, winter, and spring quarters.
Program Length: This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## PROGRAM COURSE LIST Quarter 1 - Preparation

MEC 125 Hydraulics and Pneumatics ................................................................................ 5

COLL 102 College Success for All.............................................................................. 3
Quarter 2
MEC 115 DC Circuits .............................................................................................. 5
MEC 140CL Computer Programming and Logic................................................................. 5

## Quarter 3



TOTAL CREDITS FOR CERTIFICATE COMPLETION .............................................. 33

## MECHATRONICS

## MECHATRONICS CO-OP

## CERTIFICATE B - CONTROL

Mechatronics is the combination of various engineering disciplines (specifically involving mechanical, electrical, hydraulics, pneumatics, and programmable logic control) taught to create a more well-grounded technician in a complex system, with responsibility for efficient operation of equipment with minimal downtime. The program will prepare students to install, repair, diagnose, and perform routine maintenance in a variety of industries.

Certificate B is a special type of program, called a "Co-Operative Certificate," in which employees can gain defined skills that help meet their professional talent needs. Employers may offer workers in a co-op certificate program release time (2 days per week) to attend class and engage in studies. Frequently, employers also help fund tuition and other expenses of participating workers. Degree program prerequisites for the Fundamental Skills for Manufacturing \& Engineering courses are waived for certificate students. As such, prospective co-op certificate students must demonstrate current employment in a relevant field in industry before admission to the program.
Certificate B focuses on the control and optimization of mechatronic systems. Courses will provide the employee/student with the necessary instruction and guidance to acquire broad skills in areas such as PLC programming, networking, lean manufacturing, and computer aided design. Students will then benefit from immediately applying those skills on the job with their employer.
Admission Dates: Summer, fall, winter, and spring quarters.
Program Length: This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## Quarter 1




## Quarter 2




## Quarter 3

MEC 120 Computer Aided Design I........................................................................... 5
MEC 128 Applied Statics and Strengths of Materials...................................................... 5

TOTAL CREDITS FOR CERTIFICATE COMPLETION30

## Technical Electives:

Students must take 5 or more credits from the following courses. Other related courses may be approved by faculty.

MEC 121 Computer Aided Design II....................................................................................... 5

MEC 170 Sensors and Actuators ........................................................................... 5

MEC 210 Metrology and Calibration......................................................................... 5
MEC 220 Maintenance Management......................................................................................
MEC 281 Independent Study I......................................................................................................


## MEDICAL ASSISTANT

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

Medical Assistant Program (MAP) graduates may assume positions as multi-skilled allied health professionals who perform a wide range of duties in physicians' offices, clinics, and other outpatient health care settings
The MAP curriculum includes anatomy and physiology, medical terminology, medical law and ethics, oral and written communication, administrative procedures, financial record keeping, mathematics, insurance billing and medical coding, basic office diagnostic procedures, principles of pharmacology and medication administration,
venipuncture, medical and surgical asepsis, and microbiology.
Students are trained in administrative and clinical procedures performed in physicians' offices and/or clinics. Graduates from this program are eligible to take the national certification exam through the American Association of Medical Assistants (AAMA), which is one of the four authorized exams for certification through Washington State. Training will include, but is not limited to, professional telephone techniques, scheduling appointments, interviewing and educating patients, scheduling hospital admissions for patients, maintaining financial records and files, completing insurance forms, preparing and maintaining employees' payroll records, assisting patients in preparing for examinations and procedures, cleaning and sterilizing instruments and equipment, collecting specimens, performing electrocardiograms, and assisting physicians with examinations, treatments, procedures, and minor office surgeries.

## Student Learning Outcomes:

Upon successful completion of the Medical Assistant degree, students will:

- Perform patient intake by interpreting new information and asking clarifying questions.
- Demonstrate the ability to work in a team atmosphere through collaborative work habits and attitudes.
- Demonstrate ethical and legal behaviors by following standards, policies, and procedures of the medical assistant scope of practice.
- Show technical literacy by utilizing specialized software to retrieve, manage, and interpret data.
- Perform a variety of clinical and/or administrative tasks safely and effectively as an entry level medical assistant.
- Qualify to take a national certification exam to become credentialed in the State of Washington.
- Utilize the knowledge of the credentialing process to apply for an interim medical assistant certification.
Included in this program are general education courses in math, public speaking, and sociology. These courses broaden students' foundation knowledge base and increase their success in the program. Students
must earn a solid "C" (no C-) grade or better in these general education courses to graduate from the MAP.

Additional courses included in the MAP consist of the following: CAH 102 Medical Terminology, COLL 102 College Success for All and CAH 105 Computer Applications. Students must earn a "C" (no C-) grade or better in CAH 102, COLL 102, and CAH 105 courses to satisfy graduation requirements. No MAP course may be taken more than twice. All courses with the MAP prefix must be passed with a "B" (no B-) or better.
Students will receive HIV/AIDS and HIPAA certifications through the program, but must obtain American Heart Association - CPR for Health Care Provider/First Aid cards external to the program and prior to externship.
Externship hours will vary and will be completed during the day hours for both day and evening students. With the assistance of the instructors and/or clinical placement coordinator, students will have the opportunity to choose and/or secure their own externship site if an affiliation agreement with that entity is made before the first day of externship. Upon completion of the MAP, students will graduate with an Associate of Applied Technology.
Program Accreditation: The Commission on Accreditation of Allied Health Education Programs (www.caahep.org) accredits the Medical Assistant Program at Clover Park Technical College upon the recommendation of the Medical Assisting Education Review Board (MAERB):

Commission on Accreditation of Allied Health Education Programs 1361 Park Street
Clearwater, FL 33756
727-210-2350
Physical Activity Requirements: This occupation requires medium physical activity and lifting/handling objects weighing 10-25 lbs. (occasionally up to 50 lbs .) and handling body fluids. Medical Assistants are often standing for long periods of time. For safety and protection of patients, student medical assistants must be able to perform basic cardiac life support, including CPR, and function in stressful and/or emergency situations. Students must be able to safely assist a patient in moving between an exam room table, chair, wheelchair, and/or walker.
Employability Requirements: Graduates must meet the state application requirements for medical assistants, which include, but are not limited to: passing one of the authorized national certification exams, seven hours of AIDS education and training as required under WAC 246-824, current cardiopulmonary resuscitation (CPR), and no disqualifying crimes on a criminal background check.
Program Length: This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## Admission Dates:

Day program: Summer quarter.
Evening program: Winter quarter.
Once a student begins in either the day or evening program section, they will be unable to change sections without authorization from an instructor. Changing program sections depends on available space.
Prerequisite(s): Students must attend a mandatory information session/advising meeting with an instructor before or once they have registered for MAP 107.
Students are required to show proof of a high school diploma or high school equivalency diploma upon entry into the MAP. All Medical Assistant Program required courses in quarters one through four and general education courses must be successfully completed before entering the fifth quarter. Proof of current immunizations or laboratory verification of immune status, as well as other prerequisites listed in the college catalog, are also required before entering quarter five of the program. This includes, but is not limited to, Tetanus/Diphtheria,

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Hepatitis B, Measles/Mumps/Rubella, Tuberculosis skin testing, Flu, and Varicella, as required by contracts with clinical facilities and CDC recommendations.
In order to participate in the externship, students must receive a "No Record On File" report related to crimes against persons from the Washington State Patrol and/or a Criminal Background Check. A non-refundable fee is charged to each student for the background check. Students must also meet the requirements for the facility that they are assigned to. These requirements may include, but are not limited to, a drug screening and/or a no-smoking policy. Students are required to carry personal health/medical insurance throughout their clinical rotations.
Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office. No student will be allowed at a clinical site without proof of insurance.

## PROGRAM COURSE LIST

CAH 102
COLL 102
Medical Terminology I. College Success for All. $\qquad$
…............................................................................... 3
As......................................................................... 5
MAP 107 Introduction to Medical Assisting............................................................................ 3
MAP 121 Body Systems Theory 101.
MAP 124
MAP 146
MAP 147
MAP 164
MAP 166
MAP 171
MAP 173
MAP 177
MAP 179
MAP 182
MAP 184
MAP 209
MAP 212
MAP 215
MAP 222
CMST\& 220
MAT 108
SOC\& $101^{\mathrm{DIV}}$
TOTAL CREDITS FOR AAT COMPLETION91

## MEDICAL HISTOLOGY TECHNICIAN

ASSOCIATE OF APPLIED TECHNOLOGY DEGREE
ASSOCIATE IN APPLIED SCIENCE - T DEGREE
Trains students to prepare thin sections of human tissue for microscopic examination.

Prepares students for entry-level employment as medical histology technicians in clinical, veterinary, and research laboratories. This program also serves as a pathway for career advancement in specialized areas in the medical histotechnology profession.

The Medical Histology Technician program stresses practical application and the development of job skills, as well as medical histotechnology theory.
Designed to enhance students' abilities to reason, understand, and apply correct principles of medical histotechnology by teaching analytical and critical thinking skills, the Medical Histology Technician program prepares students to sit for the National Board Certification Exam.
New entrants into the field, as well as incumbent workers who have not had the advantage of receiving a strong theoretical foundation, will find this course of study beneficial. Students will be involved in classroom/ lab work for the first three quarters of the program, with the remaining time spent in a clinical rotation.

Students are required to carry personal health/medical insurance throughout their clinical rotations. Quarterly insurance for students may be purchased; further information is available through the Advising and Counseling Office. No student will be allowed at a clinical site without proof of insurance.
Able to provide own transportation/commuter expenses in excess of 30 miles from CPTC

## Student Learning Outcomes:

Upon successful completion of the Medical Histology degree, students will:

- Be prepared and qualified to sit for the National Certification exam.
- Understand and comply with national requirements of continuing education to maintain certification.
- Perform, manipulate, and troubleshoot a variety of histology skills safely and efficiently.
- Demonstrate effective communication, both verbally and in writing, with coworkers, supervisors, clients, and physicians.
- Demonstrate and maintain a medical professional code of conduct.
- Comply with employer quality and performance standards.
- Be able to develop, utilize, maintain, and interpret documentation of a scientific nature related to histology.
- Endeavor to increase professional standards and quality.

AAT Degree General Education Requirements (23 credits):

- ENGL\& 101 English Composition
- CMST\& 220 (or higher)
- MAT 108 Math for Health Care Professionals (Preferred) or any 100-level math class
- PSYC\& $100^{\text {DIV }}$ General Psychology or other social science or humanities class
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements ( 23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 10 credits in communication: ENGL\& 101 and CMST\& 220
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142, MATH\& 146 or MATH\& 151
- 5 credits in social science, humanities, or science: BIOL\& 175, CHEM\& 110, PSYC\& 100, or SOC\& 101
- 3 credits in College Success: COLL 102

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
Granting of degree is not contingent upon the students passing any type of external certification or licensure examination.
Program Accreditation: This program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences:
5600 N. River Road
Suite 720
Rosemont, IL 60018
773-714-8880
Employability Requirements: Graduates are required to pass a national certification exam prior to employment. Students must pass a background check prior to being allowed to perform clinical rotations.
Students are required to maintain immunizations and acquire an American Health Association CPR Health Care Provider card.

Physical Activity Requirement: Ability to sit and stand for long

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periods of time. Lift and move up to 50 lbs . Repetitive movements of shoulder, elbow, wrist, and fingers.
Program Length: This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## Admission Dates: Fall quarter.

Prerequisite(s): Before starting the program, students must have a high school diploma or high school equivalency diploma.
In order to participate in the clinical aspect of the program, students must receive a "No Record On File" Report related to crimes against persons on a criminal background check. They must obtain CPR certification and have current immunizations or laboratory verification of immune status, which includes, but is not limited to, Hepatitis B series, Tetanus/Diphtheria, Tuberculosis Test, Measles/Mumps/Rubella, and Varicella, as required by contracts with clinical facilities and CDC recommendations. Proof of immunizations is required by the last day of class in fall quarter, without exception. Students are required to carry personal health/medical insurance throughout their clinical rotations. Quarterly insurance for students may be purchased; further information is available through the Advising and Counseling Office. No student will be allowed at a clinical site without proof of insurance.
BIOL\&/CHEM\& must be completed within the last five years.
For students starting Medical Histology first-quarter program classes in Fall 2018, the following prerequisites must be completed prior to registration, with a grade of "C" (2.0) or higher: ENGL\& 101, CHEM\& 110 , and BIOL\& 175
For students starting Medical Histology first-quarter program classes in Fall 2019, the following prerequisites must be completed with a grade of "B" (3.0) or higher: CMST\& 220, PSYC\& 100 OR SOC\& 101, MAT 108 or MATH\& 146 (see your adviser), CAH 105, COLL 102, ENGL\& 101, CHEM\& 110, and BIOL\& 175

## DEGREE REQUIREMENTS


CAH 102 Medical Terminology I................................................................................. 5
CAH 105 Cl Computer Applications .................................................................................. 5
CHEM\& 110 Chemical Concepts W/Lab ...................................................................... 5
CMST\& 220 Public Speaking...................................................................................... 5

HISTO 105 Orientation to the Histology Laboratory .......................................................... 2
HISTO 110 Histotechnology I........................................................................................... 10

HISTO 120 Histotechnology II................................................................................................... 10

HISTO 130 Math Applications for Histology ........................................................................ 3
HISTO 135 Histotechnology III........................................................................................... 10
HISTO 140 Histotechnology Lab III ........................................................................................ 5
HISTO 145 Immunohisto Chemistry.................................................................................. 5
HISTO 150CAP Histology Internship................................................................................. 10
HISTO 160 Histology Seminar ..................................................................................... 5
TECHNICAL COURSE REQUIREMENTS ............................................................. 100
AAT REQUIREMENTS
Technical Course Requirements .............................................................................. 100
Math for Health Care Professionals or Any 100-Level Math Class........................... 5
General Psychology (or other social science or humanities class)............................. 5
COLL 102 College Success for All............................................................................. 3
TOTAL CREDITS FOR AAT COMPLETION. ..... 113
AAS-T REQUIREMENTS
Technical Course Requirements ..... 100
5 Credits of Quantitative Reasoning ..... 5
5 Credits in Social Science, Humanities, or Science. ..... 5
COLL 102 College Success for All. .....  3
TOTAL CREDITS ..... 113

## MEDICAL LABORATORY TECHNICIAN

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

Prepares students to work in clinical laboratories performing routine analyses on blood and body fluids.
During the academic phase (spring and summer quarters and three weeks of fall quarter), students are on campus in a simulated clinical laboratory; study focuses on the theory of laboratory testing of body fluids. Basic skills, normal values, the significance of abnormal values, and quality control are emphasized. Normal human anatomy and physiology and the changes that occur in disease states are also studied. Students may have the opportunity to meet with clinical site representatives through field trips and/or the meet and greet. Students will provide instructions to students from Osaka Jikei during a "hands-on" lab experience during the cultural event.
During the clinical phase (fall and winter quarters), students are assigned to affiliated clinical laboratories in the Puget Sound area. Each student rotates through all the departments of the clinical laboratory, spending appropriate lengths of time in each.
The affiliated laboratory assigns eight- or nine-hour day shifts during the clinical phase. Some clinical sites may also assign 1-2 weeks of either swing or night shifts as part of the clinical phase. Upon successful completion, graduates are eligible to take the ASCP Medical Laboratory Technician certification examination, qualifying them for employment as a medical laboratory technician with professional recognition of having achieved MLT (ASCP) status.
Included in this program are academic courses in communication, English, math, and social sciences (psychology) that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills. Please refer to the Program Course list for details.

Students are required to carry personal health/medical insurance throughout their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office.
No student will be allowed at a clinical site without proof of insurance.

## Student Learning Outcomes:

Upon successful completion of the Medical Laboratory Technician degree, students will:

- Perform routine laboratory testing by following standard operating procedures in the laboratory.
- Demonstrate professional conduct and interpersonal communication skills with patients, laboratory personnel, other health care professionals, and with the public.
- Recognize and act upon individual needs for continuing education as a function of growth and maintenance of professional competence.
- Recognize and evaluate normal and/or abnormal patient test results, and understand which confirmatory testing is needed.
- Demonstrate an understanding of safety hazards and precautions and identify symbols.
- Relate laboratory findings to common disease.
- Monitor quality control within predetermined limits.
- Recognize pre-analytical, post-analytical, and analytical variables and corrective measures.
Students must complete all college degree requirements prior to graduation. Students must receive a 76 percent or better in all technical courses to satisfy graduation requirements. Students must receive a "C"


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or better to meet the requirements for their general core required classes. Upon successful completion of the MLT program, students will achieve an Associate in Applied Technology (AAT).
Granting of degree is not contingent upon the students passing any type of external certification or licensure examination.
Program Accreditation: This program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences:
5600 N. River Road
Suite 720
Rosemont IL 60018
847-939-3547
Employability Requirements: Graduates are required to pass a national certification exam (ASCP) prior to employment. Prior to being allowed to perform clinical rotations, students must pass a background check. Current immunizations and American Health Association CPR Health Care Provider card are also required.
Physical Requirements: Students must be able to safely lift and carry objects up to 40 lbs . and stand for long periods of time. Frequent standing, walking, grasping, and carrying. The ability to read charts, instrument displays, and printed words on paper or a computer monitor. Must also be able to distinguish gradients of colors and interpret microscopic and macroscopic details.
Program Length: This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements. The program courses are offered in two phases: approximately 23 weeks of academics and approximately 19 weeks of clinical experience. The MLT program currently runs in a hybrid schedule during the academic portion of the MLT program.
Admission Dates: Spring Quarter.
Prerequisite(s): High school diploma or high school equivalency diploma. College-level courses in both biology with a lab and chemistry with a lab passed with a grade of "B" (3.0) or better. Students will be required to pass a colorblind test. The colorblind test should be done by a medical professional such as a licensed optometrist or ophthalmologist, and the results submitted on or before the first day of school. Speaking, understanding, and writing the English language are required. To enter the program, a student must meet the prerequisites for college-level reading, writing, and math. In order to participate in the clinical aspect of the program, students must receive a "No Record On File" report related to crimes against persons from the Washington State Patrol and pass a comprehensive national background check. A non-refundable fee is charged to each student for the background check. Additionally, students must have current immunizations or laboratory verification of immune status by the end of spring quarter. This includes, but is not limited to, Hepatitis B series, which includes a follow-up positive titer, Tetanus/Diphtheria/Pertusus (TDap), Tuberculosis Test, Measles/Mumps/Rubella MMR, and Varicella as required by contracts with clinical facilities and CDC recommendations. Proof of immunizations is required by the last day of class in spring quarter, without exception. CPR certification from the American Heart Association with the designation "Health Care Provider" is required prior to commencing clinical rotation. Students are required to carry personal health/medical insurance throughout their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office.

## PROGRAM COURSE LIST

MLT 110 Introduction to the Laboratory ................................................................................... 2
MLT 205 Hematology.............................................................................................................. 11
MLT 207 Hemostasis................................................................................................................. 4
MLT 209 Phlebotomy/Processing ........................................................................................... 4
MLT 211 Immunology.............................................................................................................. 5
MLT 215 Immunohematology.................................................................................................. 5
MLT 220 Clinical Blood Banking............................................................................................ 6
MLT 217 Microbiology............................................................................................................ 10
MLT 218 Urinalysis 3
MLT 218
Urinalysis.

MLT 222
MLT 228
MLT 233
MLT 237
Body Fluids...
$\ldots . .2$
Clinical Chemistry....................................................................................................... 7
Clinical Experience II................................................................................................ 8
Clinical Experience III............................................................................................... 8
ENGL\& 101 English Composition I................................................................................................ 5
MATH\& 146 Introduction to Stats.................................................................................................... 5
PSYC\& 100 ${ }^{\text {DIV }}$ General Psychology.................................................................................................. 5
COLL 102 College Success for All.............................................................................................. 3
Computer Literacy Requirements (Complete an approved computer literacy course or successfully pass the computer literacy exam)...

TOTAL CREDITS FOR AAT DEGREE 106

## NONDESTRUCTIVE TESTING (NDT)

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

## ASSOCIATE IN APPLIED SCIENCE - T DEGREE

The Nondestructive Testing (NDT) program at Clover Park Technical College provides training in a variety of analysis techniques used in industry to evaluate the properties of a material or structure without causing damage. Because NDT does not impair the usefulness of the object being inspected, it is a valuable process used in fields such as construction, manufacturing, civil engineering, and transportation. Nondestructive testing techniques are used to examine structures or vehicles such as aircraft, trains, nuclear reactors, bridges, dams, and pipelines.
This program prepares graduates to become active and successful professionals in nondestructive testing in a wide range of industries. Students will explore and receive hands-on technical training in blueprint reading, codes and specifications, composite fabrication, assembly and repair, materials, and the manufacturing process. Training will also include the major methods of NDT, such as visual and optical, magnetic particle, liquid penetrant, radiographic, ultrasonic and eddy current testing, along with an overview of other methods. Students will be introduced to advanced technologies, such as ultrasonics (phased array), and radiography (digital detector array DDA and computerized radiography CR). Successful graduates are prepared with technical skills for entry-level positions, such as quality control technicians, NDT technicians, engineering technicians, and NDT equipment representatives.

## Student Learning Outcomes:

Upon successful completion of the Nondestructive Testing (NDT) degree, students will:

- Complete a project integrating the knowledge gained in all previous courses and that demonstrates the application of theory and practice.
- Have general knowledge of welding processes and what a proper weld would look like.
- Have a general knowledge of the various manufacturing processes that involve NDT.
- Identify the methods of nondestructive testing and define each one.
- Identify various discontinuities that are specific to each method and manufacturing process.
- Describe the fundamental parameters of manufacturing processes and the advantages, limitations, and factors to be considered when choosing a manufacturing process.
- Be able to identify the various certification and qualification standards used in NDT: i.e. SNT-TC-1A, ANSI/ASNT CP-189, NAS 410, and ANSI/ ASNT CP-105.
- Read and understand blueprints.
- State the fundamentals of physical metallurgy and heat treating and its application in industry.


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- Troubleshoot problems encountered doing each of the 5 major NDT methods.
- Demonstrate the principles of Lean and 5 S .


## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- Any 100 level math class
- PSYC\& $100^{\text {DIV }}$ General Psychology (PSY $112^{\text {DIV }}$, SOC\& $101^{\text {DVV }}$, or other humanities course that meets the diversity requirement)
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements (23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142 , MATH\& 146 or MATH\& 151
- 5 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ or SOC\& $101^{\text {DIV }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100, ASL\& 121, ASL\& 122, BIOL\& 160, BIOL\& 175 , BIOL\& 241, BIOL\& 242, BIOL\& 260, CHEM\& 110, CHEM\& 121 , CHEM\& 131, GEOL\& 110, HIST\& 146, HIST\& 147, HIST\& 148, HUM\& 101, MUSC\& 105, PHYS\& 114, POLS\& 202, PSYC\& 100, PSYC\& 200, PSYC\& 220, SOC\& 101
- 3 credits in College Success: COLL 102

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
This degree is offered at the South Hill Campus in Puyallup.
Program Length: This program is approximately eight quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): Successful completion of ENG 091 or equivalent. Successful completion of MAT 099 by the end of the first quarter of the program or instructor's permission.

## PROGRAM COURSE LIST

MS 123 Fundamentals of Welding for the Non-Welding Major. 5
MS 126 Fundamentals of Composites for the Non-Composites Technician.................. 4
MS 131 Blueprint Reading Fundamentals ................................................................. 3
NDT 108 Introduction to NDT .............................................................................................................
NDT 113 Material and Processes for NDT I.............................................................. 5
NDT 120 Visual and Optical Testing......................................................................... 5
NDT 121 Materials and Processes for NDT II................................................................ 5
NDT 125 Magnetic Particle Testing ........................................................................... 5
NDT 130 Liquid Penetrant Testing ............................................................................................ 5
NDT 140 Eddy Current Testing I......................................................................................... 5
NDT 150 Ultrasonic Testing I........................................................................................ 5

NDT 170 Eddy Current Testing II.............................................................................. 5


NDT 190 Radiographic Testing II....................................................................................... 5
NDT 210 Eddy Current Testing III................................................................................... 5
NDT 220 Ultrasonic Testing III................................................................................... 5
NDT 230 Radiographic Testing III............................................................................ 5
NDT 240CAP Capstone Project....................................................................................... 3
Nondestructive Testing Required Electives listed below .............................................................. 10
TECHNICAL COURSE REQUIREMENTS.
AAT REQUIREMENTS
Technical Course Requirements ..... 105
AAT General Education Requirements (See list above) .....  18
Computer Literacy Requirement (Complete an approved computer literacy course or successfully pass the computer literacy exam) .....  3
TOTAL CREDITS FOR AAT COMPLETION ..... 126
AAS-T REQUIREMENTS
Technical Course Requirements ..... 105
AAS-T Degree General Education Requirements (See list above) .....  .23
Computer Literacy Requirement (Complete an approved computer literacy courseor successfully pass the computer literacy exam) 3
TOTAL CREDITS FOR AAS-T COMPLETION ..... 131
Electives:
ACM 120 Composite Fabrication .....  4
ACM 125 Composite Assembly. .....  4
ACM 130 Composite Repair ..... 4
ACM 145 Special Projects. ..... $\cdots$
CAS $115^{\mathrm{CL}}$ Introduction to Computing .....  3
ENV 131 Hazardous Waste Site Operations - 40 Hours. ..... $\ldots .4$MATH\& 146MCH 101Introduction to Stats 5
MCH 101 Orientation/Machine Shop Safety. .....  .2
MS 128 OSHA, Occupational, Health and Safety. .....  3
NDT 187 Inspection and Test Equipment. .....  5
NDT 189 .....  4NDT 191
NDT 193NDT 250
Continuous Improvement Tools. .....  4
Statistical Process Control. .....  .4NDT 255NDI Internship1-11
NDT Special Projects.PHYS\& 114 $1-3$
General Physics I w/Lab. .....  .5
PHYS\& 12
Psychology of the Workplace .....  5
SVL 101 Service Learning.. .....  3

## NONDESTRUCTIVE TESTING EDDY CURRENT TESTING

## CERTIFICATE

This certificate provides students with foundational knowledge related to nondestructive testing (NDT) and offers the opportunity to gain hands-on training in the NDT method of eddy current inspection. Eddy current inspection applies electrical currents to an object to create electromagnetic fields. This type of testing can detect manufacturing defects and corrosion damage or cracking for many nonmagnetic metals and alloys.
Program Length: The certificate program is two-to-three quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Instructor's permission.
Prerequisite(s): Successful completion of NDT 185 prior to enrolling in NDT 140. NDT 185 requires MAT 099 as a prerequisite. Also successful completion of ENG 091 or equivalent.

## PROGRAM COURSE LIST

NDT 108 Introduction to NDT................................................................................................. 5
NDT 113 Material and Processes for NDT I................................................................. 5
NDT 121 Materials and Processes for NDT II.................................................................. 5

NDT 170 Eddy Current Testing II..................................................................................... 5
NDT 210 Eddy Current Testing III..................................................................................... 5
NDT 240CAP Capstone Project....................................................................................................


## NONDESTRUCTIVE TESTING

## MAGNETIC PARTICLE \& LIQUID PENETRANT TESTING

## CERTIFICATE

Provides foundational knowledge related to nondestructive testing (NDT) and offers the opportunity to gain hands-on training in the NDT methods of magnetic particle inspection, liquid penetrant inspection, and visual inspection.
Program Length: The certificate program is two-to-three quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Instructor's permission
Prerequisite(s): Successful completion of ENG 091 or equivalent and successful completion of MAT 092 or equivalent by the end of the first quarter of the program.

## PROGRAM COURSE LIST

NDT 108 Introduction to NDT ...................................................................................................... 5
NDT 113 Material and Processes for NDT I........................................................................... 5
NDT 120 Visual and Optical Testing......................................................................................... 5
NDT 121 Materials and Processes for NDT II........................................................................ 5
NDT 125 Magnetic Particle Testing .......................................................................................... 5
NDT 130 Liquid Penetrant Testing ............................................................................................. 5
NDT 240CAP Capstone Project................................................................................................................... 3
COLL 102 College Success for All............................................................................................. 3
TOTAL CREDITS FOR COMPLETION
36

## NONDESTRUCTIVE TESTING

## RADIOGRAPHIC TESTING

## CERTIFICATE

Provides foundational knowledge related to nondestructive testing (NDT) and offers the opportunity to gain hands-on training in the NDT method of radiographic inspection. Radiography uses X-rays or gamma rays to show defects that might otherwise be invisible. A vast array of material can be examined in this efficient and reliable way, ranging from tiny electronic components to 20 -foot freestanding concrete slabs.
Program Length: The certificate program is two-to-three quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.

Admission Dates: Instructor's permission.
Prerequisite(s): Successful completion of NDT 185 prior to enrolling in NDT 160 . NDT 185 requires MAT 099 as a prerequisite. Also, successful completion of ENG 091 or equivalent.

## PROGRAM COURSE LIST

NDT 108 Introduction to NDT .....  .5
NDT 113 Material and Processes for NDT I. .....  .5
NDT 121 Materials and Processes for NDT II.. ..... $\ldots . . .5$
NDT 160 Radiographic Testing I$\cdots . . .5$
NDT 190 Radiographic Testing II .....  .5
NDT 230 Radiographic Testing III..
Capstone Project ..... $\ldots . .3$
NDT $240^{\circ}$
College Success for All. .....  .3

## ULTRASONIC TESTING

## CERTIFICATE

Provides students with foundational knowledge related to nondestructive testing (NDT) and offers the opportunity to gain hands-on training in the NDT method of ultrasonic testing. With this method, NDT inspectors need access to only one side of a material. A transducer sends the ultrasound through the sample and the inner wall of a defect surface will send the wave bouncing back. Ultrasonic testing is a portable and efficient way to measure thickness, detect corrosion, and examine groove welds in many materials.
Program Length: The certificate program is two-to-three quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Instructor's permission.
Prerequisite(s): Successful completion of NDT 185 prior to enrolling in NDT 140. NDT 185 requires MAT 099 as a prerequisite. Also, successful completion of ENG 091 or equivalent.

## PROGRAM COURSE LIST

| NDT 108 | Introduction to NDT. | .. 5 |
| :---: | :---: | :---: |
| NDT 113 | Material and Processes for NDT I.. |  |
| NDT 121 | Materials and Processes for NDT II... | . 5 |
| NDT 150 | Ultrasonic Testing I.. | . 5 |
| NDT 180 | Ultrasonic Testing II.. | . 5 |
| NDT 220 | Ultrasonic Testing III.. | 5 |
| NDT $240{ }^{\text {cap }}$ | Capstone Project..... | . 3 |
| COLL 102 | College Success for All. | .... 3 |

TOTAL CREDITS FOR COMPLETION 36

## NONDESTRUCTIVE TESTING

## QUALITY ASSURANCE INSPECTOR

## CERTIFICATE

Prepares students for employment opportunities in the manufacturing and aerospace industries, with transferable skills to other manufacturers requiring quality assurance. Students will gain foundational skills in manufacturing processes, safety, measuring instruments, blueprint reading, workplace psychology, report writing, and industrial math. Skills can be applied to quality assurance and inspection work at all stages of manufacturing, from examining materials received from a supplier or inspecting components and assemblies during production to performing final checks on finished products.
This program requires that students have a sound knowledge of trade math and blueprint reading and experience in a manufacturing environment. The program is structured in three progressive steps: starting with the use of basic tools used in the lab and in the office; continuing through the use of statistics for process control and the development of inspection plans; and ending with advanced techniques, such as Six Sigma, and a capstone project
Program Length: The certificate program is three quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring quarters.
Prerequisite(s): Successful completion of ENG 094 or equivalent and successful completion of MAT 099 or equivalent. Instructor's permission required.
(CONTINUED FROM PREVIOUS PAGE)


## NURSING

## NURSING ASSISTANT

## CERTIFICATE

The Nursing Assistant Certificate Program prepares students for employment as a basic care provider under the supervision of a professional licensed provider, such as a Registered Nurse. This course is an introduction to the roles and responsibilities of being a Nursing Assistant. This course will meet the didactic portion of Washington state and Omnibus Budget Reconciliation Act (OBRA) requirements for Nursing Assistant Training.

## Student Learning Outcomes:

Upon successful completion of the Nursing Assistant certificate, students will:

- Student will demonstrate basic nursing assistant skills while caring for patients.
- 100 percent of students will demonstrate ability to apply theory to practice by passing final written exam with 78 percent.
- Students will demonstrate competency while providing basic nursing assistant skills in laboratory setting.
- Students will complete the following required components for eligibility for state NAC exam, which will include: Theory 58 hours, Lab 40 hours, Clinical 50 hours.
- 100 percent of students will pass the "mock state exam" in lab after clinicals.
Physical Activity Requirements: This occupation requires medium physical activity and lifting/handling objects weighing 50 lbs. and standing for long periods of time.
Employability Requirements: Upon completion of this course, students will be eligible to take the State Certification Examination - the National Nurse Aide Assessment Program Exam (NNAAP). Graduates must pass the NNAAP exam and meet the state eligibility requirements in order to apply for licensure. Persons with some types of criminal convictions may not be eligible for licensure.

Program Length: The total number of hours to complete the course is 148 hours. NAC 108 involves 58 hours of nursing assistant theory, which includes HIV/AIDS and CPR. NAC 111 includes 40 hours of nursing skills. NAC 114 includes 50 hours of unit-based clinical experience in a long-term care facility, using the knowledge and skills acquired from NAC 108 and NAC 111. Mandatory attendance is required for all nursing laboratory and clinical days.
For additional inquiries regarding the program or orientation, email nursingprogram@cptc.edu or call 253-589-6013.
Admission Dates: Summer, fall, winter, and spring quarters. Students entering the evening program will be required to attend an I-BEST information session and complete entry and quarterly assessments while enrolled in the program.

Prerequisite(s): Students must pass a criminal background check
performed by the Washington State Patrol and DSHS and have a "No Record On File" report. A non-refundable fee is charged to each student for the background check.
Students must have current immunizations including Measles/Mumps/ Rubella, Hepatitis B series, T-dap (within the last 10 years), TWO-PPD/ Tuberculosis Tests (the second PPD should occur 10-14 days after the reading of the first PPD), Seasonal Flu and Varicella, as required by contracts with clinical facilities and CDC recommendations. Proof of immunizations should be submitted the first day of class, unless arrangements have been made with the instructor.

## PROGRAM COURSE LIST

NAC 108 Nursing Assistant Theory....................................................................................... 5
NAC 111 Nursing Skills Fundamentals ...................................................................... 2
NAC 114 Unit Based Clinical Experience ....................................................................... 2
TOTAL CREDITS FOR COMPLETION ........................................................................ 9

## NURSING

## PRACTICAL NURSING

## CERTIFICATE

The Practical Nursing (PN) certificate program at Clover Park Technical College prepares graduates for entry into the nursing profession as practical nurses under the direction of a licensed registered nurse, licensed physician, or dentist. Graduates are eligible to take the NCLEX PN exam.
Clover Park Technical College's Practical Nursing Certificate program consists of 60 credits of nursing courses and 45 credits of general education courses. Students must receive a "B-" or better in all technical (nursing) courses to satisfy graduation requirements. In addition, all students entering the practical nurse program must have completed a state-approved nursing assistant program (NA-C), successfully passed the state exam, and maintained a current unencumbered nursing assistant license throughout the program.

This PN program focuses on the art and science of nursing. Students learn in the classroom, by simulation in the skills laboratory, and in clinical practice settings. Clinical learning experiences are obtained in various health care settings in the community under the guidance of nursing faculty. Clinical experiences are largely scheduled between 6:30 a.m. and 11:30 p.m. The college reserves the right to schedule clinical experiences during evening and/or on weekends if necessary, and students may be required to travel up to 50 miles for clinical site.
To apply, download and complete the LPN Admission Packet and follow the directions given in the packet to submit. This program does not have an application submission deadline; applications are accepted year-round.

## Student Learning Outcomes:

Upon successful completion of the Practical Nursing certificate, students will:

- Promote the dignity, integrity, self-determination, and personal growth of diverse patients, their families and oneself to provide individualized, culturally appropriate, relationship-centered nursing care.
- Make judgments in practice, substantiated with evidence, that integrate nursing science in the provision of safe, quality care for diverse patients and their families in collaboration with the health care team.
- Articulate a unique role as a member of the health care team, committed to evidence-based practice, caring, advocacy, and safe quality care, to provide optimal health care for diverse patients and their families.
- By collaborating with health care team members, utilize evidence,


## (CONTINUED FROM PREVIOUS PAGE)

tradition, and patient preferences in predictable patient care situations to promote optimal health status.

Physical Activity Requirements: This occupation requires medium physical activity and lifting/handling objects weighing up to 50 lbs . and handling body fluids. Nurses are often standing for long periods of time. For safety and protection of patients, student nurses must be able to perform basic cardiac life support, including CPR, and function in stressful and/or emergency situations.
Employability Requirements: Graduates must pass the NCLEX-PN exam and meet state eligibility requirements, including a criminal background check, in order to apply for licensure. Persons with some types of criminal convictions may not be eligible for licensure.
Program Length: This program is designed to be completed in four quarters. This is an academically rigorous program that requires a high degree of ability to read, understand, and critically think about and apply complex concepts in order to provide quality patient care. Students can expect 3-4 hours per week per class for homework and study (e.g., $\mathbf{1 5 - 2 0}$ hours per week for five classes) in addition to actual class time. It is strongly recommended that students not work more than 20 hours per week while in the nursing program to allow for adequate study time.
Admission Dates: Fall, winter, and spring quarters. It is a day program.
If students are taking or have taken prerequisite courses at another educational institution, they must have credits evaluated prior to submitting the application. Students must request an official college transcript be sent to CPTC Enrollment Services for evaluation and complete a transfer credit request form. Mail your official transcript to Clover Park Technical College ATTN: Credential Evaluator.

It is the student's responsibility to ensure their application is complete and the nursing program receives the required documents. Instructions for submitting applications are included in the application packet.
Prerequisite(s): CPTC courses with an " $\&$ " in the course name are transferable to other Washington State educational institutions.
Provide documentation of proof of successful completion of the following:

- High school transcript or high school equivalency diploma


## Completion of the following academic prerequisites:

- General Education Courses: You must achieve a "B" or better within 2 retakes ( 3 total) in the following:
- BIOL\& 241 Human A \& P 1 w/Lab (5 Cr.) (taken within 5 years of starting the program)
- BIOL\& 242 Human A \& P 2 w/Lab (5 Cr.) (taken within 5 years of starting the program)
- BIOL\& 260 Microbiology with lab (5 Cr.) (taken within 5 years of starting the program)
- ENGL\& 101 English Composition or ENGL\& 235 Technical Writing (5 Cr.)
- MAT 099 Intermediate Algebra or MATH\& 141 Precalculus I or MATH\& 146 Introduction to Stats (5 Cr.) or MATH\& 151 Calculus I (taken within 5 years of starting the program)
- NUTR\& 101 Nutrition (5 Cr.)
- PSYC\& $100^{\text {DIV }}$ General Psychology (5 Cr.)
- PSYC\& 200 Lifespan Psychology (developmental psychology) (5 Cr.)
- COLL 102 College Success for All (3 Cr.)

Speaking, understanding, and writing the English language is required.
State-approved nursing assistant course (NA-C), and current unencumbered/unrestricted NA-C certification from the state. American Heart Association CPR for the Health Care Provider. This includes adult, child, and infant, under the guidelines of the American Heart Association. Online CPR courses are not accepted. Students are required to carry personal health/medical insurance throughout their
clinical rotations.
Students must receive a "No Record On File" report related to crimes against persons from the Washington State Patrol. A non-refundable fee is charged to each student for the background check.

## PROGRAM COURSE LIST

NURS 117 Fundamentals of Nursing ........................................................................... 4
NURS 120 Medical/Surgical Nursing I ............................................................................ 3
NURS 121 Nursing Clinical Skills \& Data Collection I.......................................................... 6
NURS 124 Mental Health Nursing .............................................................................. 3
NURS 131 Medical/Surgical Nursing II............................................................................ 3
NURS 133 Medical/Surgical Nursing III...................................................................... 4
NURS 134 Pharmacology in Nursing........................................................................ 5
NURS 137 Nursing Clinical Skills \& Data Collection II................................................... 5
NURS 140 Maternity \& Pediatric Nursing.................................................................... 3
NURS 145 Medical Surgical Nursing IV........................................................................... 4
NURS 149 Clinical Practicum I....................................................................................... 5

NURS 154 Issues \& Trends in Nursing........................................................................ 2

NURS 164 Clinical Practicum IV......................................................................................................
TOTAL CREDITS FOR COMPLETION
60

## NURSING RN OPTION DEGREE

## ASSOCIATE DEGREE IN NURSING

Graduates of this program are educated in the duties and responsibilities of a Registered Nurse in accordance with the Washington Administrative Code.

The program is designed to meet the needs of LPNs who desire additional education to progress to the role of a registered nurse. Students will receive the ADN degree upon successful completion of all prerequisites, nursing courses, and general educational courses required. Students must receive a "B-" or better in all technical (nursing) courses to satisfy graduation requirements. After receiving the degree, students are eligible to take the NCLEX-RN exam.

The RN Option program complies with all the guidelines set forth in the Washington Administrative Code. The curriculum contains theory and clinical experiences in the areas of medical/surgical nursing, obstetric nursing, nursing of children, and psychiatric nursing. Clinical experiences will include opportunities for students to have direct involvement in and accountability for nursing care for patients with acute and chronic illnesses. Clinical experiences will include opportunities for students to demonstrate assessment, planning, implementation, and evaluation of nursing care of diverse individuals and groups.

Students are required to carry personal health/medical insurance throughout their clinical rotations.

## Student Learning Outcomes:

Upon successful completion of the Nursing RN Option degree, students will:

- Advocate for patients and families in ways that promote their self-determination, integrity, and ongoing growth as human beings.
- Make judgments in practice, substantiated with evidence, that integrate nursing science in the provision of safe, quality care and that promote the health of patients within a family and community context.
- Implement their role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving identity as a nurse committed to evidence-based practice, caring advocacy, and safe, quality care for diverse patients with a family and community context.
- Examine the evidence that underlies clinical nursing practice to challenge the status quo, question underlying assumptions, and offer new insights to improve the quality of care for patients, families, and


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communities.
Application Process: Applications are not being accepted at this time. For additional inquiries regarding the program, orientation, or application acceptance, email nursingprogram@cptc.edu or call 253-589-6013.
Physical Activity Requirements: This occupation requires medium physical activity and lifting/handling objects weighing up to 50 lbs . and handling body fluids. Nurses are often standing for long periods of time. For safety and protection of patients, student nurses must be able to perform basic cardiac life support, including CPR, and function in stressful and/or emergency situations.
Employability Requirements: Graduates must pass the NCLEX-RN exam and meet state eligibility requirements, including a criminal background check, in order to apply for licensure.
Program Length: This four-quarter program is a combination of classroom, laboratory, and clinical experience.

## Admission Dates: Fall quarter.

This is a full-time evening program with clinical rotations on weekends (both Saturday and Sunday). The preceptorship could happen during evenings and/or weekends.
No part-time option is currently available. This is an academically rigorous program that requires a high degree of ability to read, understand, and critically think about and apply complex concepts in order to provide quality patient care. Students can expect 3-4 hours per week per class for homework and study (e.g., 15-20 hours per week for five classes) in addition to actual class time. It is strongly recommended that students not work more than 20 hours per week while in the nursing program to allow for adequate study time.
Prerequisite(s): CPTC courses with an " $\&$ " in the course name are transferable to other Washington State educational institutions. Students must complete the following:
(1) General education courses
(2) Certifications
(3) Required immunizations

1. General educational courses: Students must receive a grade of "B"
(3.0) or higher in the following required prerequisite courses:

- ENGL\& 101 English Composition (5 Cr.)
- BIOL\& 241 Human A \& P 1 and ( 5 Cr .)
- BIOL\& 242 Human A \& P 2 (5 Cr.)
- BIOL\& 260 Microbiology ( 5 Cr .)
- PSYC\& $100^{\text {Div }}$ General Psychology (5 Cr.)
- PSYC\& 200 Lifespan Psychology (developmental psychology) ( 5 Cr .)
- CHEM\& 121 Intro to Chemistry (5 Cr.)

One of the following math courses: MATH\& 141 Precalculus I, or MATH\& 146 Introduction to Statistics, or MATH\& 151 Calculus I.
NLN NACE Foundations of Nursing (NACE 1) Exam with the score of 76 percent or higher.
Speaking, understanding, and writing the English language is required.
2. Certifications and background check(s): The student must have an active, unrestricted LPN license in Washington State and 500 hours of verified employment experience as an LPN. Students are required to pass a national and local background check with a result of "No Record On File." A non-refundable fee is charged to each student for the background check. Students must maintain a current CPR for the Health Care Provider training that includes adult, child, infant, and AED under the guidelines of the American Heart Association. Online CPR courses are not accepted.
3. Immunization requirements are based on CDC guidelines and/or clinical facility policies and may change. Please check the college website for current requirements.

## PROGRAM COURSE LIST

NURS $205 \quad$ Nursing Concepts IV Lab.......................................................................................... 4
NURS 229 Psychosocial Issues in Health Care ........................................................................ 2
NURS 231 Nursing Concepts IV................................................................................................. 3
NURS 243 Nursing Concepts V.................................................................................................. 4
NURS 244 Ethics and Policy in Health Care............................................................................... 2
NURS 245 Nursing Concepts VI.................................................................................................. 4
NURS $246 \quad$ Nursing Concepts VI Clinical .................................................................................... 3
NURS 248 Nursing Concepts VII............................................................................................... 3
NURS 250 Nursing Concepts VIII ............................................................................................... 4
NURS 252 ${ }^{\text {CAP }} \quad$ Practical Capstone .................................................................................................... 4
NURS 254 Nursing Concepts IX................................................................................................. 4

TOTAL CREDITS FOR COMPLETION ...................................................................... 37

## PASTRY ARTS

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

## ASSOCIATE IN APPLIED SCIENCE - T DEGREE

The Pastry Arts program at Clover Park Technical College offers a five-quarter Associate in Applied Science - T degree, as well as a three-quarter certificate program for students seeking entry into, or career advancement in, the pastry arts job market, specifically as a pastry arts chef.
Prepares student for careers as bakers, pastry chefs and other pastry arts positions. Students already working in the culinary arts field can select a study path that will expand their skills and further their employment potential. The Pastry Arts degree is designed to provide hands-on training that will prepare students for careers in pastry arts.

## Student Learning Outcomes:

Upon successful completion of the Pastry Arts degree, students will:

- Identify a study path that will expand their skills and further their employment potential.
- Evaluate work quality and generate recommendations for continuous improvement.
- Be prepared at entry-level to be employed in the hospitality industry or closely related field.
- Understand the fundamentals of baking science.
- Have the ability to input orders, process order reception to ensure quality/safety, and correct mistakes as needed.
- Plan day-to-day operations to run a bistro effectively.
- Demonstrate the ability to manage and lead other students by acting as lead and mentor.
- Possess the following certificates: Food Handler cards, Restaurant Management Certificate (NRA) and Accounting Certificate (NRA).
- Apply problem-solving and decision-making skills to resolve guest and student complaints.
- Students will be able to pass the ServSafe exam given by the National Restaurants Association.
- Work as a team with coworkers to ensure quality and guest services.
- Demonstrate the ability to plan, write, and execute a complete menu and monitor quality.
- Model a high level of professionalism.
- Execute a customer consultation.

The two degree options in this program are the Associate of Applied Technology (AAT), and the Associate in Applied Science - T (AAS-T). The different requirements for each degree are listed below.

## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- Any 100 level math class


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- PSYC\& $100^{\text {DIV }}$ General Psychology (PSY $112^{\text {DIV }}$, SOC\& $101^{\text {DIV }}$, or other humanities course that meets the diversity requirement)
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements ( 23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142, MATH\& 146 or MATH\& 151
- 5 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ or SOC\& $101^{\text {DIV }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100, ASL\& 121, ASL\& 122, BIOL\& 160, BIOL\& 175, BIOL\& 241, BIOL\& 242, BIOL\& 260, CHEM\& 110, CHEM\& 121, CHEM\& 131, GEOL\& 110, HIST\& 146, HIST\& 147, HIST\& 148, HUM\& 101, MUSC\& 105 , PHYS\& 114, POLS\& 202, PSYC\& 100 , PSYC\& 200, PSYC\& 220, SOC\& 101
- 3 credits in College Success: COLL 102

Physical Activity Requirements: This occupation requires the ability to stand, walk, and perform repetitive motions for extended periods of time and lift up to 50 lbs . Students must be able to meet these physical requirements in order to complete lab requirements and obtain employment in this field.
Employability Requirements: All food workers (includes those who work with unpackaged food, food equipment, or utensils, or with any surface where people put unwrapped food) are required to have a valid food worker card to work in Washington. (Chapter 246-217 WAC.)
Program Length: The program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): None.

## PROGRAM COURSE LIST

CUL 104
BAKE 106
Sanitation in Food Service Operations...
Chocolate I (Confections) ....................................................................................................... 4
BAKE 110 Patisserie I................................................................................................................... 7
BAKE 113 Cakes I (Fillings and Icings)..................................................................................... 4
BAKE 114 Dessert Alternatives (Sugar Free, Gluten Free)...................................................... 3
BAKE 115 Patisserie II.................................................................................................................... 7
BAKE 117 Frozen Desserts......................................................................................................... 3

BAKE 121 Patisserie III ................................................................................................................ 7
BAKE 131 Pies, Tarts, Custards and Fillings.............................................................................. 4
BAKE 134 Quick Breads, Cookies, Brownies ........................................................................... 3

BAKE 153 Sugar Work.................................................................................................................. 3
BAKE 157 Wedding Cakes......................................................................................................... 3
BAKE 162 Retail and Customer Service.................................................................................... 7
BAKE 210 Cakes II....................................................................................................................... 3
REST 103 Food \& Beverage Cost Control................................................................................ 4
REST 107CAP Kitchen \& Dining Management............................................................................... 3
REST 109 Marketing/Public Relations....................................................................................... 3
REST 115 Catering Production .................................................................................................. 3
REST 119 Operations Management........................................................................................ 4
REST 122 Food Service Nutrition ............................................................................................. 4
REST 126 Finance \& Accounting............................................................................................... 4
REST 131 Business Plan Development....................................................................................... 4

REST 137 Hospitality Law ............................................................................................................ 4

TECHNICAL COURSE REQUIREMENTS .
107
AAT REQUIREMENTS
Technical Course Requirements
AAT General Education Requirements (See list above)18Computer Literacy Requirement (CAS 130 (Excel I) recommended to meet com-puter literacy degree requirement or successful completion of computer literacyexam).. 3
TOTAL CREDITS FOR AAT COMPLETION ..... 128
AAS-T REQUIREMENTS
Technical Course Requirements ..... 107
AAS-T Degree General Education Requirements (See list above). ..... 23Computer Literacy Requirement (CAS 130 (Excel I) recommended to meet com-puter literacy degree requirement or successful completion of computer literacyexam) 3TOTAL CREDITS FOR AAS-T COMPLETION133

## PASTRY ARTS

## CERTIFICATE

This program prepares students with the basic skills and knowledge required for entry-level positions in the baking and pastry industry. Students gain hands-on experience and theoretical training as they produce quality bakery products from scratch.
Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.
Physical Activity Requirements: This occupation requires the ability to stand, walk, and perform repetitive motions for extended periods of time and lift up to 50 lbs . Students must be able to meet these physical requirements in order to complete lab requirements and obtain employment in this field.
Employability Requirements: All food workers (includes those who work with unpackaged food, food equipment or utensils, or with any surface where people put unwrapped food) are required to have a valid food worker card to work in Washington. (Chapter 246-217 WAC.)
Program Length: The program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): None.

## PROGRAM COURSE LIST

CUL 104 Sanitation in Food Service Operations .............................................................. 3
BAKE 106 Chocolate I (Confections) ........................................................................ 4

BAKE 113 Cakes I (Fillings and Icings)..........................................................................................
BAKE 114 Dessert Alternatives (Sugar Free, Gluten Free).............................................. 3
BAKE 115 Patisserie II......................................................................................................................
BAKE 117 Frozen Desserts........................................................................................ 3

BAKE 121 Patisserie III................................................................................................ 7
BAKE 131 Pies, Tarts, Custards and Fillings................................................................ 4
BAKE 134 Quick Breads, Cookies, Brownies ................................................................. 3
BAKE 140 Restaurant (Individual) Desserts and Petit Fours .............................................. 5
BAKE 153 Sugar Work...................................................................................................... 3

BAKE 210 Cakes II..............................................................................................................................


PSYC\& 10001V General Psychology................................................................................... 5
COLL 102 College Success for All.............................................................................. 3
TOTAL CREDITS FOR COMPLETION ............................................................................. 81

## PHARMACY TECHNICIAN

## ASHP/ACPE ACCREDITED

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

Pharmacy technicians process prescriptions, prepare intravenous drugs, order and stock medications, prepare billing, and operate and troubleshoot automated drug-dispensing systems.
Successful graduates of this program are educated and trained in pharmacy technician duties and responsibilities under the dual guidelines of the American Society of Health-System Pharmacists and the Accreditation Council for Pharmacy Education.
The structured classroom curriculum includes customer service, communication, prescription processing, aseptic technique, human relations, and pharmacy calculations. The clinical component of the program gives students the chance to practice the skills received in the classroom and laboratory environment. This prepares students to assume the role of a pharmacy technician in a variety of pharmacy settings.
Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.
This program is a combination of classroom, laboratory, and clinical experience. During the clinical experience quarter, students are required to attend 32 hours per week of clinical experience, Tuesday through Friday. Actual times may vary by pharmacy; most will be day shift hours. Students are required to carry personal health/medical insurance throughout their clinical rotations. No student will be allowed at clinical sites without proof of insurance.

## Student Learning Outcomes:

Upon successful completion of the Pharmacy Technician degree, students will:

- Understand and maintain conduct in a manner appropriate to pharmacy standards in compliance with state and federal laws.
- Apply knowledge of pharmacology and generic drug names to select appropriate medication from inventory.
- Correctly prepare medications from physician orders using critical thinking skills and collaboration with the healthcare team.
- Maintain and use common technological tools, applications, and equipment necessary for modern pharmacy operations.
- Demonstrate skills, abilities, legal, and ethical conduct needed to work in a variety of pharmacy setting working with a diverse population.
- Discuss and show competence in the ASHP/ACPE education goals for Pharmacy Technician programs.
Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
Employability Requirements: Graduation from a Washington State Pharmacy Quality Assurance Commission (PQAC) approved technical training program. The PQAC requires all applicants to provide proof of passing a national pharmacy technician certification examination. Four hours of AIDS education and training as required under WAC 246-901120. A comprehensive background check will be conducted to screen for prior convictions prior to state licensing. Persons with some types of criminal convictions may not be eligible for licensure.
Physical Requirements: Students of the Pharmacy Technician program are required to be able to discriminate increment readings on syringes and discriminate different colored and shaped objects. Students need to be able to recognize and respond to voices under protective garb and on the phone. Excellent fine motor skills are required. Must be able
to type 35 WPM. Standing for long periods of time (8-12 hours) and manipulating needles and syringes while holding their arms out in front of them is required. Ability to stand and work for long periods of time in safety equipment and garb is required. Students are expected to be able to lift 25 lbs . and push and pull carts up to 100 lbs ..
Program Length: This program is approximately three-to-five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, and spring starts.
Prerequisite(s): Before starting the program, a student must have a high school diploma or high school equivalency diploma.
To enter the program, students must meet the prerequisites for college-level reading, writing, and math. They must have completed a college-level math course within the last 5 years (unless they hold a bachelor's degree, then the rule does not apply), CAH 105 Computer Applications or equivalent, and CAH 102 Medical Terminology or equivalent course. Students must maintain a "B" or above in all technical and general education courses to enter and continue in the program.
Students will have a comprehensive background check performed by the PQAC as well as Castle Branch prior to their clinical rotation. A non-refundable fee is charged to each student for the background check. Students must be at least 18 years of age by the time clinical experience starts. Students must have current immunizations or laboratory verification of immune status. This could include, but is not limited to, Measles/Mumps/Rubella, Hepatitis B series and titer, Tetanus/ Diphtheria, Tuberculosis Test, Current Flu and Varicella, as required by contracts with clinical facilities and CDC recommendations.
Students must have current American Heart Association CPR for the Healthcare Professional certification. Proof of immunizations should be submitted the first day of class unless arrangements have been made with instructor.


## PROGRAM COURSE LIST

BIOL\& 175 Human Biology W/Lab ............................................................................................. 5
CAH 102 Medical Terminology I............................................................................................. 5
CAH 105 Cl Computer Applications .............................................................................................. 5
COLL 102 College Success for All ............................................................................................ 3
CMST\& $220 \quad$ Public Speaking........................................................................................................... 5
ENGL\& 101 English Composition I................................................................................................. 5
MAT 108 Math for Health Occupations or Alternative ......................................................... 5
PSYC\& 100 ${ }^{\text {DIV }} \quad$ General Psychology (or higher, but not PSY 112)................................................. 5
SOC\& 101DIV Introduction to Sociology ......................................................................................... 5
PT 121 Introduction to Pharmacy \& Pharmacy Law............................................................ 5
PT 123 Pharmacology with Drug Names, Part I ................................................................ 6
PT 125 Community Pharmacy with Dosage Calculations ................................................. 6
PT 127 Pharmacy Lab \#1 ........................................................................................................ 2
PT 132 Pharmacology with Drug Names, Part II................................................................. 6
PT 135 Hospital Practice with Sterile Processing ................................................................. 6
PT 148 Clinical Capstone Research ..................................................................................... 4
PT 154 Pharmacy Lab \#2......................................................................................................... 2
PT 163 CAP Community Pharmacy Clinical Capstone.............................................................. 7
PT 165 ${ }^{\text {CAP }}$ Institutional Clinical Capstone.................................................................................. 7
TOTAL CREDITS FOR AAT COMPLETION............................................................... 94

## PHARMACY TECHNICIAN

## ASHP/ACPE ACCREDITED

## CERTIFICATE

Pharmacy Technicians process prescriptions, prepare intravenous drugs, order and stock medications, prepare billing, and operate and troubleshoot automated drug-dispensing systems.
Successful graduates of this program are educated and trained in pharmacy technician duties and responsibilities under the dual guidelines of the American Society of Health-System Pharmacists and the Accreditation Council for Pharmacy Education.

## (CONTINUED FROM PREVIOUS PAGE)

The structured classroom curriculum includes customer service, communication, prescription processing, aseptic technique, human relations, and pharmacy calculations. The clinical component of the program gives students the chance to practice the skills received in the classroom and laboratory environment. This prepares students to assume the role of a pharmacy technician in a variety of pharmacy settings.
Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.
This program is a combination of classroom, laboratory, and clinical experience. During the clinical experience quarter, students are required to attend 32 hours per week of clinical experience, Tuesday through Friday. Actual times may vary by pharmacy; most will be day shift hours. Students are required to carry personal health/medical insurance throughout their clinical rotations. No student will be allowed at clinical sites without proof of insurance.

## Student Learning Outcomes

Upon successful completion of the Pharmacy Technician degree, students will:

- Understand and maintain conduct in a manner appropriate to pharmacy standards in compliance with state and federal laws.
- Apply knowledge of pharmacology and generic drug names to select appropriate medication from inventory.
- Correctly prepare medications from physician orders using critical thinking skills and collaboration with the healthcare team.
- Maintain and use common technological tools, applications, and equipment necessary for modern pharmacy operations.
- Demonstrate skills, abilities, legal, and ethical conduct needed to work in a variety of pharmacy setting working with a diverse population.
- Discuss and show competence in the ASHP/ACPE education goals for Pharmacy Technician programs.
Employability Requirements: Graduation from a Washington State Pharmacy Quality Assurance Commission (PQAC)-approved technical training program. The PQAC requires all applicants to provide proof of passing a national pharmacy technician certification examination. Four hours of AIDS education and training as required under WAC 246-901120. A comprehensive background check will be conducted to screen for prior convictions prior to state licensing. Persons with some types of criminal convictions may not be eligible for licensure.

Physical Requirements: Students of the pharmacy technician program are required to be able to discriminate increment readings on syringes and discriminate different colored and shaped objects. Students need to be able to recognize and respond to voices under protective garb and on the phone. Excellent fine motor skills are required. Must be able to type 35 WPM. Standing for long periods of time (8-12 hours) and manipulating needles and syringes while holding their arms out in front of them is required. Ability to stand and work for long periods of time in safety equipment and garb is required. Students are expected to be able to lift 25 lbs. and push and pull carts up to 100 lbs ..
Program Length: This program is approximately three to four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Fall and spring starts.
Prerequisite(s): Before starting the program, a student must have a high school diploma or high school equivalency diploma. To enter the program, a student must meet the prerequisite for college-level reading, writing, and math. They must have completed a college-level math course within the last 5 years (unless they hold a bachelor's degree; then the rule does not apply), CAH 105 Computer Applications or equivalent, and CAH 102 Medical Terminology or equivalent course. Students must maintain a " B " or above in all technical and general education courses to enter and continue in the program.

Students will have a comprehensive background check performed prior to their clinical rotation. A non-refundable fee is charged to each student for the background check. Students must be at least 18 years of age by the time clinical experience starts. Students must have current immunizations or laboratory verification of immune status. This could include, but is not limited to, Measles/Mumps/Rubella, Hepatitis B series and titer, Tetanus/Diphtheria, Current Flu, Tuberculosis Test, and Varicella, as required by contracts with clinical facilities and CDC recommendations.
Students must have current American Heart Association CPR for the Healthcare Professional certification. Proof of immunizations should be submitted the first day of class, unless arrangements have been made with the instructor.

## PROGRAM COURSE LIST

| CAH 105 ${ }^{\text {CL }}$ | Computer Applications .................................................................................... |
| :---: | :---: |
| ENGL\& 101 | English Composition (or higher) or CMST\& 220 Public Speaking ................. 5 |
| MAT 108 | Math for Health Occupations or Alternative ................................................ 5 |
| PSYC \& $100{ }^{\text {DIV }}$ | General Psychology (or higher, but not PSY 112) or <br> SOC\& 101 Introduction to Sociology. $\qquad$ |
| CAH 102 |  |
| COLL 102 | College Success for All................................................................... 3 |
| PT 121 | Introduction to Pharmacy \& Pharmacy Law.................................................. 5 |
| PT 123 | Pharmacology with Drug Names, Part I....................................................... 6 |
| PT 125 | Community Pharmacy with Dosage Calculations ........................................... 6 |
| PT 127 |  |
| PT 132 | Pharmacology with Drug Names, Part II................................................... 6 |
| PT 135 | Hospital Practice with Sterile Processing ....................................................... 6 |
| PT 148 | Clinical Capstone Research ....................................................................... 4 |
| PT 154 |  |
| PT $163^{\text {CAP }}$ | Community Pharmacy Clinical Capstone................................................ 7 |
| PT 165 | Institutional Clinical Capstone...............................................................$^{*}$ |

## PROFESSIONAL PILOT

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

## ASSOCIATE IN APPLIED SCIENCE - T DEGREE

A professional pilot possesses a commercial pilot certificate issued by the Federal Aviation Administration (FAA).
Students graduating from this course usually begin their careers as flight instructors. After working as a flight instructor for one or two years, most progress into charter flight, corporate flying, and commuter or major commercial airlines.

## Student Learning Outcomes:

Upon successful completion of the Professional Pilot degree, students will:

- Conduct appropriate preflight preparation that assesses current and forecast weather, predicted aircraft performance, loading and navigational requirements.
- Demonstrate the ability to plan cross country flights in the national airspace system.
- Demonstrate knowledge of aircraft systems and instruments.
- Effectively communicate and comply with air traffic control.
- Demonstrate proficiency in normal, short, and soft field take-offs and landings.
- Perform minimum controllable airspeed and stall maneuvers.
- Demonstrate selected ground reference maneuvers.
- Demonstrate knowledge and proficiency in emergency procedures and operations.
- Control the aircraft solely by reference to aircraft flight and navigational instruments.


## (CONTINUED FROM PREVIOUS PAGE)

- Conduct instrument approaches.
- Perform and demonstrate proficiency in high-performance commercial pilot maneuvers.
- Pass appropriate FAA practical test required for pilot certification on the first attempt.
In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science - T (AAS-T). The different requirements for each degree are listed below.


## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- Any 100 level math class
- PSYC\& $100^{\text {DIV }}$ General Psychology (PSY $112^{\text {DIV }}$, SOC\& $101^{\text {DIV }}$, or other humanities course that meets the diversity requirement)
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements (23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142, MATH\& 146 or MATH\& 151
- 5 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ or SOC\& $101^{\text {DIV }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100 , ASL\& 121, ASL\& 122, BIOL\& 160, BIOL\& 175 , BIOL\& 241, BIOL\& 242, BIOL\& 260, CHEM\& 110, CHEM\& 121 , CHEM\& 131, GEOL\& 110, HIST\& 146, HIST\& 147, HIST\& 148, HUM\& 101, MUSC \& 105, PHYS\& 114, POLS\& 202, PSYC\& 100, PSYC\& 200, PSYC\& 220, SOC\& 101
- 3 credits in College Success: COLL 102

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
*PROFESSIONAL PILOT AIRCRAFT RENTAL RATES

| PLANE | RATE | *FUEL COST PER <br> GALLON | FUEL <br> CONSUMPTION <br> RATE | HOURLY RATE <br> WITH FUEL |
| :--- | :---: | :---: | :---: | :---: |
| NON-COMPLEX <br> AIRCRAFT | $\$ 83.39$ | $\$ 4.29$ | 9 GPH | $\$ 122.00$ |
| COMPLEX <br> AIRCRAFT | $\$ 129.44$ | $\$ 4.29$ | 14 GPH | $\$ 189.50$ |

*Aircraft costs vary with the current fuel market price.
PROFESSIONAL PILOT FLIGHT FEES
*Commercial Pilot Certificate

|  | FIIGHt hours | HOURLY RATE WITH FUEL | total |
| :---: | :---: | :---: | :---: |
| AIRCRAFT RENTAL | 102 minimum flight hours | \$122.00 | \$12,444.00 |
|  | 18 minimum flight hours | \$189.50 | \$3,411.00 |
| PRE AND POST BRIEFINGS | 120 hours | \$12.00 | \$1,440.00 |
| DUAL INSTRUCTION | 55 hours | \$45.00 | \$2,475.00 |
| TOTAL FLIGHT FEE COSTS |  | \$19,770.00 |  |

*Aircraft costs vary with the current fuel market price.

## *Instrument Pilot Certificate

|  | FLIGHt Hours | hourty rate WITH FUEL | total |
| :---: | :---: | :---: | :---: |
| Aircraft rental | 60 minimum hours | \$122.00 | \$7,320.00 |
| PRE AND POST BRIEFINGS | 60 hours | \$12.00 | \$720.00 |
| dUAL InStruction | 60 hours | \$45.00 | \$2,700.00 |
| TOTAL FLIGHT FEE COSTS |  | \$10,740.00 |  |

*Aircraft costs vary with the current fuel market price.
${ }^{*}$ Private Pilot Certificate

|  | FLIGHt Hours | hourty rate WITH FUEL | total |
| :---: | :---: | :---: | :---: |
| Aircraft rental | 60 minimum hours | \$122.00 | \$7,320.00 |
| PRE AND POST BRIEFINGS | 60 hours | \$12.00 | \$720.00 |
| DUAL INSTRUCTION | 47 hours | \$45.00 | \$2,115.00 |
| TOTAL FLIGHT FEE COSTS |  | \$10,155.00 |  |

*Aircraft costs vary with the current fuel market price.

## Other Exams

| FAA Knowledge Test - 3 @ \$150.00 each <br> Check for current cost with instructor. | $\$ 450.00$ |
| :--- | :---: |
| FAA Medical exam <br> Check with FAA examiner for current cost. | $\$ 150.00$ |
| FAA medical and examiner fee paid to provider. | $\$ 1,500.00$ |
| FAA Check Ride - 3 @ Examiner Fee <br> (approximately $\$ 500.00$ each) | $\$ 600.00$ |
| FAA Check Ride -3 @ Aircraft Rental Fee <br> (approximately $\$ 200.00$ each) |  |

Employability Requirements: To be employed as a professional pilot, at the minimum, one must possess a commercial pilot certificate. This certificate is obtained by passing a Federal Aviation Administration written test and flight test and obtaining a Federal Aviation Administration medical certificate.

Program Length: This certificate program is approximately eight quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters
Prerequisite(s): A mandatory orientation is required prior to admission to the program. Must be at least $161 / 2$ years of age. Must comply with FAA licensing standards, and must obtain a second-class FAA medical examination prior to the first day of class. Please contact instructor for details.
The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training. Contact instructor for details.

## PROGRAM COURSE LIST

AVP 105
AVP 110
AVP 115
AVP 125
AVP 130
AVP $135^{\text {CAP }}$

Private Pilot I..
Private Pilot II.
.. .4
................................................................................................... 4
Private Pilot IV ................................................................................................................ 4
Private Pilot V................................................................................................................ 4
Private Pilot VI.............................................................................................................. 4

## (CONTINUED FROM PREVIOUS PAGE)

AVP 140 Instrument Pilot I. .....  .4
AVP 145 Instrument Pilot II. .....  .4
AVP 150 Instrument Pilot III. .4
AVP 155 Instrument Pilot IV. .....  4
AVP 160 Instrument Pilot V. ..... $\ldots . .4$
AVP 170 ${ }^{\text {CAP }}$ Instrument Pilot VI. .....  4
AVP 175 Commercial Pilot I .4
AVP 180 Commercial Pilot II ..... $\ldots . .4$
AVP 185 Commercial Pilot III. .....  4
AVP 210 Commercial Pilot IV .....  .4
AVP 215 Commercial Pilot V. .4
AVP 220 Commercial Pilot VI .....  4
AVP 230 Commercial Pilot VI .4
AVP 235 Commercial Pilot VIII .....  4AVP 240
Commercial Pilot X ..... 4AVP 245
AVP 250 Comm 4
AVP 255 ${ }^{\text {CAP }}$ Commercial Pilot XII .....  .4
TECHNICAL COURSE REQUIREMENTS ..... 96
AAT REQUIREMENTS
Technical Course Requirements ..... 96
AAT General Education Requirements (See list above) ..... 18
Computer Literacy Requirement (Complete an approved computer literacy course or successfully pass the computer literacy exam). .....  3
TOTAL CREDITS FOR AAT COMPLETION ..... 117
AAS-T REQUIREMENTS
Technical Course Requirements ..... 96
AAS-T Degree General Education Requirements (See list above) ..... 23
Computer Literacy Requirement (Complete an approved computer literacy course or successfully pass the computer literacy exam). ..... 3
TOTAL CREDITS FOR AAS-T COMPLETION ..... 122
Note: Students complete the Professional Pilot Program requirements atdifferent rates due to their own skills and abilities, availability of planes andweather conditions that can alter scheduled fying times. Thus, the number ofquarters needed to satisfactorily complete all graduation requirements mayexceed those listed above. Students must meet FAA flight time requirementsprior to graduation.
Optional Training
AVP 190 Crew Resource Management I... ..... $\ldots . .3$
AVP $195 \quad$ Crew Resource Management II.$\ldots .3$
AVP 218 Multi-Engine Instructor Certification MEI. .....  3
AVP $260 \quad$ Certified Flight Instructor I. .4
AVP $265 \quad$ Certified Flight Instructor II. .....  4
AVP $268 \quad$ Instrument Flight Instructor. .....  .4
AVP 271 Multi-Engine Certification .....  .3
Optional Elective Courses
AVP 118 Private Pilot Practical Test Standards .....  4
AVP 138 Private Pilot Practical Test Standards II. .....  4
AVP 152 Instrument Pilot Practical Test Standards III .....  .4
AVP 172 Instrument Pilot Practical Test Standards IV. .....  4
AVP 223 Commercial Pilot Practical Test Standards V. .....  4
AVP 257 Commercial Pilot Practical Test Standards VI. .....  4

## PROFESSIONAL PILOT PRIVATE PILOT

## CERTIFICATE

Private pilots are able to fly with passengers aboard an aircraft and have no limitations on where they can fly.

This is the first FAA certificate students obtain if they eventually want to
upgrade to higher certificates and ratings. Content includes basic maneuvering flight, takeoffs, landings, and cross-country flying. Ground training includes in-depth training on meteorology, aerodynamics, national airspace structure and navigation, and aircraft systems.
*PROFESSIONAL PILOT AIRCRAFT RENTAL RATES

| PLANE | RATE | *fUEL COST PER <br> GALION | FUUL <br> COOSUMPTION <br> RATE | HORLL RATE <br> WITH FUEL |
| :--- | :---: | :---: | :---: | :---: |
| NON-COMPLEX <br> AIRCRAFT | $\$ 83.39$ | $\$ 4.29$ | 9 GPH | $\$ 122.00$ |
| COMPLEX <br> AIRCRAFT | $\$ 129.44$ | $\$ 4.29$ | 14 GPH | $\$ 189.50$ |

*Aircraft costs vary with the current fuel market price.

## **Private Pilot Certificate

|  | FLIGHt hours | HOURLY RATE <br> WITH FUEL | Total |
| :--- | :---: | :---: | :---: |
| AIRCRAFT RENTAL | 60 minimum <br> hours | $\$ 122.00$ | $\$ 7,320.00$ |
| Pre and post <br> BRIEFINGS | 60 hours | $\$ 12.00$ | $\$ 720.00$ |
| dUAL instruction | 47 hours | $\$ 45.00$ | $\$ 2,115.00$ |
| TOTAL FLIGHT FEE COSTS |  | $\$ 10,155.00$ |  |

*Aircraft costs vary with the current fuel market price.

## Other Exams

\(\left.\begin{array}{|l|c|}\hline FAA Knowledge Test - 1 @ \$ 150.00 each \& \$ 150.00 <br>

\hline Check for current cost with instructor.\end{array}\right]\)| FAA Medical exam |
| :--- |
| Check with FAA examiner for current cost. <br> FAA medical and examiner fee paid to provider. |
| FAA Check Ride -1 @ Examiner Fee <br> (approximately $\$ 500.00$ each) |
| FAA Check Ride -1 @ Aircraft Rental Fee <br> (approximately $\$ 200.00$ each) |

Employability Requirements: To be employed as a professional pilot, at the minimum, one must possess a commercial pilot certificate. This certificate is obtained by passing a Federal Aviation Administration written test and flight test and obtaining a Federal Aviation Administration medical certificate.
Program Length: This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Must be at least $161 / 2$ years of age. Must comply with FAA licensing standards and obtain a second-class FAA medical certificate with student pilot certificate prior to the first day of class.
Please contact instructor for details. The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training. Contact instructor for details.
A mandatory orientation is required prior to admission to the program.
FAA minimum flight and ground hours required for certification.
Please note that many students need additional training hours to master the required competencies.

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60 hours total flight time. 47 hours dual and 13 hours solo. Ground instruction-60 hours. Pre- and post-flight briefings-6o hours.
Industry average flight time for Private Pilot certification is 60-75 hours.

## PROGRAM COURSE LIST



## Optional Elective Courses

## AVP 118 Private Pilot Practical Test Standards I.................................................................... 4

AVP 138 Private Pilot Practical Test Standards II.. ................................................................. 4
Note: Students often complete their program requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.

## PROFESSIONAL PILOT

## COMMERCIAL PILOT

## CERTIFICATE

The Commercial Pilot Certificate allows the holder to fly for hire in a variety of pilot positions. Content of the course includes advanced aircraft performance maneuvers and cross-country flight. Students receive advanced training in aircraft systems, meteorology, and aircraft performance.
Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), and social sciences (psychology, sociology) that enhance personal development and provide knowledge and abilities upon which technical skills are built.

## PROFESSIONAL PILOT AIRCRAFT RENTAL RATES

| PLANE | RATE | *FUEL COST PER <br> GALION | FUEL <br> CONSUETION <br> RATE | HOURYY RATE <br> WITH FUEL |
| :--- | :---: | :---: | :---: | :---: |
| NON-COMPLEX <br> ARCRAFT | $\$ 83.39$ | $\$ 4.29$ | 9 GPH | $\$ 122.00$ |
| COMPLEX <br> AIRCRAFT | $\$ 129.44$ | $\$ 4.29$ | 14 GPH | $\$ 189.50$ |

*Aircraft costs vary with the current fuel market price
PROFESSIONAL PILOT FLIGHT FEES
*Commercial Pilot Certificate

|  | FLIGHT HOURS | HOURLY RATE <br> WITH FUEL | TOTAL |
| :--- | :---: | :---: | :---: |
| AIRCRAFT RENTAL | 102 minimum <br> hours | $\$ 122.00$ | $\$ 12,444.00$ |
|  | 18 minimum <br> hours | $\$ 189.50$ | $\$ 3,411.00$ |
| PRE AND POST <br> BRIEINGS | 120 hours | $\$ 12.00$ | $\$ 1,440.00$ |
| DUAL INSTRUCTION | 55 hours | $\$ 45.00$ | $\$ 2,475.00$ |
| TOTAL FLIGHT FEE COSTS |  |  |  |

[^1]Other Exams

| FAA Knowledge Test - 1 @ $\$ 150.00$ each <br> Check for current cost with instructor. | $\$ 150.00$ |
| :--- | :---: |
| FAA Medical exam <br> Check with FAA examiner for current cost. <br> FAA medical and examiner fee paid to provider. | $\$ 150.00$ |
| FAA Check Ride -1 @ Examiner Fee <br> (approximately $\$ 500.00$ each) | $\$ 500.00$ |
| FAA Check Ride -1 @ Aircraft Rental Fee <br> (approximately $\$ 200.00$ each) | $\$ 200.00$ |

Employability Requirements: To be employed as a professional pilot, at the minimum, one must possess a commercial pilot certificate. This certificate is obtained by passing a Federal Aviation Administration written test and flight test and obtaining a Federal Aviation Administration medical certificate.

Program Length: This certificate program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): A mandatory orientation is required prior to admission to the program.
Must be at least 17 years of age. Must comply with FAA licensing standards and possess an FAA private pilot certificate and FAA instrument rating. Second-class FAA medical certificate required prior to the first day of class. Please contact instructor for details.
The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training. Contact instructor for details.
FAA minimum flight and ground hours required for certification.
Prerequisite is a Private Pilot Certificate and Instrument Rating. Minimum course requirements consist of an additional 120 hours of flight time consisting of 65 hours solo time and 55 hours of dual instruction. Required ground training is 60 hours and pre- and post-flight briefings-120 hours.
Please note that many students need additional training hours to master the required competencies.

## PROGRAM COURSE LIST

AVP 175 Commercial Pilot I............................................................................................................ 4
AVP 180 Commercial Pilot II.................................................................................................... 4
AVP 185 Commercial Pilot III...................................................................................................... 4
AVP 210 Commercial Pilot IV ..................................................................................................... 4

AVP 220 Commercial Pilot VI .................................................................................................... 4
AVP 230 Commercial Pilot VII.................................................................................................. 4
AVP 235 Commercial Pilot VIII................................................................................................ 4
AVP 240 Commercial Pilot IX................................................................................................... 4
AVP 245 Commercial Pilot X..................................................................................................... 4
AVP 250 Commercial Pilot XI.................................................................................................... 4
AVP 255CAP Commercial Pilot XII .................................................................................................. 4
English Composition (or higher) or Public Speaking ................................................................................ 5
Any 100-Level Math Class........................................................................................................................... 5
General Psychology (or other social science or humanities class) ......................................................... 5
COLL 102 College Success for All .............................................................................................. 3

TOTAL CREDITS FOR COMPLETION

## Optional Elective Courses

AVP 223 Commercial Pilot Practical Test Standards V.......................................................... 4
AVP 257 Commercial Pilot Practical Test Standards VI....................................................... 4

Note: Students often complete their program requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.

## PROFESSIONAL PILOT INSTRUMENT PILOT

## CERTIFICATE

The Instrument Rating is added to either a private or commercial pilot certificate. It allows the holder to fly in clouds and weather, navigating and controlling the aircraft exclusively by reference to the aircraft flight instruments.

Content includes basic attitude instrument flying, advanced radio navigation, instrument approaches, and cross-country flight.

## *PROFESSIONAL PILOT AIRCRAFT RENTAL RATES

| PLANE | RATE | *FUEL COST PER <br> GALION | FUEL <br> CONSUMTION <br> RATE | HOURYY RATE <br> WITH FUEL |
| :--- | :---: | :---: | :---: | :---: |
| NIN-COMPLEX <br> ARCRAFT | $\$ 83.39$ | $\$ 4.29$ | 9 GPH | $\$ 122.00$ |
| COMPLLX <br> AIRCRAFT | $\$ 129.44$ | $\$ 4.29$ | 14 GPH | $\$ 189.50$ |

*Aircraft costs vary with the current fuel market price.
*Instrument Pilot Certificate

|  | FLIGHt Hours | HOURLY RATE WITH FUEL | total |
| :---: | :---: | :---: | :---: |
| Alrcraft rental | 60 minimum hours | \$122.00 | \$7,320.00 |
| PRE AND POST BRIEFINGS | 60 hours | \$12.00 | \$720.00 |
| dUAL Instruction | 60 hours | \$45.00 | \$2,700.00 |
| TOTAL FLIGHT FEE COSTS |  | \$10,740.00 |  |

*Aircraft costs vary with the current fuel market price.

## Other Exams

\(\left.\begin{array}{|l|c|}\hline FAA Knowledge Test - 1 @ \$150.00 each \& \$ 150.00 <br>

Check for current cost with instructor.\end{array}\right]\)| FAA Medical exam |
| :--- |
| Check with FAA examiner for current cost. <br> FAA medical and examiner fee paid to provider. |
| FAA Check Ride -1 @ Examiner Fee <br> (approximately $\$ 500.00$ each) |
| FAA Check Ride -1 @ Aircraft Rental Fee <br> (approximately $\$ 200.00$ each) |

Employability Requirements: To be employed as a professional pilot, at the minimum, one must possess a commercial pilot certificate. This certificate is obtained by passing a Federal Aviation Administration written test and flight test and obtaining a Federal Aviation Administration medical certificate.
Program Length: This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): A mandatory orientation is required prior to admission to the program.
Must be at least 17 years of age. Must comply with FAA licensing standards and possess an FAA private pilot certificate or FAA
commercial certificate. Second-class FAA medical certificate required prior to the first day of class. Please contact instructor for details.
The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training. Contact instructor for details.
FAA minimum flight and ground hours required for certification.
Instrument Pilot: 60 hours total flight time, all of which is dual instruction. Ground training required is 60 hours. Pre- and post-flight briefings time -60 hours.
Please note that many students need additional training hours to master the required competencies.

## PROGRAM COURSE LIST

AVP 140 Instrument Pilot I .... 4

AVP 150 Instrument Pilot III........................................................................................................ 4
AVP 155 Instrument Pilot IV....................................................................................................... 4
AVP 160 Instrument Pilot V.......................................................................................................... 4

COLL 102 College Success for All............................................................................................... 3

TOTAL CREDITS FOR COMPLETION

## Optional Elective Courses

AVP 152 Instrument Pilot Practical Test Standards III ............................................................. 4
AVP 172 Instrument Pilot Practical Test Standards IV............................................................. 4
Note: Students often complete their program requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.

## PROFESSIONAL PILOT

## FLIGHT INSTRUCTOR

## CERTIFICATE

The flight instructor certificate allows a commercial and instrumentrated pilot to train flight students in acquiring their private and commercial pilot certificates. The instrument flight instructor rating allows the holder to train students working toward their instrument rating. Flight instructors can also teach aviation ground schools.
Employability Requirements: To be employed as a professional pilot, at the minimum, one must possess a commercial pilot certificate. This certificate is obtained by passing a Federal Aviation Administration written test and flight test and obtaining a Federal Aviation Administration medical certificate.

Program Length: This certificate program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): A mandatory orientation is required prior to admission to the program.
Must be at least 18 years of age. Must comply with FAA licensing standards and possess an FAA Commercial certificate with Instrument Rating. Second-class FAA medical certificate required prior to first day of class. Please contact instructor for details.
The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training. Contact instructor for details.

## PROGRAM COURSE LIST

| AVP 260 | Certified Flight Instructor I.. |
| :---: | :---: |
| AVP 265 | Certified Flight Instructor II. |
| AVP 268 | Certified Instrument Flight I |

$\qquad$
TOTAL CREDITS FOR COMPLETION
Note: Students often complete their program requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.

## PROFESSIONAL PILOT MULTI-ENGINE TRAINING

## CERTIFICATE

The multi-engine training allows the holder to update their knowledge and skills to meet Federal Aviation Administration multi-engine requirements.
The multi-engine training provides students with the principles of multi-engine flight and multi-engine instrument flight, including the operation, use, and limitations of the flight instruments and instrument navigation systems with a glass cockpit. Students will also learn how to deal with engine-out and the changes in aerodynamics. Multi-engine operations, systems, performance, instruments, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision-making, and instrument flight, will be studied.
Program Length: This certificate program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Must be at least 18 years of age, comply with FAA licensing standards and possess an FAA private pilot certificate and instrument rating. Second-class FAA medical certificate required prior to the first day of class. The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training. Contact instructor for details.

## PROGRAM COURSE LIST

AVP 271 Multi-Engine Certification ......................................................................................... 3
TOTAL CREDITS FOR COMPLETION ............................................................................ 3 .3

Note: Students often complete their program or course requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.

## PROFESSIONAL PILOT

## AIRLINE MULTI-ENGINE

 CREW RESOURCE MANAGEMENT 1 (CRM 1)
## CERTIFICATE

The multi-engine training allows the holder to update their knowledge and skills to meet Federal Aviation Administration multi-engine requirements.

The multi-engine training provides students with the principles of multi-engine flight and multi-engine instrument flight, including the operation, use, and limitations of the flight instruments and instrument navigation systems with a glass cockpit. Students will also learn how to deal with engine-out and the changes in aerodynamics. Multi-engine operations, systems, performance, instruments, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision-making, and instrument flight, will be studied.
Program Length: This certificate program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Must be at least 18 years of age, comply with FAA licensing standards and possess an FAA private pilot certificate and instrument rating. Second-class FAA medical certificate required prior to the first day of class. The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training. Contact instructor for details.

## PROGRAM COURSE LIST

AVP 190 Airline Multi-Engine CRM (Crew Resource Management) 1...................... 3
TOTAL CREDITS FOR COMPLETION
Note: Students often complete their program or course requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.

## PROFESSIONAL PILOT

## AIRLINE MULTI-ENGINE CREW RESOURCE MANAGEMENT 2 (CRM 2)

## CERTIFICATE

The multi-engine training allows the holder to update their knowledge and skills to meet Federal Aviation Administration multi-engine requirements.
The multi-engine training provides students with the principles of multi-engine flight and multi-engine instrument flight, including the operation, use, and limitations of the flight instruments and instrument navigation systems with a glass cockpit. Students will also learn how to deal with engine-out and the changes in aerodynamics. Multi-engine operations, systems, performance, instruments, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision-making, and instrument flight, will be studied.
Program Length: This certificate program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Must be at least 18 years of age, comply with FAA licensing standards and possess an FAA private pilot certificate and instrument rating. Second-class FAA medical certificate required prior to the first day of class. The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth

## (CONTINUED FROM PREVIOUS PAGE)

certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training. Contact instructor for details.

## PROGRAM COURSE LIST

| AVP 195 | Airline Multi-Engine CRM (Crew Resource Management) 2.......................... 3 |
| :--- | :--- |
| TOTAL CREDITS FOR COMPLETION .................................................................... 3 |  |

Note: Students often complete their program or course requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.

## PROFESSIONAL PILOT MULTI-ENGINE INSTRUCTOR TRAINING (MEI)

The multi-engine instructor training allows the holder to update their knowledge and skills to meet Federal Aviation Administration multiengine requirements.
The multi-engine instructor training provides students with the principles of multi-engine flight and multi-engine instrument flight, including the operation, use, and limitations of the flight instruments and instrument navigation systems with a glass cockpit. Students will also learn how to deal with engine-out and the changes in aerodynamics. Multi-engine operations, systems, performance, instruments, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision-making, and instrument flight, will be studied.
Program Length: This certificate program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): Must be at least 18 years of age, comply with FAA licensing standards and possess an FAA private pilot certificate and instrument rating. Second-class FAA medical certificate required prior to the first day of class. The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training. Contact instructor for details.

## PROGRAM COURSE LIST

AVP 218 Multi-Engine Instructor Certification MEI............................................................... 3
TOTAL CREDITS FOR COMPLETION

## RETAIL BUSINESS MANAGEMENT <br> ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

The AAT Retail Business Management degree prepares students for careers in marketing, sales, retailing, customer service, entrepreneurship, and general business applications. Students develop both the technical and human relations skills necessary to succeed in today's competitive work environment. Current business procedures and computer applications, including online retail services, are covered.
The program combines business theory with practical applications that include the proper use of technology in today's workplace, ensuring students are making appropriate decisions in business settings. Students are introduced to e-commerce concepts and applications and learn how to use social media to invite potential customers to interact with their company.

This program has a built-in certificate component approved by the Western Association of Food Chains. This certificate prepares individuals to manage a variety of retail sales or lines of merchandise operations. The program serves both entry-level job candidates and incumbent employees. This certificate, endorsed by the Western Association of Food Chains (WAFC), provides grocery employees in Washington access to a consistent curriculum and also meets the needs of other segments of the retail industry.

## Student Learning Outcomes:

Upon successful completion of the Retail Business Management degree, students will:

- Identify multiple types of business communications and explain when and why each is used.
- Develop a general understanding of retail management as it relates to the sales and marketing of services/products and apply these concepts to real-world situations.
- Develop a professional presentation technique.
- Discuss the importance of a supervisor's role in management and delegation and how ethics plays a role.
- Demonstrate an understanding of corporate culture and the responsibilities of the supervisor, including the hiring and firing process.
- Demonstrate an understanding of how various forces within business influence marketing decisions and how these trends affect current and future marketing practices.
- Discuss real-world examples of successful and unsuccessful electronic commerce companies, their accomplishments, their struggles, and their business practices.
- Explain how to establish and maintain trust with customers.
- Implement tactics to execute, monitor, and tune social media marketing campaigns for success.
- Demonstrate the ability on how to listen to the social web to identify marketing opportunities and potential target audiences.
Important Note: Students may take the following courses in order to complete the Retail Management Certificate prior to taking the Accuplacer assessment or equivalent for general education placement.


## PROGRAM COURSE LIST

RBM 105* Fundamentals of Organizational Behavior ...................................................................... 3
RBM 107 Marketing................................................................................................................... 3
RBM 109* Principles of Retailing ................................................................................................. 3
RBM 111 Essentials of Business Communication ................................................................... 3
RBM $113^{\text {CL }}$ Business Technology for Retail Applications.......................................................... 3
RBM 115 Human Resource Management........................................................................................ 3

RBM 119 Financial Management............................................................................................. 3
*Articulated courses with high schools for dual enrollment.
Included in this program are academic courses in communication (English Composition, Speech), Quantitative Reasoning (Math), and Social Sciences (Psychology, Sociology) that provide knowledge and abilities upon which technical skills are built and personal development is enhanced.
This degree has been designed to meet the educational needs of working adults. It is 100 percent web-based instruction with face-to-face interaction when requested by students.
Program Length: This program is approximately five-to-six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): None.

## (CONTINUED FROM PREVIOUS PAGE)

## PROGRAM COURSE LIST

RBM 105* Fundamentals of Organizational Behavior ...................................................... 3
RBM 107 Marketing.......................................................................................................... 3

RBM 111 Essentials of Business Communication............................................................... 3
RBM $113^{\text {CL }}$ Business Technology for Retail Applications................................................ 3
RBM 115 Human Resource Management..................................................................................
RBM 117 Principles of Management........................................................................... 3
RBM 119 Financial Management.............................................................................. 3
RBM 123 Customer Service......................................................................................... 5
RBM 129 Speaking for Success..................................................................................... 5
RBM 133 Effective Selling ......................................................................................... 5
RBM 159 E-Commerce Principles \& Applications.............................................................. 4
RBM 162 Social Media Marketing................................................................................. 5
RBM 164 Marketing Communications........................................................................ 5
RBM 166 CAP Successful Career Development........................................................................ 5
RBM 168 Consumer Behavior.................................................................................... 5
RBM 201 Introduction to Business Etiquette ...................................................................... 5
CAS 105 Keyboarding....................................................................................................... 3
BUS\& 201 Business Law.......................................................................................... 5
Any 100-Level Math Class.......................................................................................................... 5

General Psychology (or other social science or humanities class) .............................................. 5

TOTAL CREDITS FOR AAT COMPLETION.
.. 94
*Articulated courses with high schools for dual enrollment.

## RETAIL BUSINESS MANAGEMENT

## CERTIFICATE

This certificate, endorsed by the Western Association of Food Chains (WAFC), provides grocery employees access to a consistent curriculum and also meets the needs of other segments of the retail industry.
The program serves both entry-level job candidates and incumbent employees.
Program Length: The program is approximately three-to-six quarters long, depending on full- or part-time attendance and the time students need to satisfactorily complete all graduation requirements.
Admission Dates: Summer, fall, winter, and spring quarters.
Prerequisite(s): None.
Important Note: Taking the Accuplacer assessment or equivalent is not required for this certificate.

## PROGRAM COURSE LIST

RBM 105* Fundamentals of Organizational Behavior ............................................................. 3


RBM 111 Essentials of Business Communication............................................................ 3
RBM $113^{C L}$ Business Technology for Retail Applications.................................................... 3
RBM 115 Human Resource Management..................................................................................
RBM 117 Principles of Management.............................................................................. 3
RBM 119 Financial Management.................................................................................. 3
TOTAL CREDITS FOR COMPLETION
*Articulated courses with high schools for dual enrollment.
Optional Electives
CAS 105 Keyboarding............................................................................................ 3
RBM 123 Customer Service....................................................................................... 5
RBM 129 Speaking for Success........................................................................................ 5

RBM 159 E-Commerce Principles \& Applications........................................................ 4

RBM 164 Marketing Communications................................................................................. 5
RBM 166CAP Successful Career Development........................................................................ 5
RBM 168 Consumer Behavior................................................................................ 5
RBM 201 Introduction to Business Etiquette ................................................................. 5

## SURGICAL TECHNOLOGY

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

Prepares students to work as part of a team of surgeons and registered nurses in the operating room. Successful graduates of this program are educated in surgical technology under the guidelines of the Association of Surgical Technologists.
The structured curriculum includes basic sciences, patient care, surgical procedures, and human anatomy combined with clinical rotations in area health care facilities. Classroom instruction, labs, and clinical internships prepare students to assume the role of a perioperative team member in a variety of health care delivery settings. Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.
Students are required to carry personal health/medical insurance throughout their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office.
No student will be allowed at a clinical site without proof of insurance.

## Student Learning Outcomes:

Upon successful completion of the Surgical Technology degree, students will:

- Correlate the knowledge of anatomy, physiology, pathophysiology, and microbiology to their role as a surgical technologist.
- Demonstrate a safe level of practice and knowledge in their role as a surgical technologist.
- Acquire an understanding of the ethical, legal, moral, and medical values related to the patient and the operating room team during the perioperative experience.
- Correlate the elements, action, and use of medications and anesthetic agents used during the perioperative experience.
- Demonstrate safe practice techniques in regards to perioperative routines, patient transportation, positioning, and emergency procedures.
- Demonstrate and integrate principles of surgical asepsis as part of the perioperative experience.
- Apply knowledge and skills as a professional surgical technologist to address the biopsychosocial needs of the surgical patient.
- Perform as a competent entry-level surgical technologist in the cognitive, psychomotor, and effective learning domains.
- Value the professional attributes of the surgical technologist. Program Accreditation: The Commission on Accreditation of Allied Health Education Programs (www.caahep.org) has granted accreditation to the Surgical Technology program upon the recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA).
Commission on Accreditation of Allied Health Education Programs 1361 Park Street, Clearwater, FL 33756
727-210-2350 www.caahep.org
Physical Activity Requirements: Students cannot require use of assistive devices. This occupation requires the ability to stand, sit, and walk for extended periods of time and the ability to lift and hold 50 lbs . Students must be able to meet these physical requirements in order to complete lab requirements, be assigned to a clinical rotation and get a job in this field.
Employability Requirements: Most employers prefer national certification. Seven hours of AIDS education and training as required under WAC 246-939. A comprehensive background check will be conducted to screen for prior convictions prior to state registration.


## (CONTINUED FROM PREVIOUS PAGE)

Persons with some types of criminal convictions may not be eligible for employment.
Program Length: This program is six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## Admission Dates: Fall and spring quarters

Prerequisite(s): Students pursuing the AAT degree must have a high school diploma or high school equivalency diploma, per the governing body for surgical technology, AST. In order to participate in the clinical aspect of the program, students must pass multiple background checks. A non-refundable fee is charged to each student for the background check. Students must have current American Heart Association CPR for the Healthcare Provider certification and immunizations or laboratory verification of immune status. This includes, but is not limited to, Hepatitis B series, Tetanus/Diphtheria, Tuberculosis Test, Measles/ Mumps/Rubella, and Varicella, as required by contracts with clinical facilities and CDC recommendations. Proof of immunizations and CPR should be completed by the first day of class of the third quarter of the SURG courses. No student will be allowed at a clinical site without completion of immunizations. A physical is required for each student prior to clinical rotation. Must be at least 18 years of age by the time clinical experience starts, usually in September and April.
This program requires that the following general education courses be completed prior to beginning the first quarter of SURG courses. These general education courses are BIOL\& 241, CAH 102, COLL 102, ENGL\& 101. Students must maintain a "B" or better in all general education and Core Allied Health courses.
Students must receive a "C" or better in all technical courses to satisfy graduation requirements. Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

## PROGRAM COURSE LIST

BIOL\&241 Human Anatomy \& Physiology I .................................................................... 5
BIOL\& 242 Human Anatomy \& Physiology II ................................................................... 5

CAH 105CL Computer Applications ............................................................................ 5
ENGL\& 101 English Composition I......................................................................................... 5
MAT 108 Math for Health Occupations........................................................................................


SURG 110 Introduction to Surgical Lab ...................................................................... 3
SURG 115 Introduction to Surgical Environment ............................................................. 2
SURG 120 Care of Surgical Patient I ............................................................................. 2


SURG 148 Operating Room Theory I ............................................................................ 5
SURG 150 Surgical Environment ...................................................................................................
SURG 152 Care of the Surgical PatientII ..................................................................... 2
SURG 153 Surgical Lab II .............................................................................................. 5
SURG 154 Operating Room Theory II ................................................................................ 5
SURG 160 Care of the Surgical PatientIII ......................................................................... 2
SURG 201 Operating Room Theory III ................................................................................ 5
SURG 205 Clinical Preparation ................................................................................. 2

SURG 212 Surgical Lab III .......................................................................................................... 5

SURG 220 Clinical Applications II ......................................................................................... 5
SURG 225 Clinical Applications III ............................................................................. 5
SURG 230 Clinical Applications IV ...............................................................................................

SURG 237 Certification and Test Preparation I ............................................................. 2
SURG 240CAP Seminar II ................................................................................................... 3
SURG 242 Certification and Test Preparation II............................................................. 2
TOTAL CREDITS FOR AAT COMPLETION
119

## UPHOLSTERY

## UPHOLSTERY <br> FUNDAMENTALS

## CERTIFICATE

This two-quarter program is designed to provide graduates with a foundation in measuring, cutting, and sewing using industrial sewing machine equipment. Students will also learn how to how to set up an efficient workstation for upholstery work and the basics of sewing machine maintenance. Students will continue to develop basic upholstery skills, speed, and accuracy in the second quarter while working on projects such as furniture pillows and automotive seat covers. This certificate is a prerequisite to the Automotive Upholstery Certificate and Furniture Upholstery Certificate.
Program Length: This program is approximately two quarters long, depending on the time students need to satisfactory complete all graduation requirements. Must have required tools and textbooks.
Admission Dates: Fall and Spring quarters.
Prerequisite(s): None.

## PROGRAM COURSE LIST

UPH 102 Introduction to Upholstery I ....................................................................................... 5

UPH 106 Basic Sewing l.......................................................................................................... 5
UPH 108 Basic Sewing II......................................................................................................... 5
UPH 110 Intermediate Sewing I................................................................................................ 5
UPH 112 Intermediate Sewing II.............................................................................................. 5
UPH 114 Advanced Sewing l................................................................................................... 5

COLL 102 College Success for All............................................................................................ 3

TOTAL CREDITS FOR COMPLETION 43

## UPHOLSTERY

## AUTOMOTIVE UPHOLSTERY

## CERTIFICATE

This three-quarter program builds on the skills learned in the Upholstery Fundamentals Certificate and provides students with lessons and project-based learning specific to the automotive upholstery industry. Students will learn how to remove and re-upholster specific automotive interior elements such as doors and quarter panels, bucket seats, bench seats, headliners, carpets, and convertible tops.

Program Length: This program is approximately three quarters long, depending on the time students need to satisfactory complete all graduation requirements. Must have required tools and textbooks.
Admission Dates: Fall and Spring quarters.
Prerequisite(s): Successful completion of Upholstery Fundamentals
Certificate or instructor's permission.

## PROGRAM COURSE LIST

UPH 118 Doors and Quarter Panels I....................................................................... 4
UPH 120 Doors and Quarter Panels II..................................................................................... 4
UPH 122 Bucket Seats I.......................................................................................... 4
UPH 124 Bucket Seats II....................................................................................................................
UPH 126 Bench Seats I......................................................................................... 4
UPH 128 Bench Seats II........................................................................................ 4
UPH 132 Headliners............................................................................................. 4




## UPHOLSTERY

## FURNITURE UPHOLSTERY

## CERTIFICATE

This three-quarter program builds on the skills learned in the Upholstery Fundamentals Certificate and provides students with lessons and project-based learning specific to the furniture upholstery industry. Students will learn how to remove and re-upholster specific furniture pieces such as Louis chairs, wing back chairs, and sofas. Additionally, students will learn specific techniques used in furniture upholstery such as diamond tufting, tying springs, and design and construction of a headboard.
Program Length: This program is approximately three quarters long, depending on the time students need to satisfactory complete all graduation requirements. Must have required tools and textbooks.
Admission Dates: Fall and Spring quarters.
Prerequisite(s): Successful completion of Upholstery Fundamentals Certificate or instructor's permission.

## PROGRAM COURSE LIST

UPH 145 The Art of Tying Springs. .....  3
UPH 150 Upholstering a Louis Chair I.. .....  4
UPH 155 Upholstering a Louis Chair II . .....  .4
UPH 160 Upholstering a Wing Back Chair I. .....  4
UPH 165 Upholstering a Wing Back Chair II. .....  4
UPH 170 Upholstering a Sofa I. .....  .4
UPH 175 Upholstering a Sofa II .....  .4
UPH 180 Diamond Tufting.... .....  4
UPH 185 Pillow Backs .....  5
UPH 190 Design and Construction of a Headboard. .....  5
COLL 102 College Success for All... .....  3
TOTAL CREDITS FOR COMPLETION ..... 44

## WELDING

## ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

## ASSOCIATE IN APPLIED SCIENCE - T DEGREE

This program is designed to develop the technical knowledge and skills required for employment in welding, metal fabrication, and related occupations. Graduates may qualify for many different opportunities within manufacturing, industrial maintenance, and construction.
Students will develop skills in a variety of welding and metal cutting processes common to industry and are also able to gain practical experience through realistic projects.

## Student Learning Outcomes:

Upon successful completion of the Welding degree, students will:

- Demonstrate the safe and proper setup, startup, usage, shutdown, and maintenance of welding-related shop equipment.
- Demonstrate critical workplace skills, including: teamwork, communication, critical thinking, and problem solving.
- Use inspection techniques and critical thinking to evaluate the quality of: joint design, fit up, and welding to AWS and WABO standards.
- Effectively use shop tools and equipment for layout, fabrication, cutting, and welding projects.
- Safely perform OFW, OFC, PAC, AC-AC, SMAW, GMAW, FCAW, and GTAW to AWS and WABO standards.
- Interpret shop drawings in terms of the identification of lines, views, dimensioning, tolerances, and AWS welding symbols that are commonly found on working drawings.
- Select appropriate base metals, welding processes, and filler metals to meet fabrication project requirements.
- Discuss metallurgical principals as they apply to welding.
- Evaluate potential workplace hazards and apply necessary procedures to maintain a safe work environment.
- Practice professional and ethical work behavior.
- Develop cognitive and physical skills necessary to pass employment and certification testing.
- Prepare for employment by building an effective resume, cover letter, and job search plan.
In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science - T (AAS-T). The different requirements for each degree are listed below.


## AAT Degree General Education Requirements (18 credits):

- ENGL\& 101 English Composition or CMST\& 220 (or higher)
- Any 100 level math class
- PSYC\& $100^{\text {DIV }}$ General Psychology (PSY $112^{\text {DIV }}$, SOC\& $101^{\text {DIV }}$, or other humanities course that meets the diversity requirement)
- COLL 102 College Success for All


## AAS-T Degree General Education Requirements (23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

- 5 credits in communication: ENGL\& 101
- 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142, MATH\& 146 or MATH\& 151
- 5 credits in a social science that meets the diversity requirement: PSYC\& $100^{\text {DIV }}$ or SOC\& $101^{\text {DIV }}$
- 5 credits in social science, humanities, or science; choose one from the following: ART\& 100, ASL\& 121, ASL\& 122, BIOL\& 160, BIOL\& 175 , BIOL\& 241, BIOL\& 242, BIOL\& 260, CHEM\& 110, CHEM\& 121 , CHEM\& 131, GEOL\& 110, HIST\& 146, HIST\& 147, HIST\& 148, HUM\& 101, MUSC\& 105, PHYS\& 114, POLS\& 202, PSYC\& 100 , PSYC\& 200, PSYC\& 220, SOC\& 101
- 3 credits in College Success: COLL 102

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.
Program Length: This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## Admission Dates:

Day/Afternoon/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.
Prerequisite(s): Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

## PROGRAM COURSE LIST

WLD 106 Welding Theory............................................................................................... 5

WLD 112 Oxyacetylene Welding \& Brazing.............................................................. 4
WLD 117 Shielded Metal Arc Welding I............................................................................ 7
WLD 123 Shielded Metal Arc Welding II...................................................................


## (CONTINUED FROM PREVIOUS PAGE)

WLD 144 Print Reading ..... $\ldots .5$
WLD 152 Gas Metal Arc Welding .....  7
WLD 157 Metallurgy .....  .5
WLD 168 Flux Cored Arc Welding .....  7
WLD 210 Gas Tungsten Arc Welding ............................................................................ 7
WLD $217^{\text {CAP }}$ Special Projects 1 .....  $1-5$
Welding Electives (See list below) . ..... 28
TECHNICAL COURSE REQUIREMENTS ..... 91-95
AAT REQUIREMENTS
Technical Course Requirements ..... $.91-95$
AAT General Education Requirements (See list above) ..... 18
Computer Literacy Requirement (Complete an approved computer literacy course or successfully pass the computer literacy exam). .....  3
TOTAL CREDITS FOR AAT COMPLETION ..... 112-116
AAS-T REQUIREMENTS
Technical Course Requirements ..... 91-95
AAS-T Degree General Education Requirements (See list above) ..... 23
Computer Literacy Requirement (Complete an approved computer literacy course or successfully pass the computer literacy exam). .....  3
TOTAL CREDITS ..... 117-121
Welding Electives (Students must take 28 credits)
Students must select four elective courses from the list below
WLD 211 Advanced Gas Tungsten Arc Welding I .....  .7
WLD $214 \quad$ Gas Tungsten Arc Welding II. .....  7
WLD 219 Special Projects II. ..... $1-5$
WLD 223 GTAW Pipe Welding. ..... $\ldots .$.
WLD 225 Shielded Metal Arc Welding Pipe. .....  .7
WLD 227 Advanced Pipe Welding .....
WLD 229 Metal Forming. .....  7
WLD 233CAP Layout \& Fabrication .....  7
WLD 235CAP WABO Test Prep. .....  7
WLD 238

## WELDING

## BASIC WELDING

## CERTIFICATE

This program prepares students for entry-level positions in welding as an apprentice or shop helper. The competency-based curriculum combines classroom instruction with hands-on training to develop foundational knowledge and skill in select welding and cutting processes.
Program Length: This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## Admission Dates:

Day/Afternoon/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.
Prerequisite(s): Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

## PROGRAM COURSE LIST

WLD 110 Thermal Cutting \& Gouging. .....  3
WLD 112 Oxyacetylene Welding \& Brazing .....  .4
WLD 117 Shielded Metal Arc Welding I. .....  .7
WLD 123 Shield Metal Arc Welding II.. .....  7
WLD 152 Gas Metal Arc Welding (GMAW) .....  .7
COLL 102 College Success for Al .....  331

## WELDING <br> SHIELDED METAL ARC WELDING

## CERTIFICATE

Prepares students for employment in positions requiring specialization in Shielded Metal Arc Welding (SMAW). The competency-based curriculum combines classroom instruction with extensive hands-on training to develop the essential knowledge and skills for industry.
Program Length: This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.


## WELDING

## GAS TUNGSTEN ARC WELDING

## CERTIFICATE

Prepares students for employment in positions requiring specialization in Gas Tungsten Arc Welding (GTAW). The competency-based curriculum combines classroom instruction with extensive hands-on training to develop the necessary knowledge and skills for industry.
Program Length: This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## Admission Dates:

Day/Afternoon/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.
Prerequisite(s): Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

## PROGRAM COURSE LIST

WLD 110 Thermal Cutting \& Gouging................................................................................... 3
WLD 112 Oxyacetylene Welding \& Brazing.................................................................. 4
WLD 210 Gas Tungsten Arc Welding............................................................................ 7
WLD 211 Advanced Gas Tungsten Arc Welding I (GTAW) ................................................ 7
WLD 214 Advanced Gas Tungsten Arc Welding II (GTAW)........................................... 7
COLL 102 College Success for All............................................................................. 3
TOTAL CREDITS FOR COMPLETION ...................................................................... 31

WELDING

## GAS TUNGSTEN ARC WELDING (GTAW) PIPE

## CERTIFICATE

Prepares students for employment in positions requiring specialization in Gas Tungsten Arc Welding pipe (GTAW). The competency-based curriculum combines classroom instruction with extensive hands-on training to develop the necessary knowledge and skills for industry.
Program Length: This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## Admission Dates:

Day/Afternoon/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.
Prerequisite(s): Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

## PROGRAM COURSE LIST


WLD 112 Oxyacetylene Welding \& Brazing.............................................................. 4

WLD 211 Advanced Gas Tungsten Arc Welding I (GTAW) ............................................ 7
WID 223 Gas Tungsten Arc Welding Pipe (GTAW)..............................................................
COLL 102 College Success for All...............................................................................
TOTAL CREDITS FOR COMPLETION .. 31

## WELDING

## SHIELDED METAL ARC WELDING PIPE

## CERTIFICATE

Prepares students for employment in positions requiring specialization in Shielded Metal Arc Welding Pipe (SMAW). The competency-based curriculum combines classroom instruction with extensive hands-on training to develop the essential knowledge and skills for industry.
Program Length: This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## Admission Dates:

Day/Afternoon/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.

Prerequisite(s): Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

## PROGRAM COURSE LIST

WLD 110 Thermal Cutting \& Gouging...................................................................... 3
WLD 112 Oxyacetylene Welding \& Brazing................................................................... 4
WLD 117 Shielded Metal Arc Welding I....................................................................................
WLD 123 Shielded Metal Arc Welding II.......................................................................
WLD 225 Shielded Metal Arc Welding Pipe.................................................................... 7
COLL 102 College Success for All.............................................................................. 3

TOTAL CREDITS FOR COMPLETION31

## WIRE FEED WELDING

## CERTIFICATE

Prepares students for employment in positions requiring specialization in Gas Metal Arc Welding (GMAW) and FCAW. The competency-based curriculum combines classroom instruction with extensive hands-on training to develop the essential knowledge and skills for industry.

Program Length: This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

## Admission Dates:

Day/Afternoon/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.
Prerequisite(s): Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

## PROGRAM COURSE LIST

WLD 110 Thermal Cutting \& Gouging.................................................................................. 3
WLD 112 Oxyacetylene Welding \& Brazing................................................................... 4

WLD 152 Gas Metal Arc Welding (GMAW)......................................................................... 7
WLD 168 Flux Cored Arc Welding I (FCAW) ...............................................................
COLL 102 College Success for All.............................................................................. 3
TOTAL CREDITS FOR COMPLETION ....................................................................... 31

## Short-Term Training Programs

Students interested in part-time training may choose from several short-term training programs, courses, and workshops. Courses may be offered in a traditional classroom environment, fully online, or in a hybrid format and may be offered on a credit or non-credit basis. Short-term training courses vary in length from 4 to 40 hours, change quarterly, and often may be applied to various industry requirements for continuing education or professional development.
Some short-term training programs are composed of a course or series of courses mapped to an industry-recognized certification or license. Such courses often use curriculum and materials specified by industry associations to assist students to prepare for proctored certification examinations. Other short-term training programs include training in the skills necessary for specific entry-level job opportunities.
The menu of courses is subject to change as labor market demands change. Courses listed may not be offered every quarter. Consult the quarterly class schedule for short-term options and costs.

BARBERINGI-BARBERNG THEORY CERTIFICCTE. 18 CR (230 HRS)
This short-term training program is designed to provide graduates with a foundation in the history and current state of the barbering industry, applicable state laws and regulations, and standards of professional conduct for barbers. They will also be instructed in the safe use and proper care of tools and equipment as well as the proper handling and disposal of chemicals. Students will learn concepts related to the health and proper care of the scalp and head and facial hair. Successful completion of all three modules in this certificate is a prerequisite to continue in the Barbering program.
Program Length: This short-term program is 230 hours in length. Upon satisfactory completion of the requisite hours and assignments, the student will receive a completion award from Workforce
Development. All hours will be documented as required by Washington State Department of Licensing and will apply toward the 1,000 hours of training required to sit for the state barbering licensing examination. Must have required tools and textbooks.
Admission Dates: Quarterly
Prerequisite(s): None.

## PROGRAM COURSE LIST

ELBAR 105 Overview of Barbering History, Industry \& Tools ............................................ 5
ELBAR 110 Barbering Science \& Health........................................................................... 7
ELBAR 115 Properties, Diseases, Disorders of the Hair, Skin \& Scalp............................... 6

BARBERING II - BARBERING BASICS CERTIFICATE. $\qquad$ .17 CR (350 HRS)
This short-term training program builds on the knowledge of Barbering I - Barbering Theory and introduces students to the hands-on skills of the barbering trade. It provides students with lessons and hands-on exercises in which students will learn the fundamentals of hair cutting for men. Students will also learn to perform facial analysis and shaving techniques. They will practice the proper use of shaving tools and be instructed in safety and infection control.

Program Length: This short-term certificate program is 350 hours in length. Upon completion of the requisite hours, the student will receive a completion award from Workforce Development. All hours will be documented as required by Washington State Department of Licensing and will apply toward the 1,000 hours of training required to sit for the state barbering licensing examination. Must have required tools and textbooks.

Admission Dates: Student may register upon successful completion of Barbering I

Prerequisite(s): Successful completion of Barbering I or instructor's permission.

## PROGRAM COURSE LIST

ELBAR 120 Shaving \& Facial Hair Designs .............................................. 6
ELBAR 125 Hair Cutling ....

BARBERING III - HAIR DESIGN \& STYLING CERTIFICATE .................. 17 CR (510 HRS)
This short-term program builds on the skills learned in Barbering I and Barbering II. Students will practice advanced hair cutting and styling techniques using live models and mannequins. Students will practice skills in beard and mustache trimming, shaving, and hair sculpting.

Program Length: This short-term certificate program is 510 hours in length. Upon completion of the requisite hours, the student will receive a completion award from Workforce Development. All hours will be documented as required by Washington State Department of Licensing and will apply toward the 1,000 hours of training required to sit for the state barbering licensing examination. Must have required tools and textbooks.

## Admission Dates: Student may register upon completion of Barbering II

Prerequisite(s): Successful completion of Barbering I \& II or instructor's permission.

## PROGRAM COURSE LIST

ELBAR 205 Hair Design and Styling ............................................................................... 7
ELBAR 210 Skills Building \& Specialty Services............................................................... 10

BARBERING IV - BUSINESS OPERATIONS CERTIFICATE. $\qquad$ 13 CR (270 HRS)
This short-term program provides review for students preparing to sit for the Washington barber license examination. Additionally, they will explore the process of starting a business and managing business operations (policies, practices, marketing, merchandising, and customer service).
Program Length: This short-term certificate program is 270 hours in length. Upon completion of all modules, the student will receive a completion award. Must have required tools and textbooks.

Admission Dates: Student may register upon completion of Barbering III

Prerequisite(s): Successful completion of Barbering I, II \& III, or instructor's permission.

## PROGRAM COURSE LIST

ELBAR 215 Licensing Test Preparation......................................................................................... 2
ELBAR $220 \quad$ Skills Mastery............................................................................................................... 5
ELBAR 225 Sales \& Merchandising for Barbers ........................................................................ 2
ELBAR 230 Small Business Start-up \& Operations for Barbers................................................. 4

## CONSTRUCTION TECHNOLOGIES CONSTRUCTION TRADES ACADEMY PREAPPRENTICESHIP PROGRAM (C-TAPP) CERTIFICATE

This apprenticeship readiness program prepares students with the knowledge and skills necessary for employment in the construction industry. This one-quarter program covers safety, hand and power tool use, math, carpentry trades, print and plan reading, and employment preparation. C-TAPP includes industry certifications and credentials such as: First Aid/CPR, Forklift Operator, OSHA 10 Construction Safety, and Flagger Certification.
Physical Requirements: Should be able to lift 40 pounds.
Program Length: This program is approximately one quarter long,

## (CONTINUED FROM PREVIOUS PAGE)

depending on the time students need to satisfactorily complete all graduation requirements.

Admission Dates: Fall and spring quarters.
Prerequisite(s): None.

## CPR \& FIRST AID FOR HEALTH CARE PROVVIDERS

This American Heart Association-approved course consists of adult, child, and infant CPR and First Aid and an overview of AED procedures. Class meets OSHA and WISHA requirements. The Healthcare Provider Basic Life Support and the First Aid cards are valid for two years. Recertify with us! You must pay for the class and pass both the written and skills exams to receive your certifications. Students must read, write, and understand the English language well enough to pass a written exam.

## FLAGGER TRAINING

Flaggers direct traffic for road construction crews, set up cones, barrels, barricades, and signs to warn drivers that a construction zone is ahead and to merge traffic into specified lanes. Flaggers are also employed in the construction industry. To receive your flagger certification, you must pay for and complete our eight-hour training course. Certification is valid for three years.

## FORKLIFT OPERATIONS \& SAFETY

Created for those who might be using forklifts on the job - with a strong emphasis on safety. Our course is approved through the Washington State Department of Labor and Industries. Text required. Forklift card presented after payment and successful completion in class.

FUNDAMENTAL SKILLS FOR MANUFACTURING AND ENGINEERING (FSME)........ 18 CR
The Fundamental Skills for Manufacturing and Engineering (FSME) Certificate of Completion is designed to provide students with a foundational set of skills and background knowledge that will equip them for an entry-level position in a manufacturing organization and provide a solid foundation for further technical studies. The FSME certificate is also the first quarter of CPTC's AAS-T Mechatronics program.

## PHLEBOTOMY PROGRAM (PHLEB I20) 4 CR <br> This class is designed to develop basic phlebotomy skills for blood

 collection and safe handling. Students will learn proper technique and order of draw for venipuncture using a variety of collection methods (syringes, vacutainers, and butterfly needle). Students will also learn proper techniques for collecting blood specimens using finger and heel sticks. Students will have lab time to practice their skills on other students in a mock laboratory setting.Please note: This is a five-week intensive program aimed toward health care professionals currently employed in the field. It is composed of lecture and lab times. There is no clinical component to this course

Prerequisites: At least three months of work experience and/or formal training in a health care field. Students must provide documentation of work experience or training in order to enroll in the Continuing Education Phlebotomy Program. Students must obtain written approval to register.

## UPHOLSTERY FUNDAMENTALS CERTIFICATE

This two-quarter program is designed to provide graduates with a foundation in measuring, cutting, and sewing using industrial sewing machine equipment. Students will also learn how to set up an efficient workstation for upholstery work and the basics of sewing machine maintenance. Students will continue to develop basic upholstery skills, speed, and accuracy in the second quarter while working on projects such as furniture pillows and automotive seat covers. This certificate is a prerequisite to the Automotive Upholstery Certificate and Furniture Upholstery Certificate.
Program Length: This program is approximately two quarters long, depending on the time students need to satisfactory complete all graduation requirements. Must have required tools and textbooks.

Admission Dates: Fall and Spring quarters.
Prerequisite(s): None.

## ELECTRICAL TRAINEE/ JOURNEY LEVEL CEU COURSES

## BASIC FIRE ALARM SYSTEMS FOR TRAINEES \& ELECTRICIANS

This course provides eight hours of Continuing Education Units (CEU) as required by the State of Washington.

## BONDING AND GROUNDING CIRCUITS FOR TRAINERS \& ELECTRICIANS

This course provides eight hours of Continuing Education Units (CEU) as required by the State of Washington. This course covers a basic understanding of grounding and bonding of electrical circuits.

## CCTV WIRING METHODS PER THE NEC FOR TRAINEES \& ELECTRICIANS

This course provides eight hours of Continuing Education Units (CEU) as required by the State of Washington. This course covers basic understanding of Approved CCTV wiring methods per the NEC for Trainees \& Journey Level.

ELECTRICIAN-ADMINISTRATOR TEST PREPARATION FOR TRAINEES \& ELECTRICIANS
This course provides eight hours of Continuing Education Units (CEU) as required by the State of Washington. This course prepares students to take the Journey Level or Administrator Test.

NATIONAL ELECTRICAL CODE UPDATE FOR TRAINEES \& ELECTRICIANS
This course provides eight hours of Continuing Education Units (CEU) as required by the State of Washington. This course covers instructions on the latest National Electrical Code Changes

## WASHINGTON RCW-WAC REVIEW FOR TRAINEES \& ELECTRICIANS

This course provides eight hours of Continuing Education Units (CEU) as required by the State of Washington.

## Course Descriptions

## ACCOUNTING

## ACCT\& 201

PRINCIPLES OF ACCOUNTING I 5CR
Covers fundamentals of accounting theory and practice, including a study of the accounting cycle and the use of special journals. Focus is on double-entry accounting system and financial statement preparation. Covers transactions for a business organized as a sole proprietorship and the effects of transactions on balance sheet accounts.

Prerequisite(s): ACTG 115 or instructor's approval.

## ACCT\& 202

PRINCIPLES OF ACCOUNTING II 5CR Covers fundamentals of accounting theory and practice, continued from ACCT\& 201. Focus is on issues related to businesses organized as a partnership or corporation and their effects on balance sheet accounts. Also covers investment, dissolution, and distribution of income.
Prerequisite(s): Successful completion of ACCT\& 201 or instructor's approval.

## ACCT\& 203

PRINCIPLES OF ACCOUNTING III 5CR Introduces the theory of cost accounting and an analysis of accounting data as a part of the managerial process of planning, decisionmaking, and control. Emphasizes job order, process, standard-cost accounting data, and the preparation and use of budgets and internal control reports necessary for making economic decisions for manufacturing businesses.

Prerequisite(s): Successful completion of ACCT\& 201 or instructor's approval.

## ACTG 110

BOOKKEEPING I
Introduces fundamental principles of full-cycle, double-entry accounting, including maintaining journals, ledgers, and banking records to prepare basic financial statements for service and retail businesses organized as sole proprietorships or partnerships. Covers basics of payroll accounting and payroll tax reports. Explores the concepts and terminology required to perform specific accounting functions accurately.
Prerequisite(s): Successful completion of ENG 091 or equivalent and successful completion of MAT 092 or equivalent, or instructor's permission.

## ACTG 115

BOOKKEEPING II
Introduces continued principles of full cycle, double-entry accounting. Covers specialty issues, such as uncollectible accounts, depreciation, inventory notes, interest accruals, and end-of-period work for corporations. Also covers basics of payroll accounting and payroll tax reports. Students will maintain journals and ledgers to prepare basic financial statements for a retail business organized as a corporation and identify the concepts and terminology required to perform specific accounting functions accurately.

Prerequisite(s): Successful completion of ACTG 110.

## ACTG 120

ELECTRONIC BUSINESS MATH 2CR
Covers business math applications, including payroll, percentages, merchandising, consumer credit, simple and compound interest, prorating, stocks and bonds, and the metric system, using keyboard functions and the touch method of electronic calculator operation.
Prerequisite(s): Successful completion of ENG 091 or equivalent and successful completion of MAT 092 or equivalent, or instructor's permission.

## ACTG 135

ACCOUNTING SPREADSHEETS I 5CR Introduces electronic spreadsheets (Microsoft Office Excel). Covers creating business forms and spreadsheets to prepare financial statements.

Prerequisite(s): Successful completion of CAS 115 and CAS 121, or instructor's approval. Concurrent with ACTG 110 or instructor's approval.

## ACTG 141

QUICKBOOKS I 2CR
Covers principal applications, basic operating commands, and functions necessary to use QuickBooks automated accounting software. Basic applications include, but are not limited to, vendor, customer, and banking activities and creating files.

Prerequisite(s): Successful completion of ACTG 110 and ACTG 135, or instructor's approval.

## ACTG 143

QUICKBOOKS II
3CR
Covers continued applications for vendor and customer activities using QuickBooks
automated accounting software. Also covers starting up companies, inventory
management, sales tax, payroll, and working with balance sheet accounts.

Prerequisite(s): Successful completion of ACTG 115 and ACTG 141, or instructor's approval.

## ACTG 160

PAYROLL \& BUSINESS TAXES $\quad 5 C R$
Provides practice in all payroll operations, the recording of accounting entries involving payroll, and the preparation of required payroll and business tax returns. Covers the concepts, laws, and terminology required to perform specific payroll accounting functions.
Prerequisite(s): Successful completion of ACTG 115 or instructor's approval.

## ACTG 211

PRINCIPLES OF ACCOUNTING I
LAB
2CR
Provides instructional activities that support material covered in ACCT\& 201 in a supervised lab environment. Concurrent with ACCT\& 201 or instructor's approval.

Prerequisite(s): Successful completion of ACTG 135 or instructor's approval.

ACTG 212
PRINCIPLES OF ACCOUNTING II LAB 3CR
Provides instructional activities that support material covered in ACCT\& 202 in a supervised lab environment.
Prerequisite(s): Successful completion of ACTG 211 and 135 or instructor's approval.
Co-requisite(s): ACCT\& 202.
ACTG 213
PRINCIPLES OF ACCOUNTING III LAB

3CR
Provides instructional activities that support material covered in ACCT\& 203 in a supervised lab environment.
Prerequisite(s): Successful completion of ACTG 211 and 135, or instructor's approval.
Co-requisite(s): ACCT\& 203.

ACTG 222
FUNDAMENTALS OF INDIVIDUAL INCOME TAX ACCOUNTING 4CR Introduces the fundamentals of individual income tax accounting theory and practice, including a study of the rules and regulations for preparation of the most common forms and schedules, a brief review of the history of income taxation, tax laws in the United States, and the differences between generally accepted accounting principles and income tax accounting.
Prerequisite(s): Successful completion of ACTG 115 or instructor's approval.

ACTG 224
FUNDAMENTALS OF GOVERNMENTAL/NONPROFIT ACCOUNTING 5CR
Introduces the fundamentals of accounting theory and practice of government/nonprofit accounting, including a study of accounting methods; the reasons for and the use of the various funds; the purpose and use of budgets in this field of accounting; and the differences between generally accepted accounting principles, GASB standards, and fund/ governmental accounting.
Prerequisite(s): Successful completion of ACTG 115 and ACCT\&, 201 or instructor's approval.

## ACTG 236

ACCOUNTING SPREADSHEETS II 3CR
Provides advanced instruction in electronic worksheets, various business spreadsheets, 3 D worksheets, and various functions, including the conditional function and accounting schedules.
Prerequisite(s): Successful completion of ACTG 135 or instructor's approval.

## ACTG 241

QUICKBOOKS III
Covers advanced accounting activities using
QuickBooks automated accounting software. Topics focus on starting up companies in mid-cycle of the fiscal period. Covers setting up prior balances with accounts receivable, accounts payable, checking, inventory, payroll, and fixed assets.

Prerequisite(s): Successful completion of ACTG 143 and ACCT\& 201, or instructor's approval.

## ACTG 260

BUSINESS OFFICE I
Provides an opportunity for students to experience and participate in a realistic office environment by providing financial statements, completing financial examinations, preparing payroll, and furnishing other similar financial accounting work products to the public.
Prerequisite(s): Successful completion of ACTG 143, ACTG 235, CAS 121, and ACCT\& 201, or instructor's approval.

## ACTG 262 ${ }^{\text {CAP }}$

BUSINESS OFFICE II 5CR
Provides an opportunity for students to experience and participate in a realistic office environment by providing financial statements, completing financial examinations, preparing payroll, and furnishing other similar financial accounting work products to the public.
Prerequisite(s): Successful completion of ACTG 260 or instructor's approval.

## ACTG 271

INTERNSHIP I
Provides students with practical on-the-job field experience. Program offers students a way to combine classroom study with related work experience under the supervision of an employer. Work experience must be related to students' educational and career objectives. Must be approved by the instructor and includes a weekly seminar component.
Prerequisite(s): Instructor's approval.

## ACTG 291

INDIVIDUAL INCOME TAX ACCOUNTING 5 CR
Continues the study of the fundamentals of individual income tax accounting theory and practice, including a detailed study of the rules and regulations for preparation of the most common forms and schedules, preparation of these forms and schedules, tax laws in the United States, and the differences between generally accepted accounting principles and income-tax accounting.
Prerequisite(s): Successful completion of ACTG 222 and ACCT\& 201, or instructor's approval. Concurrent with ACTG 293.

## ACTG 293

INDIVIDUAL INCOME TAX ACCOUNTING LAB 5CR
Provides a supervised setting, with instructional support, to apply understanding of federal individual income-tax rules and regulations to specific tax problems.
Prerequisite(s): Successful completion of ACTG 222 and ACCT\& 201, or instructor's approval. Concurrent with ACTG 291.

## ACTG 295

INDIVIDUAL INCOME TAX
INTERNSHIP
5CR
Provides on-the-job practical field experience. Program offers students a way to combine classroom study with related work experience under the supervision of an employer. Work experience must be related to students' educational and career objectives. Must be approved by the instructor and includes a weekly seminar component.
Prerequisite(s): Successful completion of ACTG 291 and 293, or instructor's approval.

## BUS\& 201

BUSINESS LAW 5CR
Introduces students to business law as it applies to the business world through the Uniform Commercial Code. Examines legal institutions and processes, legal reasoning, and the interaction of law and business. Laws pertaining to business contracts, sales, bailments, commercial paper, employment, agency, business organization, insurance, and property are reviewed.
Prerequisite(s): Successful completion of ACTG 115 or instructor's approval.

## AMERICAN SIGN LANGUAGE

AMERICAN SIGN LANGUAGE I 5CR
Informs students about deafness, deaf culture, the deaf community, and American Sign Language. Learn to communicate both expressively and receptively in American Sign Language in basic conversation situations.
Prerequisite(s): Successful completion of ENG 094 or equivalent.

## ASL\& 122

AMERICAN SIGN LANGUAGE II 5CR
An expansion of ASL\& 121, working toward mastery of American Sign Language. Course focuses on deeper insights into vocabulary, grammar, receptive/expressive skills, and history with increased knowledge of deaf communities and culture.
Prerequisite: Successful completion of ASL\& 121 or appropriate prior ASL experience.

## ARCHITECTURAL ENGINEERING DESIGN

## ARC 122

RESIDENTIAL DRAFTING \&
DESIGN
5CR
Overview of the design industry, construction procedures, codes, guidelines and standards, elements and principles of design, spatial concepts, and energy efficiency in design.
Prerequisite(s): Successful completion of ENG 091 and MAT 092, or instructor's approval.

## ARC 124 <br> RESIDENTIAL DRAFTING \& <br> DESIGN II

Overview of construction specifications, residential floor plans, symbols and systems, electrical plans, plumbing plans, HVAC plans, and foundation systems and plans.
Prerequisite(s): Successful completion of ARC 122, ARC 171, and ARC 182, or instructor's approval.

## ARC 126 <br> RESIDENTIAL DRAFTING \&

 DESIGN IIIOverview of specialized construction documents: exterior elevations; cabinet and interior elevations; building sections; wall details; stair plans, elevations and details; and fireplace elevations.

Prerequisite(s): Successful completion of ARC 124 or instructor's approval.

## ARC 144 <br> DETAILING AND LIGHT CONSTRUCTION

5CR
Students will be introduced to concepts and common terminology used in light woodframed construction. Students will produce standard details of structural design for residential applications, using CAD software.

Prerequisite(s): Successful completion of ARC 124 or instructor's approval.

ARC 151
CONSTRUCTION MATERIALS RESEARCH
Students will investigate and research materials, methods, and trends in construction; the Construction Specification Institute's (CSI) MasterFormat, SectionFormat, and PageFormat systems; and methods of specifying.
Prerequisite(s): Successful completion of ARC 122, ARC 171, and ARC 182, or instructor's approval.

## ARC 171

DRAFTING TECHNOLOGIES I 5CR
Basic manual drafting skills; architectural lines, text and layers; isometric drawings; orthographic and Multiview projections; and roof plan layout and components.
Prerequisite(s): Successful completion of ENG 091 and MAT 092, or instructor's approval.

## ARC 174

CIVIL ENGINEERING 5CR
An introduction to civil engineering software. Students will learn to create, edit and modify civil CAD design objects, add annotation, obtain information, import/export, and use civil CAD data in other applications.
Prerequisite(s): Successful completion of ARC 126 and ARC 282, or instructor's approval.

## ARC 182 <br> INTRODUCTION TO CAD DRAFTING

An introduction to CAD software. Students will learn to utilize the fundamentals of CAD software to produce basic architectural drawings.
Prerequisite(s): Successful completion of ENG 091 and MAT 092, or instructor's approval.

## ARC 191

ENGINEERING MECHANICS OF MATERIALS
Students will apply basic engineering used in the building design field: forces, force systems, loading, and reactions; material stress and strain; selection of wood columns and wood connection materials; steel structural materials; and reinforced concrete materials.
Prerequisite(s):Successful completion of ARC 126 and MAT 094 or higher, or instructor's approval.

## ARC 220

RESIDENTIAL DRAFTING \& DESIGN IV
Overview of site planning, framing methods and plans, commercial building codes, and materials for commercial construction. Students will create drawings using industry standard CAD software.

Prerequisite(s): Successful completion of ARC 126, or instructor's approval.

## ARC 223

DESIGN PROJECT I 5CR
Project management and design of a multistory house compliant with current state building and energy codes, all based on the needs of a hypothetical client.
Prerequisite(s): Successful completion of ARC 220 or instructor's approval.

ARC $225^{\text {CAP }}$
DESIGN PROJECT II
Students will manage and design an intermediate architectural drafting project. Address regulatory codes and hypothetical client needs, establish schedules, and give effective progress reports. Students will use interactive collaboration within 3D
Architectural CAD software and produce a complete set of computer-drafted construction drawings.
Prerequisite(s): Successful completion of ARC 223 and ARC 286, or instructor's approval.

ARC 227
SPECIAL INTERN PROJECT 5CR
Completion of a 150 -hour job site internship as approved by the instructor and under employer supervision as stated in the $\mathrm{PC}_{3}$ Work-Based Learning Experience Plan and Agreement.
Prerequisite(s): Instructor's permission required.

ARC 229
SPECIAL DESIGN PROJECT
Complete a design project of student's choosing, as approved by the instructor to aid in realistic training.
Prerequisite(s): Successful completion of ARC 262 and ARC 286, or instructor's approval.

ARC 231
COST ESTIMATING I 3CR
Use industry-software to estimate the cost of a single-story residential project as assigned by your instructor.

Prerequisite(s): Successful completion of ARC 126 or instructor's approval.

## ARC 237

ENERGY ANALYSIS 1CR
Students will complete Washington Energy
Code documents for energy analyses of a one-story residence.

Prerequisite(s): Successful completion of ARC 126 and ARC 223, or instructor's approval.

ARC 255
EMPLOYMENT RESEARCH
Basic job-seeking skill activities, including résumé preparation, employer contacts, presentation activities, and employment opportunities.
Prerequisite(s): English reading with comprehension, composition, and basic verbal skills.

## ARC 262

INTRO TO 3D MODELING
A hands-on introduction to 3D modeling. This course walks students through the basics of the software. Develop a preliminary design model using massing. Learn about strategies and techniques to develop speed and efficiency in modeling and presentations.
Prerequisite(s): Successful completion of ARC 182 or instructor's approval.

ARC 282
INTRO TO BUILDING INFORMATION MODELING
Use current industry-standard architectural 3D software application to produce threedimensional building models and production drawings. Explores integration of building systems in a three-dimensional virtual environment.

Prerequisite(s): Successful completion of ARC 262 or instructor's approval.

## ARC 286

ADVANCED BUILDING INFORMATION MODELING
Using current industry-standard architectural 3D software, students will create software families. Manage both two-dimensional and three-dimensional information within the program family through use of parameters.

Prerequisite(s): Successful completion of ARC 282 or instructor's approval.

## ARC 288

APPLIED CADD 5CR
Use current industry-standard 3D software applications (i.e. - Revit, SketchUp, Civil3D) to create or modify a design. Produce production drawings. Save, print, or transmit drawings to industry-standard applications.
Prerequisite(s): Successful completion of ARC 262, 223, and ARC 282, or instructor's approval.

## ARC 293

ENGINEERING STATICS 5CR
Students will apply basic engineering used in the building design field: equilibrium, loads and reactive forces, shear and bending in structures, and wood spanning elements.
Prerequisite(s):Successful completion of ARC 191 and MAT 099 or higher, or instructor's approval.

## ART

## ART\& 100

ART APPRECIATION 5CR
Introduction to the diversity of the art world from ancient civilizations to contemporary society. A discussion of art terminology and methods will be covered in an overview of art materials and techniques.
Prerequisite(s): Appropriate Accuplacer (283 in reading) score or equivalent, or successful completion of ENG 094.

## AUTOMOTIVE COLLISION

## ACT 102 <br> FUNDAMENTALS OF COLLISION REPAIR

Explores career safety, industry certifications, vehicle construction, and an overview of the career field.
Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement.
Co-requisite(s): IAUT 104, IAUT 115, IAUT 130, and IAUT 140. MAT 092 or meet appropriate placement. Instructor's permission required.

## ACT 106

BODY SHOP EQUIPMENT 3CR
Covers operating hand tools, power tools, and shop equipment. Explores air systems and their design and function.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ACT 110

WELDING, HEATING, \& CUTTING 4CR Covers the skills of welding, heating, and cutting as they relate to the collision industry.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ACT 115

PLASTICS/SMC REPAIR 4CR Explores plastic, fiberglass, and SMC repairs as they relate to the collision industry.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ACT 120

GLASS, TRIM, \& HARDWARE 5CR Covers the practical skills used to repair and replace door locks and windows and to repair water leaks on car and truck bodies, interior parts, and door skin.
Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ACT 125 <br> INTRODUCTION TO METAL <br> STRAIGHTENING

Introduces basic body-panel straightening techniques.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ACT 132

PANEL REPLACEMENT
6CR
Covers the fundamentals of replacing hoods, bumpers, fenders, grilles, lids, and other bolted-on panels.
Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ACT 133

## PANEL REPAIR

6CR
Covers metal-straightening fundamentals including proper tool usage, application of fillers, and sanding for proper size, shape, and texture.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ACT 134cAP

AUTO COLLISION MAJOR REPAIR 5CR
Introduces vehicle damage measuring systems, straightening auto body structure, and replacing structural components.
Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ACT 141

AUTO BODY ALUMINUM REPAIR 4CR
This course is an introduction to aluminum body repair.
Prerequisite(s): Successful completion of ACT 102, ACT 106, ACT 110, ACT 115, ACT 120, and ACT 125. Instructor's permission required.

## ACT 145

COLLISION ESTIMATING 5 CR
Covers collision damage estimating, reviewing work orders, and acquiring work skills for job success.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and

IAUT 140. Instructor's permission required.

## ACT 151

REFINISH EQUIPMENT
PREPARATION 6CR
Covers paint-shop equipment and painting fundamentals.
Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ACT 154

TOPCOAT REFINISHING 8CR
Covers color matching, final masking, surface cleaning, and topcoat finishing.
Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ACT 156

PRE-PRIME PREPARATION 5CR
Explores corrosion protections and vehicle refinish preparation.
Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ACT 157

POST-PRIME PREPARATION 5CR
Explores final preparations, blocking, and final sanding for application of topcoat.
Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

ACT $166^{\text {CAP }}$
SURFACE IMPERFECTIONS/ EXTERIOR TRIM

5CR
Covers paint application problem solving, final detailing, decals, and trimming.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ACT 171

PLASTIC REFINISHING
Covers paint-shop equipment and painting fundamentals as they relate to plastics.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## AUTOMOTIVE CORE

## IAUT 104

INTRODUCTION TO
AUTOMOTIVE ELECTRICAL $4 C R$
This course is an introduction to automotive electrical systems. Students will learn electrical theory, basic electrical testing
equipment and procedures, and proper wire splicing and repairs.
Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required.
Co-requisite(s): IAUT 105, IAUT 115, IAUT 130 , and IAUT 140. Must be completed with a grade of 2.3 or better.

## IAUT 105

INTRODUCTION TO
AUTOMOTIVE TRADES
This course is an introduction to the automotive industry. Students will learn about the industry, automobile safety, pollution and hygiene, basic hand tools, fasteners, and resume preparation.
Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement. Instructor's permission required.

Co-requisite(s): IAUT 104, IAUT 115, IAUT 130 , and IAUT 140. MAT 092 or meet appropriate placement.

## IAUT 115

INTRODUCTION TO
AUTOMOTIVE STEERING, SUSPENSION \& BRAKES
This course is an introduction to automotive steering, suspension, and braking systems. Students will learn the basic theory of these systems, how to put a vehicle on a lift and perform inspections, and how to perform a four-wheel alignment.
Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required.
Co-requisite(s): IAUT 104, IAUT 105, IAUT 130, and IAUT 140. Must be completed with a grade of 2.3 or better.

## IAUT 130

AUTOMOTIVE HVAC
Students will learn auto HVAC system diagnosis and proper service techniques.
Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required.
Co-requisite(s): IAUT 104, IAUT 105, IAUT 115, and IAUT 140. Must be completed with a grade of 2.3 or better.

## IAUT 140

BASIC AUTOMOTIVE WELDING 4CR
This course is an introduction to automotive welding. Includes basic welding using Oxy-Fuel, MIG, and other processes used in automotive repair.
Prerequisite(s): Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required.

Co-requisite(s): IAUT 104, IAUT 105, IAUT 115, and IAUT 130. Must be completed with a grade of 2.3 or better.

## AUTOMOTIVE RESTORATION \& CUSTOMIZATION FINISHING

## ARCF 103

FUNDAMENTALS \& SHOP EQUIPMENT
Covers shop safety, fundamentals of tool use, and proper use of shop equipment.
Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ARCF 109

WELDING \& METAL SKILLS 4CR
Covers welding, heating, and cutting techniques using MIG and oxyacetylene equipment. Students will learn safe handling and correct metal-forming techniques of sheet metal.
Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

ARCF 114
BASIC REPAIRS \& ASSEMBLY 8CR
Covers basic repair and assembly procedures for bolt-on body components.
Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

ARCF 119
CUSTOM FABRICATION
6CR
Explores basic customizing techniques used on original factory parts, as well as fabrication of custom parts.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ARCF 124

REFINISHING EQUIPMENT 4CR
Explores refinishing equipment use and maintenance.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required

## ARCF 129

REFINISH PREPARATION
7CR
Explores corrosion protection and vehicle refinish preparation.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

ARCF 130
ADVANCED PAINT APPLICATION 4-6CR Covers application of advanced masking, topcoat shading, and graphics on a restoration or custom project.
Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

ARCF 133
FIBERGLASS/COMPOSITES TECHNIQUES
Further develop skills in customizing
techniques used on original factory parts, as well as fabrication of custom parts.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ARCF 134

CUSTOM REFINISHING 6CR
Covers topcoat, clear coat, and custom refinishing.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required

ARCF 141
SURFACE IMPERFECTIONS/ SHOW \& SHINE 4CR
Covers paint-application problem-solving and show detailing.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ARCF 154

AUTOMOTIVE RESTORATION \& CUSTOMIZATION FINISHING

## LAB

4-9CR
Finish projects and competencies in restoration and/or customizing. Nine credits in summer quarter; variable credit other three quarters.
Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ARCF 159

METAL STRAIGHTENING \& SHAPING

4-6CR
Metal straightening and shaping techniques on a custom or restoration project.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ARCF 167

CUSTOM PAINT APPLICATION 3CR
Covers application of custom masking, topcoat shading and graphics.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ARCF 168

APPLIED METAL SKILLS
Covers application of previously acquired metal skills as they relate to students' project work.
Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## ARCF 170 <br> CUSTOM REFINISHING SPECIAL PROJECTS 4-6CR

 Develop skills in advanced custom and/or restoration techniques. Students will have the opportunity to apply knowledge to projects of personal interest, as assigned, and/or job shadowing.Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## AUTOMOTIVE TECHNICIAN

## AUT 147

## AUTOMOTIVE BRAKES 6CR

Theory and troubleshooting of hydraulic systems, disc brake systems, drum brake systems, power booster systems and antilock brake systems.

Prerequisite(s): Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140 Instructor's permission required.

Co-requisite(s): AUT 149 and AUT 157.

## AUT 149

AUTOMOTIVE SUSPENSION STEERING, \& WHEEL ALIGNMENT 7CR Theory and troubleshooting of front suspension systems, steering systems, rear suspension systems, and computer-controlled systems. This course will also cover basic wheel alignment, including two- and four-wheel alignment.

Prerequisite(s): Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

Co-requisite(s): AUT 147 and AUT 157.

## AUT 157

AUTOMOTIVE BRAKES, SUSPENSION, STEERING, \& WHEEL ALIGNMENT LAB
Repair automotive brakes, steering, and suspension systems by applying knowledge attained in required courses. This is a hands-on class that uses live projects. Instructor's permission required.
Co-requisite(s): AUT 147 and AUT 149.

## AUT 174 <br> ENGINE MINOR MECHANICAL REPAIR

Diagnose and repair general engine mechanical, lubrication, and cooling system problems. Upon completion of this course, students will be familiar with the terminology, basic theory, diagnostics, and minor engine mechanical service and repair procedures.

Prerequisite(s): Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

Co-requisite(s): AUT 175 and AUT 178

## AUT 175 <br> ENGINE MAJOR MECHANICAL REPAIR

7CR
Diagnose and repair engine blocks, heads, and valve trains. Upon completion of this course, students will be familiar with the terminology, basic theory, diagnostics, and removal and installation procedures to successfully diagnose and repair automobiles and light truck engines.

Prerequisite(s): Must have required tools and textbooks. Instructor's permission required.
Co-requisite(s): AUT 174 and AUT 178.

## AUT 178

ENGINE MECHANICAL LAB 3CR Repair engine components by applying knowledge attained in required courses. This is a hands-on class that uses live projects. Upon completion of this course, students will be familiar with diagnosis, maintenance and repair of automobile and light truck engines.

Prerequisite(s): Must have required tools and textbooks. Instructor's permission required.
Co-requisite(s): AUT 174 and AUT 175.

## AUT 209

ELECTRONIC SYSTEMS 7CR
Diagnose and repair automotive electronic systems and study basic application of computerized electronic control systems. Upon completion of this course, students will be familiar with the terminology, basic theory, diagnostics, removal, and installation procedures used on automobiles and light trucks.

Prerequisite(s): Must have required tools and textbooks. Instructor's permission required.

## Co-requisite(s): AUT 212.

## AUT 212

ELECTRICAL SYSTEMS 9CR
Diagnose and repair automotive electrical systems and study basic application of computerized electronic control systems. Upon completion of this course, students will be familiar with the terminology, basic theory, diagnostics, removal, and installation procedures used on automobiles and light trucks.

Prerequisite(s): Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

Co-requisite(s): AUT 209.

## AUT 217

AUTOMOTIVE IGNITION SYSTEMS 7CR
Diagnose and repair electronic and computercontrolled automotive ignition systems. Upon completion of this course, students will be familiar with the terminology, basic theory, and diagnostic and repair procedures used on automobiles and light trucks.
Prerequisite(s): Must have required tools and textbooks. Successful completion of AUT 174, AUT 175, AUT 178, AUT 209, and AUT 212. Instructor's permission required.

Co-requisite(s): AUT 223 and AUT 236.

## AUT 223

AUTOMOTIVE FUEL SYSTEMS 7CR
Diagnose and repair fuel management systems. Upon completion of this course, students will be familiar with the terminology, basic theory, and diagnostic and repair procedures used on automobiles and light trucks.

Prerequisite(s): Must successfully complete courses AUT 174, AUT 175, AUT 178, AUT 209, and AUT 212, and must have required tools and textbooks. Instructor's permission required.

Co-requisite(s): AUT 217 and AUT 236.

## AUT 236

AUTOMOTIVE EMISSIONS SYSTEMS

7CR Diagnose and repair emissions control systems. Upon completion of this course, students will be familiar with the terminology, basic theory, and diagnostic and repair procedures used on automobiles and light trucks.

Prerequisite(s): Must successfully complete courses AUT 174, AUT 175, AUT 178, AUT 209, and AUT 212, and must have required tools and textbooks. Instructor's permission required.

Co-requisite(s): AUT 217 and AUT 223.

## AUT 239

AUTOMOTIVE CLUTCHES \& MANUAL TRANSMISSIONS 9CR
Provides students with the knowledge and skills to competently repair automotive clutches and manual transmissions/ transaxles. Upon completion of the course, students will be familiar with the terminology, basic theory, diagnostics, maintenance, and repair of automobile/light truck clutches and manual transmissions/transaxles.

Prerequisite(s): Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

AUT 243
AUTOMOTIVE AXLES, DRIVELINES, DIFFERENTIALS \& TRANSFER CASES $\qquad$
Provides students with the knowledge and skills to competently repair automotive axles drivelines, differentials, and transfer cases. Upon completion of the course, students will be familiar with the terminology, basic theory, diagnostics, maintenance, and repair of automobile/light truck axles, drivelines, differentials, and transfer cases.

Prerequisite(s): Must successfully complete AUT 239 and have required tools and textbooks. Instructor's permission required.

AUT 246
MANUAL DRIVE TRAINS \& AXLES LAB
This course is designed to teach students to competently repair drive-train components by applying knowledge attained in required courses. This is a hands-on class that uses live projects. Upon completion of this course, students will be familiar with diagnosis, maintenance, and repair of automobile/light truck manual drive trains.

Prerequisite(s): Must successfully complete courses AUT 239 and AUT 243, and must have required tools and textbooks. Instructor's permission required.

## AUT 247

AUTOMATIC TRANSMISSIONS 7CR This course provides students with the knowledge and skills to competently repair automatic transmissions. Upon completion of the course, students will be familiar with the terminology, basic theory, diagnostics, maintenance, and repair of automobile/light truck automatic transmissions.

Prerequisite(s): Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## AUT 250

AUTOMATIC TRANSAXLES 7CR
This course provides students with the knowledge and skills to competently repair automatic transaxles. Upon completion of the course, students will be familiar with the terminology, basic theory, diagnostics, maintenance, and repair of automobile transaxles.

Prerequisite(s): Must successfully complete AUT 247 and have required tools and textbooks. Instructor's permission required.

## AUT 251 ${ }^{\text {cAP }}$ <br> AUTOMATIC TRANSMISSION/ TRANSAXLE LAB

4CR
This course is designed to teach students to competently repair automatic transmission/ transaxle assemblies by applying knowledge attained in required courses. This is a hands-on class that uses live projects. Upon completion of this course, students will be familiar with diagnosis, maintenance, and repair of automobile/light truck drive trains by applying academic knowledge to hands-on projects.

Prerequisite(s): Must successfully complete courses AUT 247 and 250, and must have required tools and textbooks prior to entering this course. Instructor's permission required.

## AUT 255 <br> AUTOMOTIVE AIR CONDITIONING, HEATING \& VENTILATION

Theory, troubleshooting, and repair of automotive air-conditioning systems, heating systems, and ventilation systems. Also covers recovery and recycling of both R-12 and R134A refrigerants.
Prerequisite(s): Must successfully complete AUT 209 and AUT 212 and have required tools and textbooks. Instructor's permission required.

AUT 270
INTRODUCTION TO HYBRID SAFETY
This course is an introduction to the safety precautions required when working on hybrid and electric vehicles. Students will learn about the basics of hybrid electrical systems, personal protective equipment (PPE), and how to power down the most common hybrid vehicles. Offered only during winter quarter.

Prerequisite(s): Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

## AUT 295

ON-THE-JOB TRAINING/WORKBASED LEARNING 1-2CR
Provides advanced students with realistic training at a work site. Dates and times will be determined

Prerequisite(s): Instructor's permission required.

## AUTH 105

HYBRID/ALTERNATE FUEL
INTRODUCTION \& SAFETY
Covers the history, evolution, and general safety precautions for servicing.
Prerequisite(s): Students must have completed an ASE/NATEF certified automotive training program or have instructor's permission with two years of automotive experience.

AUTH 110<br>ALTERNATE FUEL VEHICLE SYSTEMS<br>2CR<br>Covers diesel, E85, CNG, and hydrogen systems in use today.

Prerequisite(s): Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

## AUTH 115 <br> TOYOTA HYBRID SYSTEM

 OVERVIEW 2CRCovers the Toyota systems in use today, with a focus on the Prius model.

Prerequisite(s): Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

## AUTH 120

TOYOTA PRIUS HYBRID SYSTEM 2CR Covers the Toyota systems in use today, with a focus on the Prius model.

Prerequisite(s): Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

## AUTH 125

HONDA HYBRID SYSTEM OVERVIEW 2CR
Covers the Honda hybrid systems in use today, with a focus on the Civic model.

Prerequisite(s): Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

## AUTH 130

HONDA CIVIC IMA HYBRID SYSTEM
Covers the Honda Civic Integrated Motor Assist systems in use today.
Prerequisite(s): Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

AUTH 135
FORD ESCAPE/MERCURY
MARINER HYBRID SYSTEM OVERVIEW
Covers the Ford Escape/Mercury Mariner
Hybrid systems in use today, with a focus on the Escape model.

Prerequisite(s): Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

## AUTH 140

GENERAL MOTORS \& OTHER HYBRID SYSTEMS OVERVIEW 2CR Covers General Motors and other systems in use today, with a focus on the GM Dual Mode model system.
Prerequisite(s): Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

## AUTH 145

ADVANCED LAB \& FINAL EXAM PREPARATION
Gives students a hands-on opportunity for preparation for the final exam.
Prerequisite(s): Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

## FAUT 120

FORD INTRODUCTION TO
AUTOMOTIVE
Students will be preparing for working in a shop environment by covering HAZMAT issues, equipment safety and operation, hand tool selection and use, and service information selection and use. Students will also become familiar with employment opportunities and expectations and certification requirements.
Prerequisite(s): Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required.
Co-requisite(s): FAUT 149, FAUT 172, and FAUT 179.

FAUT 144
FORD BASIC ELECTRICAL

## SYSTEMS DIAGNOSIS AND

## TESTING

6CR
Diagnose and repair automotive electrical systems using the Symptom-to-System-to-Component-to-Cause process. Use special tools and service equipment associated with electrical diagnosis and repair. Use all service publications in their available formats to obtain needed information for diagnosis.
Perform diagnosis test procedures. Perform repair procedures. Students will become familiar with the tools, terminology, basic theory, diagnostics, removal, and installation procedures used during common service operations and will have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.
Prerequisite(s): Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required.

## Co-requisite(s): FAUT 209 and FAUT 212.

## FAUT 147

FORD AUTOMOTIVE BRAKES 6CR
Covers brake system theory and operation, diagnostic strategies, and component removal/reinstallation. Students will become familiar with the tools, terminology, and procedures used during routine brake service operations and have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list. (See syllabus).
Prerequisite(s): Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required.
Co-requisite(s): FAUT 157, FAUT 185, and FAUT 255.

## FAUT 149

FORD AUTOMOTIVE
SUSPENSION, STEERING, \&
WHEEL ALIGNMENT 7CR
Students will learn suspension and steering principles, diagnostic strategies, and component removal/reinstallation. Alignment geometry and service procedures are also covered. Students will become familiar with the tools, terminology, and procedures used during routine brake service operations and have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list (see syllabus).
Prerequisite(s): Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required.

Co-requisite(s): FAUT 120, FAUT 172, and FAUT 179.

## FAUT 157

FORD AUTOMOTIVE BRAKES, SUSPENSION, STEERING, \& ALIGNMENT LAB
Provides students with the opportunity to practice the skills covered in FAUT 147 and FAUT 149. Students will become familiar with the tools, terminology, and procedures used during common service operations and have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite(s): Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required.
Co-requisite(s): FAUT 147, FAUT 185, and FAUT 255.

## FAUT 172

FORD BASE STEERING, SUSPENSION, \& ALIGNMENT 6CR
Students will learn suspension and steering principles, alignment geometry, and service procedures to diagnose and correct excessive tire wear and pull concerns. Students will perform suspension adjustments using an alignment machine; perform power steering service and tests; correctly inspect steering and suspension system components; and flush, fill and inspect power steering systems. Students will become familiar with the tools, terminology, and procedures used during common steering and suspension service operations and will have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.
Prerequisite(s): Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required.
Co-requisite(s): FAUT 120, FAUT 149, and FAUT 179.

## FAUT 179

FORD GENERAL MAINTENANCE \& TIRES
Topics covered include shop safety practices, general automotive maintenance, vehicle checkups, and multi-point inspections.
Students will perform scheduled maintenance on items such as fluid and filter changes and learn wheel and tire service procedures. Students will use all available service publications to identify automotive systems and components and become familiar with the tools, terminology, and procedures used during routine maintenance, inspections, and wheel and tire service. Students will have the opportunity to practice the procedures identified as priority tasks in the NATEF (ASE) task list.
Prerequisite(s): Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required.
Co-requisite(s): FAUT 120, FAUT 149, and FAUT 172.

## FAUT 185

FORD BRAKE SYSTEMS
DIAGNOSIS
2CR
Topics covered include brake system diagnosis and testing and brake system service. Students will diagnose brake concerns using all available service publications. Identify brake system components and perform brake system inspections, machine rotors using an on-car lathe, and become familiar with the tools, terminology, and procedures used during routine brake service operations. Students will have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.
Prerequisite(s): Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required.
Co-requisite(s): Concurrent enrollment in FAUT 147, FAUT 157, and FAUT 255 is required.

## FAUT 209

FORD ELECTRONIC SYSTEMS 7CR
Diagnose and repair automotive electronic systems and basic application of computerized electronic systems. Students will become familiar with the tools, terminology, basic theory, diagnostics, removal, and installation procedures used during common service operations and have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.
Prerequisite(s): Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required.
Co-requisite(s): FAUT 144 and FAUT 212.

## FAUT 212

FORD ELECTRICAL SYSTEMS 9CR
Diagnosis, repair, and basic application of automotive electrical systems. Students will become familiar with the tools, terminology, basic theory, diagnostics, removal, and installation procedures used during common service operations and have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite(s): Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required.
Co-requisite(s): FAUT 144 and FAUT 209.

## FAUT 255

FORD AIR-CONDITIONING, HEATING \& VENTILATION
Provides students with theory, troubleshooting, and repair of automotive air-conditioning systems, heating systems, and ventilation systems. Also covers recovery and recycling of both $\mathrm{R}-12$ and $\mathrm{R}-134 \mathrm{~A}$ refrigerants and procedures used during common service operations and gives students the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite(s): Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required.

Co-requisite(s): FAUT 147, FAUT 157 and FAUT 185.

## AVIATION MAINTENANCE TECHNICIAN

## AMT 104

BASIC MATHEMATICS, BASIC PHYSICS, AND WEIGHT \&
BALANCE
5CR
Perform all of the mathematical computations required in the Aviation Maintenance Technician curriculum. Understand the scientific principles that apply to the operation of aircraft, engines, and the equipment that aviation maintenance technicians are in daily contact with. Develop a comprehensive understanding of the importance of weight and balance to aircraft safety, and make all of the required calculations for weight and balance checks, equipment changes, extreme loading checks, and the addition of ballast.

## AMT 109

BASIC ELECTRICITY
4CR
Covers direct-current circuits, series, and parallel-circuit arrangements and their application. Includes the relationship between voltage, current, resistance, and power. Students will calculate and measure these values and understand the operation of the multimeter and its use in troubleshooting.

## AMT 116

AIRCRAFT DRAWINGS, CLEANING \& CORROSION CONTROL, GROUND OPERATIONS \& SERVICING, AND FLUID LINES \& FITTINGS $5 C R$
Sketch aircraft repairs and alterations and understand information presented on typical aircraft blueprints, graphs, and charts. Recognize types of corrosion and know their causes, identify and use the proper materials and processes to remove corrosion byproducts, treat corroded areas, and apply proper protection. Gain a thorough understanding of the importance of safe ground handling procedures, aircraft movement, and storage, and identify aviation fuels. Identify fluid line components, fabricate rigid and flexible fluid lines, and properly install fluid lines on aircraft.

## AMT 119

MATERIALS \& PROCESSES
Learn about identification and selection of non-destructive testing methods, dyepenetrant, eddy current, ultra-sound, and magnetic particle inspections, as well as basic heat-treated processes, aircraft hardware, and materials. Inspect and check welds. Perform precision measurements.

AMT 125
ADVANCED ELECTRICITY
Understand the effect of resistance, capacitance, and inductance in AC circuits, and understand transformers. Learn about basic semi-conductor devices (diodes and transistors), and be able to explain their function in simple circuits.

## AMT 127

MAINTENANCE FORMS \& RECORDS, PUBLICATIONS, AND MECHANICS PRIVILEGES \& LIMITATIONS
Use maintenance records and entries, maintenance forms, and inspection reports. Requires reading, comprehension, and application of information from the FAA and manufacturer's maintenance specifications, data sheets, manuals, publications, related FAA regulations, airworthiness directives, and advisory material. Apply mechanic privileges within the limitations prescribed by FAR Part 65.

## AMT 132 <br> WOOD STRUCTURES, AIRCRAFT COVERINGS, \& FINISHES

4CR
Covers wood aircraft construction, repair, and inspection. Students will select, apply, inspect, test, and repair aircraft fabric and fiberglass covering materials. Become familiar with types of aircraft protective coatings, trim applications, markings, finish problems, and the inspection of finishes.

## AMT 133

AIRCRAFT FUEL SYSTEMS, ICE \& RAIN CONTROL SYSTEMS, \& FIRE PROTECTION SYSTEMS 4CR Covers principles of operation and configuration of warning systems, electrical brake controls, anti-skid systems, and landing gear position indicating and warning systems. Learn the effects of ice and rain on aircraft during operations in inclement weather, the equipment and materials used to counter ice and rain, and the maintenance of this equipment. Explore components and operation of fire detection and extinguishing equipment, as well as smoke and toxic gas detection systems.

## AMT 135

SHEET METAL STRUCTURES 4CR
Inspection and repair of all types of sheet metal. Information regarding the fabrication, construction, and repair of sheet-metal aircraft structures.

## AMT 136 <br> WELDING, POSITION \& <br> WARNING SYSTEMS

Principles regarding the fabrication, construction, and repair of welded aircraft structures. Principles of operation of speed and configuration warning systems, electrical brake controls, anti-skid systems, and landing-gear position indicating and warning systems.

## AMT 137

NON-METALLIC STRUCTURES 4CR
Covers inspection and repair of all types of non-metallic and composite structures, including transparent plastic enclosures and interiors.

## AMT 138

AIRCRAFT INSPECTIONS
Lecture, demonstration, and practical application are used to train students in the methods and techniques of all phases of aircraft inspections, federal aviation regulations, maintenance record entries, and disposition of those records.

## AMT 139

ASSEMBLY \& RIGGING 4CR
Covers basic information regarding the assembly of aircraft, components, rigging of all flight control surfaces, balancing and inspection of flight controls, alignment of aircraft structures, and jacking of aircraft.

## AMT 140

AIRCRAFT LANDING GEAR 3CR
Inspect, check, service, and repair landing gear retraction systems, shock struts, brakes, wheels, tires, and steering systems.

## AMT 141

HYDRAULIC \& PNEUMATIC POWER SYSTEMS
Inspect, check, service, troubleshoot, and repair hydraulic and pneumatic power systems and components. Identify and select hydraulic fluids.

## AMT 142 <br> HANGAR OPERATIONS \& MAINTENANCE

Perform maintenance on items of shop equipment used in the day-to-day operation of the aircraft maintenance hangar, calibrate precision tools as needed, and assist in repair station operations. Note: Offered winter quarter. Not FAA approved.

AMT 143
AIRFRAME ELECTRICAL SYSTEMS 5CR Learn about operation of AC and DC electrical systems used on large and small aircraft, generating and starting systems, AC and DC electric motors, wiring, controls, switches, indicators, and protective devices, and constant speed and integrated drive generators.

## AMT 144

ENGINE ELECTRICAL SYSTEMS 5CR
Develop an understanding of the operation of generators, alternators, DC motors, and AC motors, and their repair and overhaul. Learn the special requirements of electrical components operating in high-temperature areas and how to install wiring, controls, switches, and indicators, and to protect them from the effects of high temperatures.

## AMT 145

CABIN ATMOSPHERE CONTROL SYSTEMS

3CR

## PHYSIOLOGICAL ASPECTS

OF FLIGHT. INSPECTION AND MAINTENANCE OF OXYGEN, PRESSURIZATION, HEATING, COOLING AND AIR-CONDITIONING SYSTEMS. AMT 146 AIRCRAFT INSTRUMENT, COMMUNICATION \& NAVIGATION SYSTEMS 3CR
Learn principles of operation of common aircraft instruments, air- or vacuum-driven gyros, pilot-static systems, and static system leak tests. Gain operating principles of common avionics equipment, antennas, autopilots, servos, approach coupling systems, interphones, static discharge devices, and ground proximity warning systems. Inspect and repair antennas and electronic equipment.

## AMT 208

HELICOPTER OPERATIONS \& MAINTENANCE PRACTICES 4CR
Covers history, operations, regulations, publications, records, special-use equipment, and basic maintenance fundamentals as they relate to rotorcraft.

## AMT 210

BASIC ROTOR SYSTEMS MAINTENANCE \& REPAIR

4CR
Covers history of rotorcraft and principles of flight, types, and function of rotor systems, overhaul of rotor hub assemblies, installation and static balancing of rotors, types and function of anti-torque control systems, and inspection of rotor blades using manufacturer's data.

AMT 212
ADVANCED ROTOR SYSTEMS MAINTENANCE \& REPAIR
Covers vibration analysis, installation and dynamic balancing of rotor systems, tracking of helicopter rotor blades, principles of helicopter autorotation, and adjustment of autorotation RPM for power-off operations.

## AMT 215

HELICOPTER SYSTEMS
Covers helicopter power plants and controls; fuel systems, turbine fuels, and fuel system components; oil systems and types of oils; mechanical drives, clutches, drive shafts, freewheeling units, and transmissions; flight controls, hydraulic, and instrument systems; rotor RPM, engine-out, and master caution and warning systems; electrical systems, NiCad batteries, and starter generators; fuselage structures; and landing gear.

## AMT 217

FAA TESTING \& TURBINE ENGINES
Covers preparation for and completion of FAA certification examinations. FAA written examinations are accomplished outside of CPTC at an FAA Designated Written Examination Center. After successful completion of written examinations, students must pass an oral and practical examination administered by an FAA Designated Maintenance Examiner. Students are charged a fee for these examinations. Note: Fees for these examinations are not included in the college tuition or lab fees. The remaining 120 hours of training concentrate on turbine engines, including their history, different types, the theory of operation of turbine engines, the Brayton cycle, Bernoulli's theory, and turbine engine air-flow characteristics. Learn the theory of operation of different types of compressors, combustion chambers, turbines and turbine stator vanes (nozzles). Learn the exhaust sections maintenance of turbine engines, including turbine engine removal, overhaul, inspection, and repair procedures. Learn to install turbine engines; make adjustments; troubleshoot, test, and check run procedures; and become familiar with regulations, publications, and records for turbine engines.

## AMT 219

ENGINE LUBRICATION SYSTEMS 4CR Covers the components and the operation of engine lubrication systems. Introduction to the requirements and characteristics of engine lubricants and lubrication systems.

## AMT 221

ENGINE INSTRUMENT SYSTEMS 4CR
Covers the theory and principles of operation of electrical and mechanical fluid rate-of-flow indicating systems. Covers electrical and mechanical temperature, pressure, and RPM-indicating systems.

## AMT 224

POWERPLANT RECIPROCATING ENGINE THEORY
Covers the history of aircraft engines, principles of energy transformation, theory of operation, engine requirements and configuration, and overhaul of horizontallyopposed engines.

## AMT 225 <br> POWERPLANT MAINTENANCE

 \& OPERATIONPowerplant maintenance and operation consists of theory of operation; engine requirements, configuration and installation; and troubleshooting and removal of horizontally-opposed engines.

AMT 226<br>ENGINE FUEL SYSTEM \& FIRE PROTECTION<br>Fuel systems and fire protection consists of transformation of energy, chemistry of combustion, and thermal efficiency of fuel-air mixtures. Fire protection covers the components and the operation of firedetection and extinguishing equipment.

## AMT 228

ENGINE FUEL METERING SYSTEMS5CR
Fuel metering consists of the principles of fuel metering for float carbs, pressure carb, fuel injection, anti-detonation injection, turbine fuel controls, and electronic engine-fuel controls.

AMT 229CAP
PROPELLERS \& FAA FINAL TESTING 4CR
Consists of the theory of operation and nomenclature; propeller controls and instrumentation; fixed pitch, controllable pitch, constant speed, and feathering propellers; governors, anti-ice, phasing, and synchronization systems; and inspection, maintenance, and repairs to propellers and related systems, including familiarization with unducted fan engines. At the end of the course, six hours are devoted to preparation for FAA certification examinations. FAA written examinations are taken at an FAA Designated Written Examination Center. After successful completion of written examinations, students must pass an oral and practical examination administered by an FAA Designated Mechanics Examiner. Students are charged a fee for these examinations administered by FAA designated examiners and centers. Fees for theses examinations are not included in the college tuition or lab fees systems.

## AMT 231

ENGINE INSPECTION
Engine inspection consists of detailed work with FAA regulations, types of inspections, conformance to type certificate data sheets and major alterations, airworthiness directives, and maintenance record entries.

## AMT 233

ENGINE IGNITION \& STARTING SYSTEMS
Covers the operation, maintenance, and overhaul of magnetos and ignition; harnesses; the inspection, servicing, troubleshooting, and repair of reciprocating and turbine engine ignition system; and components and turbine engine electrical and pneumatic starting systems.

## AMT 235

INDUCTION, AIRFLOW, COOLING \& EXHAUST SYSTEMS $3 C R$
Learn about the maintenance of carburetors and fuel-injected, naturally aspirated, turbo-charged, and super-charged induction systems. Learn about maintenance of ice and rain control systems, as well as principles of air-cooled engines and problems that can occur with an air-cooled engine. Study the history, development, and function of exhaust systems. Students will describe, inspect, maintain, troubleshoot, and repair components of exhaust systems. Learn operation principles of turbine-engine reversing systems and power recovery turbines.

AMT 239
ADVANCED HANGAR
OPERATIONS \& MAINTENANCE 3CR Advanced hangar operations and maintenance is designed for students currently enrolled in the helicopter and powerplant classes. It includes servicing and repair of shop equipment, calibration of precision tools, and assisting in the repair station operations.
Note: This course work is only offered winter quarter. This class is not FAA approved.

## AVIONICS TECHNICIAN

## AVIO\& 102

## AIRCRAFT ELECTRONIC

## FUNDAMENTALS

8CR
Fundamentals, troubleshooting, and experimentation with fundamental aircraft electronics; diodes; power supplies; rectifiers; voltage regulators; transistors; amplifiers; oscillators and multivibrator circuits; latches and flip-flops; transmitters; synchro systems; and gyroscopes.
Prerequisite(s): Successful completion of AMT 104, AMT 109, AMT 116, AMT 119, AMT 125, AMT 127, AMT 143, and AMT 144 or FAA Airframe or Powerplant license or instructor's permission.

## AVIO\& 103

AIRCRAFT WIRING SYSTEMS 4CR
Fundamentals, troubleshooting, and repair of aircraft wiring, including acceptable standards for visual, electrical, and mechanical quality.

Prerequisite(s): Successful completion of AVIO\& 102 and AVIO\& 201.

## AVIO\& 104

AIRCRAFT FIBER OPTIC SYSTEMS 3CR
This course is designed to prepare participants to install, maintain, troubleshoot, and repair fiber optics in the aviation industry.
Participants will learn to work safely with materials used in fiber optics while learning to handle materials properly during the routing, installation, assembly, cleaning, troubleshooting, and repair process.
Prerequisite(s): Successful completion of AVIO\& 102 and AVIO\& 201.

AVIO\& 201
AIRCRAFT DIGITAL ELECTRONIC INSTRUMENT SYSTEMS
Digital techniques of troubleshooting, repairing, and experiments of aircraft electronic instrument systems. This course includes aircraft flight instrument systems; computer math and number systems, logic expressions, gates, and families; digital electronics and test equipment; timers; integrated and combinational circuits; computer registers, memory, and microprocessors; counters; TDM and FDM; introduction to fiber optics and lasers; data communications; and bus systems.
Prerequisite(s): Successful completion of AMT 104, AMT 109, AMT 116, AMT 119, AMT 125, AMT 127, AMT 143, and AMT 144 or FAA Airframe or Powerplant license or instructor's permission.

## AVIO\& 202

## AVIONICS SYSTEMS FOR

AIRFRAME AND POWERPLANT 8CR
Fundamentals, troubleshooting, and repair of aircraft avionics systems for airframe and powerplant including: aerodynamic principles; aircraft structures; communication systems; navigation systems; power distribution systems; avoidance and detection systems; master warning and annunciator systems; radar systems; lighting systems; powerplant systems; and airframe systems.
Prerequisite(s): Successful completion of AVIO\& 102 and AVIO\& 201.

## AVIO\& 203

AVIONICS COMMUNICATIONS 4CR
Preparation for the Federal Communications Commission General Radiotelephone Operator License and Ship Radar Endorsement, utilizing FCC guidelines, fundamentals of communication, and key topics.
Prerequisite(s): Successful completion of AVIO\& 102 and AVIO\& 201.

## AVIO\& 204

PRINCIPLES OF AVIONICS
TROUBLESHOOTING
4CR
This course is designed to identify and isolate avionics system faults through a logical approach using a four-step troubleshooting method.

Prerequisite(s): Successful completion of AVIO\& 102 and AVIO\& 201.

## BACHELOR OF APPLIED SCIENCE

BUS 310
PROJECT MANAGEMENT 5CR
Teaches students some of the techniques necessary to develop realistic and comprehensive project plans, identify risk areas, monitor the plans, and deal with problems. The course will also cover management of the procurement process and communication with project stakeholders.
Prerequisite(s): Successful completion of ENGL\& 101.

## ECON 310

MANAGERIAL ECONOMICS
Focuses on forecasting and estimating techniques and on tools used to analyze projects, compare alternatives, and make sound business decisions based on economic principles, such as time value of money, internal rate of return, and cost-benefit ratios.
Prerequisite(s): Successful completion of ENGL\& 101 and MATH\& 146.

ENG 310
BUSINESS COMMUNICATIONS 5CR
Focuses on audience-oriented communication in the business environment. Course content includes writing reports, proposals, memoranda, and emails; graphical presentation of data using Excel; and developing and delivering presentations using PowerPoint and other visual aids.

Prerequisite(s): Successful completion of ENGL\& 101.

## MAT 311

MATHEMATICAL TECHNIQUES
FOR OPERATIONS MANAGEMENT 5CR
Provides students with the foundational mathematical tools required for operations management, including acceptance sampling, decision theory, probability theory, and linear programming.
Prerequisite(s): Successful completion of MATH\& 146.

## MAT 413

## MEASUREMENT AND

STATISTICAL PROCESS CONTROL 5CR
Introduces key tools used in statistical process control, including control charts, continuous improvement, acceptance sampling, and the design of experiments. Also covers fundamental metrology principles, including error measurement and analysis, the impact of temperature and pressure on precision measurement, equipment calibration, and advanced test and measurement techniques.
Prerequisite(s): Successful completion of MAT 311 or instructor's permission.

OPM 312
FORECASTING AND SYSTEM DESIGN
Introduces students to forecasting and capacity planning tools for manufacturing and service organizations. Covers the selection of appropriate processes and facility layouts, the design of work systems, and maintenance planning.
Prerequisite(s): Successful completion of MAT 311 or instructor's permission.

## OPM 313

QUALITY MANAGEMENT
Equips students with the tools used to plan, implement, and manage quality management programs, with special emphasis on process documentation, staff training, and communication of results to management and auditors.

Prerequisite(s): Successful completion of MAT 311 or instructor's permission.

OPM 314
LOGISTICAL PLANNING \&
SUPPLY CHAIN MANAGEMENT 5CR
Introduces students to the complexities of domestic and global supply chains, including consideration of make/buy and outsourcing decisions. Explores the importance of the inventory control and procurement functions and discusses the use of materials resource planning (MRP), manufacturing resource planning (MRPII), and enterprise resource planning (ERP) systems.
Prerequisite(s): Successful completion of MAT 311 or instructor's permission.

OPM 315
LEAN CONCEPTS AND APPLICATIONS
Introduces students to the theory behind Lean, including concepts such as value stream mapping, workplace organization and standardization, 5 - S and cellular flow. Covers Lean terminology, including kanban and total production maintenance, and tools, such as gap analysis, " 5 Whys," root cause analysis, Pareto charts, and cause-effect diagrams.
Prerequisite(s): Successful completion of MAT 311 or instructor's permission.

## OPM 411

FACILITY LAYOUT AND
MATERIALS HANDLING
Covers the design and optimal layout of industrial facilities, materials handling systems, and warehousing for the most efficient flow of raw materials, work-inprocess, and completed product.
Prerequisite(s): Successful completion of MAT 311 or instructor's permission.

## OPM 412

WORKPLACE HEALTH AND SAFETY MANAGEMENT
Provides a foundation for students to take on responsibility for the management of health and safety in the workplace. Covers OSHA and the inspection process, identification of safety hazards and implementation of preventative measures, and developing a formal health and safety training program.

Prerequisite(s): Successful completion of MAT 311 or instructor's permission.

OPM 491
FOCUSED STUDY I 5CR
Provides students with an opportunity to explore an area of professional interest and to develop a greater understanding of that area through focused study and applied research under the direction of a faculty member and/ or industry mentor. The topic to be studied will be agreed on in conjunction with program faculty and approved by the program director, and each course will require both a written report and an oral presentation of the research findings.
Prerequisite(s): Successful completion of MAT 311, OPM 312, ENG 310, and instructor's permission.

## OPM 492

FOCUSED STUDY II
Provides students with an opportunity to explore an area of professional interest and to develop a greater understanding of that area through focused study and applied research under the direction of a faculty member and/ or industry mentor. The topic to be studied will be agreed on in conjunction with program faculty and approved by the program director, and each course will require both a written report and an oral presentation of the research findings.
Prerequisite(s): Successful completion of MAT 311, OPM 312, ENG 310, and instructor's permission.

## OPM 493

FOCUSED STUDY III 5CR
Provides students with an opportunity to explore an area of professional interest and to develop a greater understanding of that area through focused study and applied research under the direction of a faculty member and/ or industry mentor. The topic to be studied will be agreed on in conjunction with program faculty and approved by the program director, and each course will require both a written report and an oral presentation of the research findings.
Prerequisite(s): Successful completion of MAT 311, OPM 312, ENG 310, and instructor's permission.

## OPM 498 CAP

INDIVIDUAL CAPSTONE PROJECT 5CR
Involves the self-directed execution of a project in the field of operations management, employing elements from many of the courses the student has already taken linked together in a methodical, systematic way. The topic to be studied will be agreed on in conjunction with program faculty and approved by the program director. The course requires both a written report and an oral presentation of the project results.
Prerequisite(s): Successful completion of OPM 491 and OPM 492.

## OPM 499cap

GROUP CAPSTONE PROJECT 5CR
Involves working as a team on a project in the field of operations management. The topic to be studied will be chosen by the group, agreed on in conjunction with program faculty, and approved by the program director. The project may be carried out with an industry partner/ employer. The course requires a written project report, an oral presentation of the project results by the group, and individual summary reports by each student.
Prerequisite(s): Successful completion of OPM 491 and OPM 492.

## PHIL 310 ${ }^{\text {DIV }}$

PROFESSIONAL ETHICS 5CR
This course increases students' awareness of ethical dilemmas that might occur at work to show how such ethical issues are subject to management analysis and decision-making action and to provide students with the conceptual tools necessary to identify and develop an acceptable resolution to these dilemmas.
Prerequisite(s): Successful completion of ENGL\& 101.

## PSYC $311^{\text {DIV }}$

INDUSTRIAL \&
ORGANIZATIONAL PSYCHOLOGY 5CR
Examines how people behave and interact with each other at work, with an emphasis on the way that this affects job performance. Topics covered in this course include the development of leadership skills, recruitment and retention, motivation and team building, managing change, and conflict resolution.
Prerequisite(s): Successful completion of ENGL\& 101.

## BIOLOGY

## BIOL\& 160

GENERAL BIOLOGY W/LAB 5CR
Provides an introduction to cellular biology for students preparing for the health professions. Major concepts include the structure, reproduction, and metabolism of cells; genetics; ecological perspectives; and evolutionary biology.
Prerequisite(s): Successful completion of ENG 094 or equivalent.

## BIOL\& 175

HUMAN BIOLOGY W/LAB 5CR
This course is an in-depth approach to body systems, emphasizing the relationship between structure and functions. This is a laboratory course appropriate for non-science majors or for students beginning study in life sciences.
Prerequisite(s): Successful completion of ENG 094 or equivalent.

## BIOL\& 241

HUMAN A \& P $1 \quad 5 C R$
Provides students with the first course of the two-quarter study of body structure and related physiology on cellular-through-system levels. Includes an in-depth study of cells, tissues, and integumentary, skeletal, muscular, nervous, and sensory systems. Laboratory component included.
Prerequisite(s): Successful completion of CHEM\& 110 or higher and BIOL\& 160 or BIOL\& 175. All prerequisite courses must be completed with a grade of 2.0 or better.

## BIOL\& 242

HUMAN A \& P 2 5CR
Provides students with the second course of the two-quarter study of body structure and related physiology on cellular-through-system levels. Includes an in-depth study of body organization and cardiovascular and lymphatic physiological processes. Includes immunology, respiratory, digestive, metabolic, excretory, reproductive, and endocrine systems. Laboratory component included.
Prerequisite(s): Successful completion of BIOL\& 241 with a grade of 2.0 or better.

BIOL\& 260
MICROBIOLOGY
5CR
Provides students with the content of diversity, structure, and physiology of beneficial and harmful microbes. Laboratory practice in identification of microbial species through culturing, staining, and biochemical testing. Includes laboratory.
Prerequisite(s): Successful completion of BIOL\& 160 with a grade of 2.0 or better and CHEM\& 110 with a grade of 2.0 or better.

## CENTRAL SERVICE/ STERILE PROCESSING

## MMN 103

## INTRODUCTION TO THE PROGRAM \& THE HEALTH CARE INDUSTRY

Covers overall program content, including policies, procedures, philosophy, and terminal objectives. Explores the history and evolution of the central service profession, human relations, legal issues, and regulatory agencies affecting the field. Web enhanced.

## MMN 106 <br> ANATOMY \& PHYSIOLOGY/ MEDICAL TERMINOLOGY 4CR

 Explores the overall makeup of the human body, its systems and functions, and related medical and surgical terminology. Surgical instrumentation is introduced. Web enhanced.Prerequisite(s): Successful completion of MMN 103.

## MMN 111 <br> MICROBIOLOGY/INFECTION CONTROL

3CRCovers the examination of human pathogens in microbiology. Students will learn about infection control as it relates to the sterilization process. Safety issues in the health care environment are covered, including bloodborne pathogens. This unit satisfies the Washington state law for mandatory HIV training for all medical personnel. Web enhanced.

Prerequisite(s): Successful completion of MMN 103 and MMN 106.

## MMN 124

SURGICAL INSTRUMENTATION 4CR
In this course, students learn to identify basic and complex surgical instruments. They will demonstrate thorough knowledge of the manufacture, care, and processing of surgical, endoscopic, and power instruments. In addition, students will have an understanding of special protocols required with loaner instruments. Web enhanced.

Prerequisite(s): Successful completion of MMN 103, MMN 106, and MMN 111.

## MMN 126

PRINCIPLES AND METHODS OF
CLEANING \& DISINFECTING 6CR
Includes classroom and laboratory experience in the fundamentals of cleaning and disinfection. Topics include cleaning and disinfecting chemicals, handling and transporting of patient care equipment, and general decontamination protocols for instruments and equipment. Students will gain knowledge and experience with high-level disinfection and flexible endoscopes. The proper and safe handling of infectious waste is included. Web enhanced.

Prerequisite(s): Successful completion of MMN 103, MMN 106, MMN 111, and MMN 124.

## MMN 129

PRINCIPLES AND PRACTICES OF STERILIZATION
Students learn techniques and practice in the packaging, assembly, and sterilization of procedural trays, instrument sets, and sterile supplies. Major topics include methods of high- and low-temperature sterilization, sterilization chemicals, and packaging materials. Guidelines for point-of-use processing and transport are discussed. Operations, parameters, and maintenance of various sterilizers are learned, as well as monitoring of the sterilization process and quality control. Proper storage and storage concerns for sterile supplies are included.

Prerequisite(s): Successful completion of MMN 103, MMN 106, MMN 111, MMN 124, and MMN 126.

## MMN 132

MATERIEL MANAGEMENT/ CENTRAL SERVICE APPLICATIONS 3CR This course is an overview of the handling and distribution of materiels in a medical facility. Topics covered include inventory management, replenishment methods, and tracking systems. Students become familiar with quality assurance measures and techniques.

Prerequisite(s): Successful completion of MMN 103, MMN 106, MMN 111, MMN 124, MMN 126, and MMN 129.

MMN 213
CLINICAL INTERNSHIP I 6CR
Provides students with the opportunity to apply the theories and principles of central service and sterilization learned in the classroom to the actual work experience in a central service, sterile processing, or distribution department. The role of the central service technician in a hospital central service/sterile processing department will be the focus. In order to participate in the clinical aspect of the program, students must receive a clear background check as required by the health care facilities, have proof of current immunizations, complete CPR for health care professionals, be able to lift 50 pounds, and be able to work on their feet for up to eight hours.

Prerequisite(s): Successful completion of MMN 103, MMN 106, MMN 111, MMN 124, MMN 126, MMN 129, and MMN 132.

MMN 215
CLINICAL INTERNSHIP II 6CR
Continued participation in the clinical setting at local facilities allows students to gain a variety of experiences in central service/ sterile processing and materiel management. Requirements are the same as MMN 213.

Prerequisite(s): Successful completion of MMN 213.

## CHEMISTRY

## CHEM\& 110

CHEMICAL CONCEPTS W/LAB 5CR
An introduction to chemistry intended for non-science majors. This course looks at how models of atoms, bonding, and the structures of materials provide an understanding of common chemical properties and reactions.

Co-requisite(s): Students who have not completed MAT 099 or achieved an Accuplacer advanced algebra score of 233 or equivalent or higher must take MAT 099 concurrently with this course.

CHEM\& 121
INTRO TO CHEMISTRY
Understanding the metric system, atomic theory, bonding, quantitative relationships, solutions, gases, acids and bases, salts, and nuclear chemistry. Lab included.
Prerequisite(s): Successful completion of CHEM\& 110 or high school chemistry.
Co-requisite(s): MAT 099 or higher or appropriate Accuplacer placement or equivalent concurrently with this course.

## CHEM\& 131

INTRODUCTION TO ORGANIC/ BIOCHEMISTRY
This course is a survey of organic and biochemistry. The following topics are covered: Nomenclature of organic matter, alcohols, alkenes, organic acids and bases, amines and amides, carbohydrates, proteins, enzymes, nucleic acids, and metabolic pathways.

Prerequisite(s): Successful completion of CHEM\& 121.

## CHEM\& 161

GENERAL CHEMISTRY WITH LAB I 5CR
Course covers methods and measurements, including significant figures and scientific notation, states of matter, atomic structure, the periodic table, ionic and covalent bonding, and calculations and chemical equations, including the mole.
Prerequisite(s): Successful completion of MATH\& 141 and one year of high school chemistry or CHEM\& 121 or other collegelevel chemistry class.

## CHEM\& 162

GENERAL CHEMISTRY WITH LAB II 5CR A continuation of general chemistry with instruction in properties of solutions, calculation of solution concentrations, thermodynamics, acids and bases, oxidation and reduction, and radioactivity. Also covers the structure, properties, and nomenclature of organic molecules.
Prerequisite(s): Successful completion of CHEM\& 161 or acceptable equivalent.

## COLLEGE SUCCESS

## SVL 101

SERVICE LEARNING
3CR
Participate in organized service that addresses local community needs - specifically, the issue of poverty - while developing academic and professional skills. Work directly with community partners to link community activities and projects to academic growth and self-discovery through reflection. Relate service experience to local and global social issues, and broaden knowledge of your chosen profession. Requires a minimum of 20 hours of community service work in addition to class assignments and activities.

## COLL 102

COLLEGE SUCCESS FOR ALL 3CR
College Success for All prepares students for success at Clover Park Technical College and beyond. This class is offered pass/fail and utilizes CANVAS, CPTC's online learning management system, to familiarize students with this learning environment. Designed to provide students with the basic skills to be successful in college by developing connections with campus resources, faculty, staff, and peers. The course includes 20 hours of classroom instruction and 20 hours of online and computer work. It includes, but is not limited to: study skills, learning styles, communication skills, time management, campus resources, test taking strategies, diversity, and campus policies and procedures. This class also includes mandatory safety and FERPA training, along with SALT component for financial planning.
Prerequisite(s): None, but required for all students.

## COMMUNICATION

## CMST\& 220

PUBLIC SPEAKING
5CR
An Open Course Library class with inexpensive course materials. Assists students in developing real-world oral communication skills. Capture the dynamics of today's business realities and see the benefits of effective communication. Selection of topics, library research, analysis, oral style, use of visual aids, and preparation and delivery of various types of speeches and oral presentations are included. The Internet, email, community interaction, and other practical tools support student learning and increase public speaking skills. Emphasis is placed on principles of cultural diversity.
Prerequisite(s): Appropriate Accuplacer (283 in reading) placement score or equivalent or successful completion of ENG 094.

## COMPOSITES

## ACM 105

BASIC MATHEMATICS, BASIC PHYSICS, AND WEIGHT

## \& BALANCE

5CR
Perform all of the mathematical computations required in the Advanced Manufacturing curriculum. Understand the scientific principles that apply to the operation of aircraft, engines, and the equipment that Advanced Composite Manufacturers will be in daily contact with. Students will develop a comprehensive understanding of the importance of weight and balance to aircraft safety and make all of the required calculations for weight and balance checks, equipment changes, extreme loading checks, and the addition of ballast.

## ACM 110

BLUEPRINTS; DRAWINGS; AND PRECISION MEASURING 4CR Determine and identify dimensions of a part from drawings, including orthographic and isometric projections. Sketch objects/parts in either orthographic or isometric views.

## ACM 115

MATERIALS AND PROCESSES/ LAB AND EQUIPMENT SAFETY
Students will identify and determine the proper use of fasteners, demonstrate a basic understanding of aircraft hardware identification and terminology, learn about lab safety and the proper use of tools, calculate/ apply torque values, and perform precision measurements.

## ACM 120

COMPOSITE FABRICATION 4CR
Learn manufacturing methods and processes commonly used for the fabrication of composite materials. Instruction includes material choices, fabrication techniques, material handling, and safety procedures.
Prerequisite(s): Successful completion of ACM 105, ACM 110, and ACM 115 (GPA 2.0 or better).

## ACM 125

COMPOSITE ASSEMBLY 4CR
Identify and use appropriate materials and processes to assemble structures made of composite materials. Includes room temperature and elevated temperature bonding, drilling, countersinking, and installing mechanical fasteners and potted fasteners.
Prerequisite(s): Successful completion of ACM 105, ACM 110, and ACM 115 (GPA 2.0 or better).

## ACM 130

COMPOSITE REPAIR 4CR
Inspect, test, and repair composite structures. This course explains how imperfections affect composite properties and provides hands-on training for the repair of defects.
Prerequisite(s): Successful completion of ACM 105, ACM 110, and ACM 115 (GPA 2.0 or better).

## ACM 145

SPECIAL PROJECTS 3CR
Develops skills in print reading, project planning, layout, distortion control, fixturing, and other fabrication techniques. Students will have the opportunity to apply knowledge to projects of personal interest and/or as assigned.
Prerequisite(s): Successful completion of ACM 105, ACM 110, and ACM 115 (GPA 2.0 or better).

## COMPUTER <br> APPLICATIONS

## CAS 105

KEYBOARDING
3CR
Use computers to develop touch control and proper keyboarding techniques; introduction to basic word-processing functions.

## CAS $115^{\text {cL }}$

INTRODUCTION TO COMPUTING 3CR Explore personal computer concepts from a user's perspective. In this introductory course, learn computer terminology; run programs; save, retrieve, and search for files; use help; and perform computer maintenance. Develop basic skills in word processing, Internet, email, and PowerPoint.

## CAS $121^{\text {cl }}$

## WORD I

Use beginning word-processing techniques while creating and editing business documents. Create tables, columns, envelopes, and mailing labels. Work with special features to track and review changes and compare documents.

## CAS $1^{\circ}{ }^{\text {cL }}$

WORD II
Explore advanced word processing with Microsoft Word. Perform mail merges, create styles, use advanced graphics tools, create basic forms with formulas, and use advanced report functions, including indexes. Create macros and modify the Word environment.
Prerequisite(s): Successful completion of CAS 121.

CAS $130^{\mathrm{cl}}$
EXCELI
Create and analyze professionally formatted spreadsheets. Enter data, formulas, and functions. Create charts and insert graphics. Sort and filter lists.
Prerequisite(s): MAT 092 skills preferred.
CAS 135 ${ }^{\text {cl }}$
EXCEL II
Use advanced spreadsheet features and functions to analyze and project data. Learn how to use what-if analysis tools, such as scenarios and solver. Create macros; validate data; link worksheets/books; use pivot tables; find errors; and share, merge, and protect workbooks.
Prerequisite(s): Successful completion of CAS 130.

## CAS $141^{\text {cl }}$

## POWERPOINT

 3CRCreate professionally formatted presentations that include animation and transitions. Insert and format charts, graphics, diagrams and pictures. Save presentations for various delivery options.

## CAS 145 ${ }^{\text {ct }}$

PUBLISHER
5CR
Explore desktop publishing in this projectbased class. Create and edit flyers, newsletters, brochures, logos, calendars, and various business publications. Use mail merge to create letters and labels. Use tools to edit text, colors, graphic-design objects, and logos. Prepare files for commercial printing.

## CAS 151

ACCESS I 3CR Develop basic relational databases as you create, edit, format, and print tables, queries, forms, and reports. Copy records and import tables from another Access database. Define field properties and create relationships. Run, sort, and filter queries. Use comparison and logical operators and perform calculations. Explore the basics of creating a cohesive database.

## COMPUTER <br> NETWORKING \& <br> INFORMATION <br> SYSTEMS SECURITY

NSS 101
IT ESSENTIALS I
Introduces students to the knowledge and skills necessary to competently install, build, configure, upgrade, troubleshoot, and repair PC-compatible hardware, including troubleshooting basic networks and Internet connectivity. Additionally, this course will cover the latest memory, bus, peripherals, and wireless technologies.

## NSS 105 ${ }^{\text {cl }}$

IT ESSENTIALS II 4CR
Introduces students to the knowledge and skills necessary to competently use, install, configure, upgrade, and troubleshoot current operating systems technologies.
Prerequisite(s): Successful completion of NSS 101 or instructor's permission.

## NSS 109

CISCO NETWORKING I
The first of four courses in the new Cisco NetAcad CCNA Routing and Switching curriculum, which teaches basics of Ethernet technologies, cabling LANS and WANS, network media, basics of TCP/IP and IP addressing, and routing fundamentals.

## NSS 120

MS DESKTOP SUPPORT I 5CR
Introduces students to the knowledge, skills, and tasks necessary to troubleshoot basic problems computer users will face while running a desktop operating system.

## NSS 125

MS DESKTOP SUPPORT II 4CR
Introduces students to the knowledge, skills, and tasks necessary to troubleshoot basic problems computer users will face related to configuring and maintaining applications running on a desktop operating system.
Co-requisite(s): NSS 120 or instructor's permission.

## NSS 127

SCRIPTING FOR NETWORK
ADMINS II 4CR
This introductory scripting course is designed to provide students with the fundamental knowledge and skills to use scripting to automate administrative tasks commonly used by system administrators.

## NSS 135

IMPLEMENTING SYSTEM SECURITY4CR
Capstone course of general security concepts, communications security, infrastructure security, basics of cryptography, and organizational security. Includes access, attacks, auditing, vulnerabilities, devices, algorithms, protocols, disaster recover, and documentation.

NSS 139
SERVER OS INSTALLATION AND CONFIGURATION
Introduces knowledge, skills, and tasks necessary to deploy, support, and secure Windows server network operating systems in a variety of stand-alone and enterprise network environments. Provides hands-on training for Information Systems Security professionals responsible for managing accounts and resources, maintaining server resources, monitoring server performance, safeguarding data, and securing server network operating systems. Provides guidance for students pursuing industry certification.

## NSS 141

DIGITAL FORENSICS
Introduces the use of software to perform recovery of deleted or corrupted data. Techniques will be used to demonstrate the use of statistical analysis practices to predict or show trends involving security issues of access, crime, or loss prevention.

## NSS 145

SERVER SECURITY
Introduces the use of security best practices to harden server operating systems. Successful students will manage the protection of Active Directory by implementing Group Policy changes, reading $\log$ files, and integrating threat management detection systems to defend server operating systems.

## NSS 156

CYBER SECURITY FUNDAMENTALS 4CR
This course introduces students to the evolving field of cybersecurity. Students will learn about common cyber-attacks and the techniques used to identify, detect, and defend against cybersecurity threats. They will also gain a basic understanding of personal, physical, network, Internet, and enterprise security. This course also provides a foundation for more advanced study of cybersecurity.

## NSS 160

INTRODUCTION TO LINUX 5CR
Introduces the fundamentals of the Unix/ Linux operating system, concepts, architecture, and administration. Students will practice these basic concepts and approaches using LINUX.

NSS 161
ADMINISTERING WINDOWS

## SERVER OS

Introduces the knowledge and skills necessary for systems administrators to successfully implement core services in Windows server operating systems. Provides extensive hands-on training for information systems security professionals responsible for installing and maintaining a variety of network services including DHCP, DNS, IP addressing, and Virtual Private Networks.
Prerequisite(s): Successful completion of NSS 139 or instructor's permission.

## NSS 164

VIRTUALIZATION AND CLOUD TECHNOLOGIES 4CR
Introduces virtualization and cloud technologies needed to advance in today's technology workplace. Provides an overview of virtualization and cloud technologies focusing on using virtualization software in networked environments in building virtual networks, implementing clusters, enhancing performance and security, and using virtualization and cloud management tools to centralize management of multiple virtual servers. This class includes opportunities for hands-on learning experiences to build the skills necessary for a successful career in the computer industry, which is increasingly focused on virtualization.

Prerequisite(s): Successful completion of
CompTIA's A+ and Network+ certifications or equivalent training.

## NSS 180 ${ }^{\text {cap }}$

INTERNSHIP |
2CR
On-the-job practical field experience combining classroom study with related work experience under the supervision of an employer. Includes scheduled seminars.
Prerequisite(s): Instructor's permission.

## NSS 201

ADVANCED LINUX 5CR
Advanced fundamentals of the Linux operating system, servers, and desktop computers. This course is a hands-on, practical approach to the advanced abilities and usage of Linux system concepts, architecture, and administration.
Prerequisite(s): Successful completion of NSS 160 or basic understanding of the Linux Operating System.

NSS 206
ADVANCED WINDOWS SERVER CONFIGURATION
Introduces knowledge, skills, and tasks necessary to deploy, support, and secure Windows server network operating systems in a variety of stand-alone and enterprise network environments. Provides extensive hands-on training for information systems security professionals responsible for installing and maintaining a variety of network roles. Includes Active Directory, Group Policies, Certification Authority and Rights Management.
Prerequisite(s): Successful completion of NSS 161 or instructor's permission.

## NSS 250ㄷAP

INTERNSHIP II
2CR
This course provides practical field experience in a security-related specialty area. Includes scheduled seminar.

Prerequisite(s): Instructor's permission.

## NSSB 203

PENETRATION TESTING AND
SECURITY ANALYSIS
5CR
Introduces the history of hacking, its various forms, examples of the latest attacks, tools, and techniques employed by today's hackers. Includes countermeasures that help illustrate how to protect against these devastating maneuvers.

Prerequisite(s): Successful completion of NSS 135.

## NSSB 210

SECURITY LEARNING LAB I 3CR
Provides opportunities for students to gain the knowledge, enhance their skills, and provide hands-on experience needed or required within the industry to be successful in the security field.
Co-requisite(s): NSSB 203 and NSSB 232.

COMPUTER FORENSICS
4CR
Basic practices and techniques used in computer forensics. This course introduces the chain of custody and determination of the sequence of events when a misuse or crime is suspected. Topics include evidence collection and analysis, interpretation of clues from mail messages, news posting, and file signatures on hard drives and other computer storage media.
Prerequisite(s): Successful completion of NSS 141.

NSSB 220
SECURITY LEARNING LAB II 3CR
Provides opportunities for students to gain the knowledge, enhance their skills, and provide hands-on experience needed or required within the industry to be successful in the security field.

Co-requisite(s): Concurrently enrolled in NSSB 215 and NSSB 246.

NSSB 232
INVESTIGATION AND RESPONSE 5CR
Analyze the risks involved and determine what level of security is needed to operate a website. Topics include how to protect a web setup from intrusion, sabotage, eavesdropping, and tampering, and view the website with existing tools and techniques of hackers. Develop a secure website plan to select, secure, configure, and set up firewalls, as well as secure an extended and distributed enterprise network or Virtual Private Network.

NSSB 246
SCRIPTING FOR PENETRATION TESTERS
Introduces scripting languages used for one-off programming jobs or prototyping and their use for large generic applications as a flexible way to configure and secure generic software components to fit specialist requirements. This class will illustrate some practical applications of scripting and provide an introduction to some of the most widely used scripting languages.

## NSSC 201

## CISCO NETWORKING II <br> 5CR

The second of four courses in the new Cisco NetAcad CCNA Routing and Switching curriculum. Includes the basics of configuring routers, routing protocols, TCP/IP concepts, access control lists, and network troubleshooting skills.
Prerequisite(s): Successful completion of NSS 109.

Co-requisite(s): NSSC 201 and NSSC 203 are half-quarter stacked courses offered during the same quarter. Students must register for both during the same quarter.

## NSSC 203

CISCO NETWORKING III 5CR
The third of four courses in the new Cisco
NetAcad CCNA Routing and Switching curriculum. Includes VLSM, basics of OSPF and EIGRP, switch concepts and configuration, Spanning Tree Protocols, VLANs, and VTP.

Co-requisite(s): NSSC 201 and NSSC 203 are half-quarter stacked courses offered during the same quarter. Students must register for both during the same quarter.

NSSC 205
CISCO NETWORKING IV
The last of four courses in the new Cisco NetAcad CCNA Routing and Switching curriculum. Includes PPP, ACLs, and BPG technologies.

Prerequisite(s): Successful completion of NSSC 203
Co-requisite(s): NSSC 210.

NSSC 207
CISCO LEARNING LAB I 3CR
Provides opportunities for students to gain the knowledge, skills, and hands-on experience needed to prepare for the Cisco CCENT certification exam.

Co-requisite(s): This course is only for students pursuing the Cisco Network Design \& Security Certificate and must be taken concurrently with NSSC 201 and NSSC 203.

## NSSC 208

MANAGING NETWORK SECURITY 5CR Introduces knowledge and skills needed to install, configure, operate, manage, and verify network security products and security features. The course focuses on implementing IP network security.

Prerequisite(s): Successful completion of NSSC 205 or current CCENT certification.

Co-requisite(s): NSSC 210.

## NSSC 210

CISCO LEARNING LAB II
Provides opportunities for students to gain the knowledge, skills, and hands-on experience needed to prepare for the Cisco CCNA certification exam.

Co-requisite(s): NSSC 205 or NSSC 208.

## COMPUTER <br> PROGRAMMING

CPW 101 ${ }^{\text {cl }}$
PROGRAMMING FUNDAMENTALS 5CR
This course is an introduction to programming concepts that enforces good programming style and logical thinking. Designed for students with little or no programming language experience, it begins with basic general programming concepts and key concepts of structure. The course then progresses to the intricacies of decisionmaking, looping, array manipulation, and methods.

## CPW 116

.NET PROGRAMMING
Create programs using the .NET Framework, with focus on desktop and console applications. Use decision structures, loops, and arrays to solve problems. Apply exception handling and data validation to programs. Use the predefined libraries in .NET Framework to solve problems. Create methods and learn to pass and return arguments. Create classes, and use the classes as objects in programming. Use databases to store and retrieve the data from the applications.

Prerequisite(s): Successful completion of CPW 142 and CPW 210.

## CPW 118

WEB DESIGN PRINCIPLES
Explore how the web works and methods and limitations of delivering content on the web.
Examine usability issues, such as interface design and structure and how to accommodate a wide variety of viewports, from smartphones to cinema screen computer monitors. Students will build a four-page portfolio-style website and post it to the Internet

## CPW 142

JAVA OBJECT-ORIENTED PROGRAMMING I
Construct a foundation of procedural programming concepts and skills requisite for professional object-oriented software development. Use Java, a modern-structured, object-oriented language, to develop your problem-solving and algorithm formulation skills.

Prerequisite(s): Successful completion of CPW 101 and MAT 094.

## CPW 143

JAVA OBJECT-ORIENTED PROGRAMMING II
Build your problem-solving skills with the fundamental concepts and techniques of object-oriented Java programming in analyzing, designing, and implementing computer programs. Practice problem-solving methods and algorithm development to analyze, design, implement, modify, verify, and document computer programs that solve real-world problems. Develop a good conceptual understanding of data and functional abstraction

Prerequisite(s): Successful completion of CPW 142.

## CPW 150

PRINCIPLES OF RELATIONAL DATABASES
Delve into the fundamental concepts, terminologies, methodologies, and system organizations of database management systems. Develop the theoretical foundation of understanding necessary to design, implement, optimize, query, and maintain a database system. Propose, design, and develop a database, using a relational database management system to reinforce the theoretical concepts.

## CPW 203

ADVANCED JAVASCRIPT
Reinforce fundamentals and create larger applications using JavaScript. Dive deeper into event-driven programming. Update web pages dynamically by manipulating the HTML Document Object Model (DOM). Learn how to integrate existing JavaScript libraries and frameworks into your applications.
Prerequisite(s): Successful completion of CPW 223.

## CPW 205cAP

OBJECT-ORIENTED ANALYSIS \& DESIGN 5CR
Explore methodologies and technologies used in analyzing, designing, and developing object-oriented software systems intended to solve real-world problems. Build on the Systems Development Life Cycle model initially presented in the CPW 101 course to model and design systems using tools such as CRC cards and the Unified Modeling Language, which includes class, use case, and sequence diagrams. Discuss the theoretical and practical aspects of object orientation.
Prerequisite(s): Successful completion of CPW 245.

CPW 210
ADVANCED DATABASE PROGRAMMING
Advanced database programming using a commercial relational database management system. Perform object creation, manipulation, and control using SQL. Write simple and complex queries to solve problems. Create advanced objects like stored procedures and triggers. Explore nonrelational systems and business intelligence.
Prerequisite(s): Successful completion of CPW 101, CPW 150.

## CPW 212

ADVANCED .NET PROGRAMMING 5CR
Learn advanced .NET programming - writing classes, working with indexers, overloading operators, and other advanced object-oriented concepts. Work with databases using ADO.
NET, databinding, and object-relational mappers. Learn techniques for working non-relational data storage.
Prerequisite(s): Successful completion of CPW 116.

## CPW 213

.NET WEB PROGRAMMING 5CR
Earn professional experience in analyzing, designing, and developing dynamic, datadriven, commercial web applications using Microsoft ASP.NET. Gain a solid foundation in web development covering topics from state management, security, using various data stores, working with forms, and more.
Prerequisite(s): Successful completion of CPW 116 and CPW 203.
Prerequisite or Co-requisite: CPW 212.

## CPW 215 <br> ADVANCED .NET WEB

PROGRAMMING 5CR
Build upon existing fundamental ASP.NET
skills. Learn how to build scalable, secure, and maintainable web applications. Apply advanced object-oriented techniques while diving deeper into design patterns. Learn how to create and consume web services. Explore server architecture and data storage options with the public cloud.

Prerequisite(s): Successful completion of CPW 212 and CPW 213.

## CPW 217CAP

PORTFOLIO
Build a portfolio website showcasing skills developed in the Computer Programming program. Create a fully functional website from start to finish. Analyze and derive requirements by creating a project proposal or by working with an actual client. Larger projects will utilize source control and emphasize team work.
Prerequisite(s): Successful completion of CPW 215.

## CPW 218

C++ 5CR
Deals with learning programming using C++ as the primary language, with a focus on problem-solving and introduction to object-oriented concepts and terms.
Prerequisite(s): Successful completion of CPW 245.

## CPW 223

INTRODUCTION TO JAVASCRIPT 5CR
Introduces the fundamentals of working with JavaScript. Applies variables, objects, arrays, strings, conditional statements, and external data to create dynamic, interactive web pages.
Prerequisite(s): Successful completion of CPW 101 and CPW 118.

## CPW 240

PROGRAMMING PRACTICUM 5CR
Programming on a medium scale in objectoriented development, consolidating prior programming principles and expanding knowledge of application design. This course introduces students to some concepts of advanced programming. Topics may include Graphical User Interface (GUI), Java Database Connectivity (JDBC), multithreading, inner classes, collections, exceptions, file I/O (NIO), networking, reflection, Swing, Remote Method Invocation (RMI), Naming Service (JNDI), Serialization, Servlets, and JavaServer Pages (JSP).
Prerequisite(s): Successful completion of CPW 245.

## CPW 245

DATA \& LOGIC STRUCTURES 5CR
Expand your understanding of object-oriented programming techniques by implementing abstract data types as data structures in solving complex computing problems. Study the fundamental algorithms of computer science while using mathematical principles to analyze the efficiency of their implementation.
Prerequisite(s): Successful completion of CPW 143.

## CPW 252

## PHONE PROGRAMMING

 5CRCovers the concepts involved with programming on the phone - source control, phone emulators, phone APIs, and deployment.
Prerequisite(s): Successful completion of CPW 245.

## CPW 299CAP

INTERNSHIP
Earn college credit by applying learned technical skills in professional work experiences directly related to your studies in Computer Programming and Web Development. Perform 165 hours of part-time or full-time labor as an intern with a public or private enterprise, as a paid employee, or as a volunteer. Study and practice in resume building, interviewing, and job-search skills by actually identifying and then applying for an intern position. Work site supervisor and CPW faculty will jointly evaluate your performance.
Prerequisite(s): Instructor's permission.

## CONSTRUCTION TECHNOLOGIES

## CONST 102

SAFETY \& OPERATING
CERTIFICATES
3CR
Presents the basic elements of safe practices related to construction job sites, emphasizing accident prevention and correct response in the event of injury and other medical emergencies on the job, as well as personal protective equipment that is standard in the industry. Participants receive instruction in administering First Aid, CPR and AED (defibrillator use), as well as how to protect themselves against Bloodborne Pathogens (BBP). Provides Forklift Operator Certification with classroom and hands-on training in safe forklift operation; Lead Renovation, Repair and Painting certification (Lead RRPrequired by EPA to engage in remodeling certain types of older structures), OSHA 10 Construction Safety card, and American Heart Association First Aid and CPR certification card.

Prerequisite(s): Physical capability to do the work required.

## CONST 104

TRADES MATH \& PRINT READING FOR CONST.
Provides a basic foundation of math skills directly related to performing functions required in the construction trades, along with essential knowledge required to accurately read and interpret blueprints, plans, and schematics. Math skills and the ability to correctly interpret plans/prints are critically important to the construction process to ensure jobs are completed professionally and on time. This foundational training includes, but is not limited to, ability to measure and cut various materials correctly, understand and use the metric system of measurement, solve questions related to weight, volume, pressure, angles of fall, etc., and understand "scale" and its relationship to the finished product.

## CONST 106

BASIC CARPENTRY SKILLS
Introduces basic tools of the trades with a focus on carpentry and provides hands-on experience in the proper techniques for safe use of various hand and power tools as well as their correct care, maintenance and storage. Participants will learn how to set up an efficient work station, how various parts of a structure are framed up, and the basic principles of electric power and how that relates to employing proper electrical connections when using power tools. Students will be drilled on essential hands-on skills needed to pass entry assessments for the United Brotherhood of Carpenters carpentry apprenticeship program.

## CONST 109

EMPLOYMENT PREPARATION 4CR
Explains the history of apprenticeship, its subsequent evolution into the present-day form, and how this translates into an effective method of on-the-job training resulting in journeyman credentials that are recognized industrywide throughout this country and in many other parts of the world. Provides an overview of government agencies, regulatory bodies and actual regulations that affect the construction industry. Participants are also given information related to job success, including but not limited to, ethical standards, attitude and behavioral expectations, teamwork and communication strategies, personal financial management, ergonomics, physical fitness and nutrition, and use of basic MS Office computer programs to conduct job search activities.

## CONST 112

FOOTINGS \& FOUNDATIONS
Introduction to the methods of construction footing and foundation forms, terminology, and inspections for the typical residential home.

## CONST 116

FLOOR FRAMING 3CR
Introduction to the construction procedures and terminology used in framing a residential wood floor.

## CONST 120

## WALL FRAMING, SHEETING \&

 CEILINGSIntroduction to wall-framing construction procedures and terminology, the application of ceiling and/or two-story framing, inspections, sheeting, and aligning.

## CONST 122

ROOF FRAMING
5CR
Introduction to roof framing and the use of a framing square, including both truss roofs and stick-built residential roofs.

## CONST 126

ROOFING MATERIALS \&
INSTALLATION 3CR
Introduction to various roofing materials, including proper installation techniques.
Prerequisite(s): Successful completion of CONST 102, CONST 104, CONST 106, and CONST 109.

## CONST 134

EXTERIOR FINISH
Introduction to the installation of exterior trim, siding, window, and door installation, or the equivalent on typical residential homes.

Prerequisite(s): Successful completion of CONST 102, CONST 104, CONST 106, and CONST 109.

CONST 139
INTERIOR FINISH I
Introduction to interior wall and ceiling finish, interior doors and hardware, cabinet and countertop installation, and interior trim and finish flooring.
Prerequisite(s): Instructor's permission.

## CONST 142

INTERIOR FINISH II
Continuation of interior wall and ceiling finish, interior doors and hardware, cabinet and countertop installation, and interior trim and finish flooring.
Prerequisite(s): Successful completion of CONST 102, CONST 104, CONST 106, and CONST 109.

## CONST 144

ELECTRICAL AND PLUMBING BASICS
Introduction to basic home electrical, switches, outlets, wiring, and plumbing pipes, drains, faucets and leaks.

Prerequisite(s): Instructor's permission.

## CONST 152

LEED
2CR
Introduction to LEED for new construction and renovations.

Prerequisite(s): Instructor's permission.

## CONST 155

DECKING
Introduction to outside deck construction, including types, code requirements, and safety.

Prerequisite(s): Instructor's permission.

## CONST 158

ENERGY AUDITOR
5CR
Introduction to trade regulations, other building trades workers, industry and standards organization, and entering the carpentry trade.

Prerequisite(s): Instructor's permission.

## CONST 160

HOME INSPECTOR
4CR
Overview of equipment, technology, systems, and software used to measure a building's structural and physical integrity.

Prerequisite(s): Instructor's permission.

## SBS 107

SUSTAINABILITY BUILDING
BASICS 4CR
Overview of sustainable "green" building
models, with a focus on energy, indoor health, natural resources and other environmental impact.

## SBS 121

SURVEY OF ENERGY RATINGS 3CR
Introduction to the current and emerging efficiency standards for measuring energy usage and consumption, including but not limited to Energy Star, BPI, LEED, Built Green, etc.

Prerequisite(s): Instructor's permission.

## SBS 130

ALTERNATIVE ENERGY SYSTEMS
An overview of existing and emerging approaches to energy production for use in residential and commercial structures, including but not limited to, solar/ photovoltaics, wind, geothermal, biofuels, etc.

## SBS 142

BUILDING ENVELOPE
4CR
Introduction to the principles of heat, light, sound, moisture, and air movement within a residential structure, including an overview of external factors that impact a building's energy integrity.

## SBS 150

MOISTURE MITIGATION 3CR
Introduction to practices in construction that prevent moisture intrusion, as well as techniques for maintaining healthy living environments free from the destructive impacts of moisture.

SBS 174
BASIC DIAGNOSTICS AND TESTING
Overview of the equipment, technology, systems, and software used to measure a building's energy usage and loss.

## SBS $185^{\circ}{ }^{\circ}$

SERVICE LEARNING PROJECT 3CR
A capstone project that gives students an opportunity to apply their sustainable building science knowledge in a real-life setting, focusing on helping nonprofit organizations achieve sustainability in the buildings where they live, work, and serve the public.

## CORE ALLIED HEALTH

## CAH 102

MEDICAL TERMINOLOGY I
Provides students with the basic techniques of medical word building using basic word elements. The class will be organized according to specific body systems and will include key terms and the introduction of anatomical, physiological, and pathological terms.

## CAH 105 ${ }^{\text {cl }}$

COMPUTER APPLICATIONS 5CR
Introduction course to the use of Microsoft Office and related online programs. Students will become familiar with online tools and learn team-based objects while developing a proficiency in the use of technology.

## COSMETOLOGY

COSMO 112
INFECTION CONTROL PRINCIPLES \& PRACTICES
Acquire knowledge for successful and responsible infection control, first aid, and safety. Learn and apply concepts of microbiology for safe handling of tools, proper dispensing of chemicals, and prevention of the spread of bacteria in a school or salon as required by state board regulations. Obtain Barbicide certification.
Prerequisite(s): Instructor's permission.

## COSMO 116

GENERAL SCIENCE OF HAIR 5CR
Learn why professional hair services must be based on an understanding of the growth, structure, and composition of hair. Gain skills in evaluating various hair and scalp conditions. Understand the purpose for draping and scalp massage as a foundation for attentive client care services.
Prerequisite(s): Instructor's permission.

## COSMO 123

COSMETOLOGY FUNDAMENTALS 2CR
Study design and art principles to assist in achieving customized designs for the client. Gain skills in the art of consultation while developing professional behaviors for salon success and effective communication.
Prerequisite(s): Instructor's permission.

## COSMO 136

APPLICATION OF HAIRCUTTING AND HAIRSTYLING

14CR
This course introduces the fundamentals of haircutting techniques and thermal styling. This course will include safe use of shears, taper shears, and razor. Thermal Styling will introduce the purpose and use of brushes and various irons for styling to complete a finished design. Infection control and safety processes required by salon and state board regulations are reinforced.

Prerequisite(s): Instructor's permission.

## COSMO 142

ADVANCED APPLICATIONS OF HAIRCUTTING AND HAIRSTYLING 4CR
This course presents techniques and procedures for fundamental clipper cutting, which build on the theory and previous experiences of haircutting and enables students to be current in haircutting trends. Wet Styling introduces finger waving, pin curling, and roller placements, along with long hair designs. Infection control principles and practices are reinforced.
Prerequisite(s): Successful completion of COSMO 136.

## COSMO 146

CHEMICAL TEXTURE SERVICES 5CR
Presentation of the three main concepts of chemical texturizing commonly known as permanent waving, relaxing with chemicals, and curl reforming and straightening.
Brazilian blowout certification is achievable through this course. This course covers the theory of chemical texturizing and the tools used to achieve desired effects, infection control principles and practices, and client consultation.
Prerequisite(s): Successful completion of COSMO 112, COSMO 116, COSMO 123, and COSMO 136.

## COSMO 158

GENERAL SCIENCE OF HAIR
COLORING
7CR
Introduction to the creative artistry of color through the study of color theory, the use of the color wheel, and basic color applications and techniques. Formulating color will also be presented.
Prerequisite(s): Successful completion of COSMO 112, COSMO 116, COSMO 123, and COSMO 136.

## COSMO 163

LAB CLINIC II
Experience hands-on learning in a realistic salon setting. Fundamental and developing skills are reinforced and expanded as students provide consultation, haircutting, hairstyling, conditioning treatments, and hair coloring services on clients/models.
Prerequisite(s): Successful completion of COSMO 142, COSMO 164 , and COSMO 158, or instructor's approval.

## COSMO 164

LAB CLINIC I
8CR
Expand hands-on learning in a realistic salon setting. Fundamental and developing skills are reinforced and expanded as students provide consultation, haircutting, hairstyling, and conditioning treatments on clients/ models.

Prerequisite(s): Successful completion of COSMO 112, COSMO 116, COSMO 123, and COSMO 136.

## COSMO 172

LAB CLINIC III
Continue to gain hands-on learning in a realistic salon setting. Fundamental and developing skills are reinforced and expanded as students provide consultation, haircutting, hairstyling, conditioning, hair coloring, and chemical texturizing services on clients/ models.

Prerequisite(s): Successful completion of COSMO 163, COSMO 181, COSMO 226, or instructor's approval.

## COSMO 175

COSMETOLOGY SALON BUSINESS PRACTICES
Introduces the professional mindset and skills required to develop strategies for success. Learn the basic factors of salon business practices, such as business plans for salon owner/boot renter, importance of recordkeeping, retailing, creating a referral system, and building and retaining a clientele.
Prerequisite(s): Successful completion of COSMO 112, COSMO 116, COSMO 123 , COSMO 136, COSMO 142, COSMO 158, COSMO 163, COSMO 164, COSMO 181, and COSMO 226, or instructor's approval.

## COSMO 181

## ARTIFICIAL HAIR

An informative overview of artificial hair principles.

Prerequisite(s): Successful completion of COSMO 142 and COSMO 158 or instructor's approval.

## COSMO 183

GENERAL SCIENCE OF NAILS 7CR
Learn to work with the tools required for nail services and practice fundamental techniques for providing clients with a professional manicure and pedicure on natural nails. Topics include basic nail theory, nail disease, disorders, and anatomy of the hands. Practice skills in safety and sanitation associated with nail care.

Students will engage in 100 hours of natural nail training, as well as preparation for the Washington Department of Licensing State Board Cosmetology written and practical exams.

Note: This course is not offered every quarter.

## COSMO 189

GENERAL SCIENCE OF SKIN 7CR
An introduction to esthetic sciences. Presents structure and growth, disorders and diseases, application and removal of temporary hair, facial massage, and cosmetics. Students will comply with all infection control principles and practices. Students will engage in 100 hours of skin care training, as well as preparation for the Washington Department of Licensing State Board Cosmetology written and practical examinations.
Note: This course is not offered every quarter.

## COSMO 226

ADVANCED HAIR COLORING 8CR
Reinforces skills and techniques of hair coloring applications and presents advanced patterns creating special effects for current trends and fashion. Develops skill in the special challenges of hair color and corrective solutions.

Prerequisite(s): Successful completion of COSMO 158 or instructor's approval.

## COSMO 229

STATE BOARD PRACTICAL PREPARATION
Prepares students to sit for the Washington State Cosmetology or Hair Designer Practical Board examination.
Prerequisite(s): Successful completion of COSMO 112, COSMO 116, COSMO 123, COSMO 136, COSMO 142, COSMO 146, COSMO 158, COSMO 163, COSMO 164, COSMO 172, COSMO 175, COSMO 181, and COSMO 226, or instructor's approval.

COSMO 231
LAB CLINIC IV
Continue to gain hands-on learning experience in a realistic salon setting. Fundamental and developing skills are reinforced and expanded as students provide consultation, haircutting, hairstyling, conditioning, hair coloring, and chemical texturizing services on clients/models. Demonstrate skills with minimal supervision.

Prerequisite(s): Successful completion of COSMO 172 or instructor's approval.

## COSMO 233

LAB CLINIC V
Gain 130 hours of hands-on learning in a realistic salon setting. Fundamental and developing skills are reinforced and expanded as students provide consultation and natural nail care, including manicuring, pedicuring, and safety issues as they relates to nails. Basic skin care, including histology, hair removal, facial massage, and product application and removal, will also be performed.
Prerequisite(s): Successful completion of COSMO 231 or instructor's approval.

COSMO 236
STATE BOARD WRITTEN TEST REVIEW
Prepares students for Washington State Cosmetology or Hair Designer Written Board Examinations.

Prerequisite(s): Successful completion of COSMO 172 or instructor's approval.

## COSMO 244 ${ }^{\text {CAP }}$

COSMETOLOGY CAPSTONE
Arrange a portfolio that demonstrates a
culmination of all skills, concepts, and achievements that summarize the Cosmetology or Hair Designer program under the discretion of the instructor.

Prerequisite(s): Successful completion of COSMO 112, COSMO 116, COSMO 123, COSMO 136, COSMO 142, COSMO 146, COSMO 158, COSMO 163, COSMO 164, COSMO 172, COSMO 175, COSMO 181, and COSMO 226, or instructor's approval.

## COSMO 248

INTERNSHIP | 1CR
Provides the opportunity for on-the-job experience and/or the availability to earn required hours of training to complete the program courses. This course offers 33 hours of experience.
Prerequisite(s): Instructor's approval.

COSMO 250
INTERNSHIP II
2CR
Provides the opportunity for on-the-job experience and/or the availability to earn required hours of training to complete the program courses. This course offers 66 hours of experience.

Prerequisite(s): Instructor's approval.

## COSMO 252

INTERNSHIP III
Provides the opportunity for on-the-job experience and/or the availability to earn required hours of training to complete the program courses. This course offers 99 hours of experience.
Prerequisite(s): Instructor's approval.

## COSMO 254

INTERNSHIP IV 4CR
Provides the opportunity for on-the-job experience and/or the availability to earn required hours of training to complete the program courses. This course offers 132 hours of experience.
Prerequisite(s): Instructor's approval.

## COSMO 256

INTERNSHIP V
Provides the opportunity for on-the-job experience and/or the availability to earn required hours of training to complete the program courses. This course offer 160 hours of experience. Internship cannot exceed 10 percent of the total program hours.
Prerequisite(s): Instructor's approval.

## CULINARY ARTS

## CUL 104

SANITATION IN FOOD SERVICE OPERATIONS
Presents the principles of food microbiology, food-borne illness and the standards enforced by regulatory agencies. Incorporates applied measures for the prevention of food-borne illness and other microbiological factors. Includes National Restaurant Association ServSafe Certification.

## CUL 107

PROFESSIONAL COOKING I 7CR
Provides students with a general understanding of the professional kitchen. Topics include kitchen safety; dishwasher procedures; how to handle food in a safe environment; selection of and caring for knives; understanding how a professional kitchen is organized; and the rationale, cleaning, and function of kitchen equipment. Students will learn to cut foods in a variety of shapes and to recognize and use a variety of herbs and spices.

## CUL 109

COOKING METHODS I 7CR
Introduces students to the experience of preparing and cooking meals for restaurant service. Students will be given assignments and will rotate through restaurant stations throughout the quarter. Students will learn dishwashing and basic food preparation, how to read and follow standardized recipes, deli operations, and station organization.

## CUL 111

FOOD PREPARATION I 3CR
Practice and apply the skills of a restaurant cook. Students will learn the importance of organizing and planning their work stations, as well as preparing items needed prior to actual cooking. Topics include fruit and vegetable varieties, uses, and preparation.

## CUL 113

INTRODUCTION TO BAKING 3CR
Introduces culinary students to the fundamentals of baking and to scientific principles. Students will learn different mixing and production methods in producing quick breads, pastries, cakes, pies, soufflés, mousses, and custards.

## CUL 117

PROFESSIONAL COOKING II 7CR
Covers the procedures and techniques of sauces and stocks. Students will learn how to prepare a variety of classic hot and cold sauces, use thickening agents properly, recognize and classify sauces, and prepare a variety of stocks.

## CUL 119

FOOD PREPARATION II
Provides practice in the fundamental techniques related to hot food cooking. Students will perform specific competencies to develop their proficiency in the techniques and science of cooking. Topics that will be covered are pasta, potatoes and grain cookery.

## CUL 123

COOKING METHODS II 7CR
Introduces the experience of preparing and cooking meals for restaurant service. Students will be given assignments and will rotate through restaurant stations throughout the quarter. They will be expected to practice a high level of previously learned competencies in knife skills, sanitation, proper handling and storage of product, and working under stringent time guidelines.
Prerequisite(s): Successful completion of CUL 109.

## CUL 127

PROFESSIONAL COOKING III 7CR
Introduces students to basic meat cooking procedures, breakfast cookery, and dairy products. Students will learn the composition of meats, eggs, and dairy products and apply various cooking methods.

## CUL 132

AMERICAN REGIONAL CUISINE $3 C R$
Explores the history and styles of food from the Pacific Northwest, California, the Southwest, New England, and Florida. Students will create regionally-inspired dishes with continued emphasis on solid cooking methodologies.

## CUL 135

FOOD PREPARATION III 3CR
Focuses on beef, chicken, and fish cookery and fabrication. Instruction will center on understanding the structure and composition of meats, being able to identify a variety of fish and shellfish, use of proper storage, and application of various cooking methods.

## CUL 139

COOKING METHODS III 7CR
Introduces students to the experience of preparing and cooking meals for restaurant service. Students will be given assignments and will rotate through restaurant stations throughout the quarter. Students will be expected to practice a high level of previously learned competencies in knife skills, sanitation, proper handling and storage of product, and working under stringent time guidelines.

Prerequisite(s): Successful completion of CUL 123.

## REST 103

FOOD \& BEVERAGE COST
CONTROL
Outlines the fundamentals of food costing in relation to writing menus. Students will be responsible for pricing out each item on the menu, as well as preparing yield tests and standardizing recipes.

## REST 107cAP

KITCHEN \& DINING
MANAGEMENT
Learn how to communicate with, lead, and manage different types of people. This entails how to hire and fire, inventory control, writing job descriptions, and creating performance reviews for both front and back of the house.

Prerequisite(s): Successful completion of REST 112.

## REST 109

MARKETING/PUBLIC RELATIONS 3CR
Learn how to create a marketing concept for your restaurant. Learn to define your target market and understand the importance of effective marketing in the industry. We will also look at current market trends, consumer behavior, market segmentation, and positioning your business in the market to get the desired results.

## REST 112

RESTAURANT DINING 7CR
Familiarizes students with all aspects of running a casual-style dining room open to the public. Included are opening/closing procedures, table setup, customer-service techniques, leadership, sanitation, and safety procedures.

## REST 115 <br> CATERING PRODUCTION

Emphasis will focus on buffet preparation and presentation. Students will receive hands-on experience creating and executing catering requisitions. Students will explore designing menus for various events, functions, and price limits.

## REST 119

OPERATIONS MANAGEMENT 4CR
Explore all aspects of running a successful operation in the hospitality industry. Students will learn leadership skills, team building, and how to create a positive work environment. Students will also learn hiring procedures, how to recruit new team members, how to organize and implement systems and controls, and how to handle issues that arise daily. Students will also explore how to use Excel and the benefits of using Excel for restaurants.

## REST 122

FOOD SERVICE NUTRITION 4CR
Learn the basics of food service nutrition for culinary professionals. This class will teach students about the biological process that occurs as you eat and what constitutes a healthy diet. Students will gain an understanding of the structure and functions of food.

## REST 126

FINANCE \& ACCOUNTING 4CR
Prepares students to understand, interpret, and analyze financial statements, budgeting, cash flow, and cash management. This gives students a chance to become familiar with financial statements prior to entering the workforce.

REST 131
BUSINESS PLAN DEVELOPMENT 4CR
Develop a restaurant concept from start to finish, including a hands-on look at how to develop a business plan to present to possible investors. Students will practice decisionmaking and problem-solving skills by creating and planning their own concept.

## REST 133

beVERAGE SERVICE
MANAGEMENT
4CR
Learn to successfully set up and manage a beverage service operation. Includes the history of bar service, beverage-making ingredients and processes, safety, and sanitation in the bar.

## REST 137

HOSPITALITY LAW
Learn about laws affecting the hospitality industry on both a national and state level. This class will look at operating an establishment according to government regulations regarding sales, civil rights, liability, administration issues, and organization.

## DENTAL ASSISTANT

## DAS 103

GENERAL STUDIES 4CR
Introduces students to the dental profession and cultural diversity, including how to correctly recognize and identify the various occupations within the dental field, as well as the terminology necessary to complete all other courses.

## DAS 105

BIOMEDICAL SCIENCES 4CR
Introduces students to the sciences of microbiology, disease transmission, occupational health and safety, ergonomics, and the processes and procedures for infection prevention, disinfection, instrument processing, and sterilization. Students will be able to demonstrate how to prevent disease transmission and the proper handling of infectious and hazardous materials.

DAS 110
DENTAL SCIENCES I 5CR
Students will explore information that will assist in accurately identifying oral anatomy, oral embryology, histology, common facial landmarks, and key elements of personal oral hygiene and nutrition.

DAS 113
DENTAL ASSISTING SKILLS I 4CR
Introduces students to the techniques that will enable them to successfully achieve the goal of proper moisture control to provide better visibility in the operating field, reduce the transmission of infectious diseases, and maintain a safe laboratory environment. Students will learn to take alginate impressions, pour and trim diagnostic study casts, and to accurately record vital signs, including blood pressure, pulse, and respiration. Students will be able to accurately identify dental charting symbols.

## DAS 116 <br> FOUNDATIONS OF CLINICAL DENTISTRY

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Introduces students to the management of a medical or dental emergency in the dental office. In addition, students will be introduced to the dental treatment room, including the proper names, descriptions, use and care of dental instruments and equipment used in restorative dental procedures.

## DAS 118

PRINCIPLES OF RADIOGRAPHY
1CR
Introduces students to the theory of radiographic techniques, including patient and operator safety while exposing radiographs.

DAS 120
DENTAL SCIENCES II 5CR
Explores the general characteristics and uses of dental materials and covers oral pathology conditions in the oral cavity. This course is also designed to provide the necessary information to accurately identify each of the body's systems and functions and how they interact with each other. Students will explore the structures of the head and oral cavity.

Prerequisite(s): Successful completion of DAS 103, DAS 105, DAS 110, DAS 113, DAS 116, and DAS 118

## DAS 125

DENTAL ASSISTING SKILLS II 6CR
Introduces students to advanced study model principles, coronal polish and fluoride treatments, and advanced moisture control, including the application of rubber dams, intermediate charting, and dental instruments and hand pieces.

Prerequisite(s): Successful completion of DAS 103, DAS 105, DAS 110, DAS 113, DAS 116, and DAS 118.

## DAS 130

DENTAL SPECIALTIES I
3CR
Explores in depth the dental specialties of endodontics, orthodontics, and periodontics. This course introduces students to periodontal charting.
Prerequisite(s): Successful completion of DAS 103, DAS 105, DAS 110, DAS 113, DAS 116, and DAS 118.

DAS 135
PRINCIPLES OF RADIOGRAPHY II 5CR
Introduces students to intraoral and extraoral radiographic imaging, legal issues associated with radiography, and manual and automatic processing techniques.
Prerequisite(s): Successful completion of DAS 103, DAS 105, DAS 110, DAS 113, DAS 116, and DAS 118.

## DAS 140

CERTIFICATION REVIEW I
Prepares students to take the Infection Control Exam through the Dental Assistant National Board.
Prerequisite(s): Successful completion of DAS 103, DAS 105, DAS 110, DAS 113, DAS 116, and DAS 118.

## DAS 223

DENTAL SCIENCES III
3CR
Introduces students to the science of pharmacology, including the recognition of potential drug interactions and the subject of anesthesia and pain control as it applies to dentistry. Also introduces students to anesthesia and pain control, lab and impression materials, and the medically and physically compromised patient.

Prerequisite(s): Successful completion of DAS 103, DAS 105, DAS 110, DAS 113, DAS 116, DAS 118, DAS 120, DAS 125, DAS 130 , DAS 135, and DAS 140 and complete the Infection Control component of the DANB certification exam.

## DAS 224

DENTAL ASSISTING SKILLS III 7CR
Introduces the theory and practice of chair-side assisting, including oral evacuation and instrument exchange. Students are introduced to advanced chair-side instruments, tray systems, charting, study models, and rubber-dam application techniques. This course covers the assembly and placement of matrix systems. Students will expose, process, and mount a minimum of three full-mouth series of radiographic images, both on film and digitally. This course's culminating project covers the operatory preparation and assisting during restorative procedures.
Prerequisite(s): Successful completion of DAS 103, DAS 105, DAS 110, DAS 113, DAS 116, DAS 118, DAS 120, DAS 125, DAS 130, DAS 135 , and DAS 140 and complete the Infection Control component of the DANB certification exam.

## DAS 226

DENTAL SPECIALTIES II 8CR
This course provides an in-depth exploration of the dental specialties of fixed prosthodontics, removable prosthodontics and dental implants, oral and maxillofacial surgery, and pediatric dentistry. Students will also be introduced to the expanded function of pit and fissure sealants, construction and placement of provisional crowns and bridges, polishing full and partial dentures, and retraction cord placement. Students will also prepare the operatory, give post-operatory instructions, and document in the patient chart a variety of specialty procedures.
Prerequisite(s): Successful completion of DAS 103, DAS 105, DAS 110, DAS 113, DAS 116, DAS 118, DAS 120, DAS 125, DAS 130, DAS 135 , and DAS 140 and complete the Infection Control component of the DANB certification exam.

## DAS 228

CERTIFICATION REVIEW II 1CR
Prepares students to take the Radiation Health and Safety exam through the Dental Assistant National Board.

Prerequisite(s): Successful completion of DAS 103, DAS 105, DAS 110, DAS 113, DAS 116, DAS 118, DAS 120, DAS 125, DAS 130, DAS 135 , and DAS 140 and complete the Infection Control component of the DANB certification exam.

## DAS 237CAP

CLINICAL EXPERIENCE I 1CR
Provides Dental Assistant students with the opportunity to use the skills and information acquired in DAS 103-228. Students will spend three hours per week - for a total of 30 hours - volunteering in an infection-control assistant capacity in a private office or dental clinic.
Prerequisite(s): Successful completion of DAS 103, DAS 105, DAS 110, DAS 113, DAS 116, DAS 118, DAS 120, DAS 125, DAS 130, DAS 135, and DAS 140 and complete the Infection Control component of the DANB certification exam.

## DAS 239CAP

CLINICAL EXPERIENCE II 10CR
Provides Dental Assistant students with the opportunity to use the advanced skills and information acquired in DAS 103-237. Students will spend 270 hours rotating through a minimum of two private offices or dental clinics.
Prerequisite(s): Successful completion of DAS 103, DAS 105, DAS 110, DAS 113, DAS 116, DAS 118, DAS 120, DAS 125, DAS 130, DAS 135, DAS 140, DAS 223, DAS 224, DAS 226, DAS 228, and DAS 237, Infection Control certification, all college-level general education courses, and the Radiation Health \& Safety component.

## DAS 241

ADVANCED THEORY
Introduces students to dental business administration procedures.
Prerequisite(s): Successful completion of DAS 103, DAS 105, DAS 110, DAS 113, DAS 116, DAS 118, DAS 120, DAS 125, DAS 130, DAS 135, DAS 140, DAS 223, DAS 224, DAS 226, DAS 228, and DAS 237, Infection Control certification, all college-level general education courses, and the Radiation Health \& Safety component.

## DAS 243

## CERTIFICATION REVIEW III

Prepares students to take the final component of the Dental Assistant National Board exam, General Chairside. Upon successful completion of the exam and all Dental Assistant courses, students will receive their Certified Dental Assistant credentials and be eligible for graduation.

Prerequisite(s): Successful completion of DAS 103, DAS 105, DAS 110, DAS 113, DAS 116, DAS 118, DAS 120, DAS 125, DAS 130, DAS 135, DAS 140, DAS 223, DAS 224, DAS 226, DAS 228, and DAS 237, Infection Control certification, all college-level general education courses, and the Radiation Health \& Safety component.

## DBOA 103

DENTAL TERMINOLOGY \&
PROCEDURES
4CR
Introduces information to correctly recognize and identify various occupations within the dental environment. Students will also learn terminology necessary to complete the other courses in the program. Students will learn to accurately identify the names and numbers of teeth in the primary and permanent dentition. Students will complete the Washington State Dental Association (WSDA) HIV/AIDS course.

DBOA 111
DENTAL CHARTING,
SCHEDULING AND RECALL MANAGEMENT
Explores dental charting symbols and treatment descriptions. Students will develop, decipher, and present a comprehensive treatment plan. Covers the necessary information to accurately develop a patient recall system and maintain productive and effective patient scheduling. Students will have training and 24 -hour access to the Dentrix Dental Software to learn and practice dental charting, scheduling, and recall procedures.
Prerequisite(s): DBOA 103 (or co-requisite).

## DBOA 119

DENTAL DOCUMENTS AND INVENTORY SYSTEMS 4CR
Explores a wide variety of dental office forms and the development of manual and computerized inventory filing systems. Organizational skills are the primary emphasis of this course.

Prerequisite(s): DBOA 103 (or co-requisite).

## DBOA 135

DENTRIX ADVANCED TRAINING 2CR
Provides expanded Dentrix software skills to students with basic Dentrix Dental Software training or experience. Students will have training and 24 -hour access to the software. Students will demonstrate setting up practice defaults in the Office Manager module, manage electronic charting in the Dentrix Dental Software, pursue dental insurance claims processing and payment posting processes, and explore and generate management reports.

Prerequisite(s): DBOA 111 or industry experience with the Dentrix Dental Software (or co-requisite).

## DIGITAL

ENTERTAINMENT
DESIGN AND
PRODUCTION

DED 102
GENRE STUDIES 3CR
Covers history of film and how economy and politics affect films through hidden symbolism.

## DED 104

## GENERAL ART <br> 4CR

Covers the fundamentals of traditional art and basic skills of visual expression.

## DED 106 ${ }^{\text {CL }}$

DIGITAL ART I
Overview of the primary industry software tools used in the creation of 2D computer graphics: Adobe Photoshop and Adobe Illustrator. Students will learn the commands and the interfaces of industry-standard raster graphics and vector graphics with photo modification.

## DED 108

SCREENWRITING
Introduces the fundamentals of writing and working with scripts for many different media projects. This will include, but is not limited to, the creation and breakdown of scenes using voice, action, and dialogue.

Co-requisite(s): Successful completion of ENG 094.

## DED 110

DIGITAL PHOTOGRAPHY I 4CR
This introductory-level course familiarizes students with the basics of cameras, the new features of today's DSLRs, and the basic elements of taking a good photograph. Students will explore the work of great artists of the medium, learn the elements of composition, and begin working with light and shadow to create visually interesting images.

## DED 112

DIGITAL ART II
4CR
Focuses on Adobe Illustrator and learning to use the advanced tools within this professional vector editing software. Students will learn how to create high-quality illustrations, logos, graphs, diagrams, adverts, web sites, and web or print layouts for clients, while increasing their productivity and incorporating best practice into their workflow.
Prerequisite(s): Successful completion of DED 106.

DED 120
DIGITAL PHOTOGRAPHY II
Builds on the previous course concentrating on using light effectively. Students will begin to use photographic lights to take studio-style photographs of still life, working up to portrait photography.

Prerequisite(s): Successful completion of DED 110.

DED 125
DIGITAL VIDEO I 4CR
Introduces students to digital video equipment and proper handling. Hands-on work will involve 3-point lighting, continuity, sound, and basic editing. Students will complete a variety of technical exercises, which will familiarize them with terms and equipment.

## DED 127

ADVANCED MEDIA CREATION 4CR
Covers advanced creation and critique of digital entertainment through an iterative design and development process.

Prerequisite(s): Successful completion of DED 140 or DED 154.

DED 130
STORYBOARDING 3CR
Teaches students how to break down a script into shots and create a visual storyboard that shows actor and camera movements while showing the type of camera angle and shot.
Prerequisite(s): Successful completion of DED 104.

DED 135
MOTION GRAPHICS I 4CR
Uses 2D and 3D compositing, animation, and visual effects tools to allow students to create innovative graphics and visual effects for film, video, broadcast, DVD, and the web. Using Adobe After Effects, students will learn the concepts of video, time-based animation, and special effects. They will explore program features that include key framing, editing, masking, type, 3D environment, and tools. Importing media from a wide variety of applications, including Adobe Photoshop and QuickTime files will also be covered

## DED 138 <br> ADVANCED DEVELOPMENT <br> TOOLS 4CR

A course covering the use of advanced tools of media production. Students will develop projects using the industry tools of their medium. Students will choose between using the advanced software of their medium to create professional-grade projects to use in a personal portfolio showcasing their talents and skills.

Prerequisite(s): Successful completion of DED 125 and DED 152.

## DED 140

DIGITAL VIDEO II
4CR
Continues students' education from Digital Video I by extending their knowledge to more hands-on lessons of film production. This includes, but is not limited to, creating master shots and the use of common shot types.

Prerequisite(s): Successful completion of DED 125.

## DED 145

DIGITAL EDITING 4CR
Covers digital editing using Adobe Premiere Pro. Students will work with nested, singleframe, and multiple-sequencing editing tools to export to a variety of formats and for websites like YouTube, adding multi-track audio, transitions, and simple effects.

## DED 147

ADVANCED DESIGN THEORY 4CR
Explores the high-level decisions made in the creation of various forms of digital entertainment. Introduces the concepts and practices associated with how written word is translated into visual language. Students will explore how their chosen media are a reflection of the world we live in and vice versa. During this course, students will have the opportunity to learn the art and theory behind films and games including how various design decisions are used to affect the audience.
Prerequisite: Successful completion of DED 127 or DED 102, DED 140, DED 145, and DED 152.

## DED 150

3D MODELING I 4CR
Uses 3D Studio Max, specialized software that is commonly used to create 3-Dimensional graphics. The majority of the class is spent becoming familiar with the software through class tutorials and weekly assignments and learning basic techniques, such as box modeling. By completing this class, students will be able to create models that can be used in film or games.

## DED 152

MOTION GRAPHICS II 4CR
Builds on Motion Graphics I by working on more advanced features in Adobe After Effects. Students will go more in-depth with the features, such as particles, photo replacements, and integrating 3D models into scenes to create digital effects.

Prerequisite(s): Successful completion of DED 135.

## DED 154

GAME DESIGN I 3CR
Introduces the fundamentals of game design and development with a focus on rapid prototyping through pen and paper design. Students will also build a foundational knowledge of genre and basic elements of games and their interaction with each other.

## DED 158

3D MODELING II
Expands into the 3D world by teaching students to create textures for their 3D Models. Discusses the importance of file size and formats for a variety of purposes that go into creating detailed textures for an abstract style or gritty look. Students will create a variety of texture maps such as UV Mapping, diffused, opacity, bump, normal, specular, and reflection maps to really bring models to life.
Prerequisite(s): Successful completion of DED 150.

## DED 159CAP

CAPSTONE/INTERNSHIP
This course consists of either a major project representing the culmination of the student's learning in the program OR a full- or part-time position as an intern in either the public or private sector. The project must be approved by the instructor, show the breadth of skill acquired in the program, and require the students to use the entire production cycle, including their preproduction paperwork. The students will also be required to keep an online journal of their project and report in at least once per week with updates on their progress. The internship a temporary position, where the student gains confidence and experience in a chosen area of employment. Students experience on-the-job opportunities as well as making a skilled contribution to the internship provider.

Prerequisite(s): Successful completion of DED 125 and DED 152.

## DED 170

3D MODELING III 4CR
Teaches students advanced techniques in modeling using 3D Studio Max, such as NURBS, lighting and reflection effects, and particle systems. Students will apply these methods to create organic and hard-surface models
Prerequisite(s): Successful completion of DED 106 and DED 158.

## DED 172

SCENE DESIGN 4CR
Covers the use of lighting and design to create environments that enhance the story while providing optimum shooting potential.
Prerequisite(s): Successful completion of DED 120 and DED 125.

## DED 174

3D ANIMATION 4CR
Introduces the methods and techniques of animating virtual objects and environments using 3D Studio Max. Students will bring life to 3D Models with basic animation techniques using and combining modifiers to control the animation. They will explore the features, such as key frames, track view, function curves, animation constraints, and controllers.
Prerequisite(s): Successful completion of DED 158.

## DED 175

DEVELOPMENT PROJECT
An instructor-led major project involving the full class. Each student will be given a role to fulfill in the project just as in a professional film or game production studio.
Prerequisite(s): Successful completion of DED 112 and DED 150.

## DED 183

INTERACTIVITY GUIDANCE 4CR
A class exploring the interaction between the technical skills of digital entertainment creators and their deliverable product. Students will work in their respective media to take control of communications between their medium and their audience to create new digital entertainment projects.

## EARLY CARE \& EDUCATION

## ECE 120

INTERPERSONAL SKILLS FOR THE ECE PROFESSIONAL
Covers human relations roles and workplace skills. Discusses balancing individual technical skills with human relations and competencies.

## ECE 126

NATURE \& OUTDOOR
CLASSROOM
Gain skills and knowledge on the components of an outdoor classroom. Includes ways to incorporate creativity while supporting children as they explore nature in the environment, as well as sustainable practices for young children.

## ECE 132

RAISING AN EMOTIONALLY INTELLIGENT CHILD 1CR
This course will focus on teaching parents, teachers, and providers how to use emotioncoaching techniques that foster emotional intelligence in children.

ECE 134
ISSUES \& TRENDS GREEN 2CR
Research topics that cover some of the current sustainable practices and trends in the ECE field.

## ECE 135 <br> SChOOL AGE MATH, SCIENCE

 \& TECHNOLOGY3CR
Explore the different aspects of the school-age curriculum in science, math, and technology.

## ECE 156

FROM SEED TO TABLE:
GARDENING WITH CHILDREN 2CR
Discover how important connecting with nature and caring for living plants can be for children. Students will learn techniques to create plantings and cooking items grown to serve at the snack table.

## ECE 158

JUST RECYCLE IT!
Students will explore the use of developing sustainable "green" curriculum ideas that use recyclable materials to make creative projects and activities to use in your work with young children.

## ECE 190

PRACTICUM IV: GREEN 3CR
Provides students with the opportunity for practical field experience with a sustainable practice or "green" specialization. Includes a seminar component.

## ECE 194

PRACTICUM IV: THE
EMOTIONALLY INTELLIGENT
CHILD 3CR
Provides students with the opportunity for practical field experience with an emotional intelligence specialization. Includes a seminar component.

## ECE 198

PRACTICUM IV: WORKING WITH FAMILIES
Provides students with the opportunity for practical field experience with a specialization in working with families. Includes a seminar component.

## ECE 219

PRACTICUM IV: RESPONSIVE CAREGIVING FOR INFANTS AND TODDLERS
Explores responsive caregiving for infants and toddlers, including best practices, building trust, environments, creating lesson plans, theories of development, and collaborating with families.

## ECE 230

INCLUSION IN ECE 3CR
Introduction to including children with special needs in the ECE field.

## ECE 245DIV

DIVERSITY AWARENESS \& CURRICULUM DEVELOPMENT 3CR
Exploring our own cultural awareness supports our work with diverse populations and is paramount to planning for and interacting with young children and their families. In this course, you will explore the various aspects of bias to develop strategies and an anti-bias approach within the early childhood curriculum.

## ECE 290 ${ }^{\text {CAP }}$

PORTFOLIO ADVENTURE 2CR
Provides students with the opportunity to compile their Early Care and Education degree portfolio. The portfolio adventure is an opportunity for students to establish self-marketing goals in the field and to produce an end-product that reflects their best practice, passion, and experience to date in the program and field. Students will receive instructor guidance and feedback and will participate in the ECE portfolio review process prior to graduation.

## ECED\& 100

CHILD CARE BASICS (STARS) 3CR Designed to meet licensing requirements for early learning teachers and family home child care providers, the STARS 30-hour basics course is recognized in the MERIT system Topics include child growth/development, cultural competency, community resources, guidance, health/safety/nutrition, and professional practice.

## ECED\& 105

INTRODUCTION TO EARLY CHILDHOOD EDUCATION 5CR
Explore the foundations of early childhood education. Examine theories defining the field, issues and trends, best practices, and program models. Observe children, professionals, and programs in action.

## ECED\& 107

HEALTH, NUTRITION AND SAFETY 5CR
Develop knowledge and skills to ensure good health, nutrition, and safety of children in group care and education programs. Recognize the signs of abuse and neglect, responsibilities for mandated reporting, and available community resources.

## ECED\& 120

PRACTICUM: NURTURING RELATIONSHIPS

2CR
Students will apply theories of best practice in an early learning setting. Focus will be on developing supportive relationships while keeping children healthy and safe.

ECED\& 132
INFANTS \& TODDLERS NURTURING CARE
Examine the unique developmental needs of infants and toddlers. Study the role of the caregiver, relationships with families, developmentally-appropriate practices, nurturing environments for infants and toddlers, and culturally relevant care.

## ECED\& 139

ADMINISTRATION OF EARLY LEARNING PROGRAMS 3CR
Develop administrative skills required to develop, open, operate, manage, and assess early childhood education and care programs. Explore techniques and resources available for Washington State licensing and National Association for the Education of Young Children (NAEYC) standard compliance.

## ECED\& 160

CURRICULUM DEVELOPMENT
Investigate learning theory, program planning, and tools for curriculum development promoting language, fine/gross motor, social-emotional, cognitive and creative skills, and growth in young children.

## ECED\& 170

ENVIRONMENTS FOR YOUNG CHILDREN3CR

Design, evaluate and improve indoor and outdoor environments that ensure quality learning and nurturing experiences and optimize the development of young children.

## ECED\& 180

LANGUAGE AND LITERACY DEVELOPMENT
Develop teaching strategies for language acquisition and literacy skill development at each developmental stage (birth through age 8) through the four interrelated areas of speaking, listening, writing, and reading.

## ECED\& 190

OBSERVATION AND ASSESSMENT 3CR Collect and record observation and assessment data in order to plan for and support the child, the family, the group, and the community. Practice reflection techniques, summarizing conclusions and communicating findings.

ECS 110 ${ }^{\text {cL }}$
COMPUTER ESSENTIALS FOR THE ECE PROFESSIONAL
Covers the essential computer tools and techniques necessary for the ECE professional. Covers designing forms, parent newsletters, fliers, brochures, and other materials needed to smoothly run a child care center.

ECS 121
INTRODUCTION TO THE EARLY CHILDHOOD PROFESSION
Examines professional characteristics, responsibilities and rewards for individuals working with young children. Ethics and workplace skills will be examined. Washington State Minimum Licensing Requirements for Child Care Centers and Family Child Care Homes will be covered. ECS 121 is the foundation course for series ECS 121-127.

ECS 122
WAYS TO STUDY HOW CHILDREN GROW/LEARN
Examines theory and field practices to facilitate physical and intellectual development of young children. Ethics and workplace skills will be examined. Washington State Minimum Licensing Requirements for Child Care Centers and
Family Child Care Homes will be covered.
ECS 123
SELF, SOCIAL AND POSITIVE GUIDANCE 2CR
Examines theory and field practices to support social and emotional development of young children and provide positive guidance. Ethics and workplace skills will be examined. Washington State Minimum Licensing
Requirements for Child Care Centers and
Family Child Care Homes will be covered.
ECS 124
PRODUCTIVE RELATIONSHIPS WITH FAMILIES

2CR
Examines theory and field practices to establish positive and productive relationships with families. Ethics and workplace skills will be examined. Washington State Minimum Licensing Requirements for Child Care Centers and Family Child Care Homes will be covered.

## ECS 125

PROGRAM MANAGEMENT 2CR
Examines theory and field practices to ensure a well-run purposeful program that is responsive to participant needs. Ethics and workplace skills will be examined.
Washington State Minimum Licensing
Requirements for Child Care Centers and
Family Child Care Homes will be covered.

## ECS 126

PROFESSIONALISM 2CR
Examines theory and field practices necessary
to maintain knowledge of and commitment to professionalism in the early learning field. Ethics and workplace skills will be examined. Washington State Minimum Licensing
Requirements for Child Care Centers and Family Child Care Homes will be covered.

ECS 127CAP
CDA CAPSTONE 2CR
Reviews the six CDA competency areas and prepares students for the CDA application and testing process.

## ECS 151

ECE CURRICULUM: MATH, SCIENCE \& TECHNOLOGY
Explores the different aspects of early childhood curriculum in science and technology.

## ECS 160

MUSIC/MOVEMENT \& CREATIVITY: CREATIVE ART CURRICULUM 5CR
Explores the different aspects of the early childhood curriculum in creative art, music, movement, and creativity.

## ECS 181

ECE PRACTICUM I
Provides students with practical field experience. Students will work at community child care centers or the Hayes Child Development Center on the Lakewood Campus, allowing them to apply classroom study to on-the-job situations. Includes a scheduled seminar.

## ECS 182

ECE PRACTICUM II 5CR
Provides students with practical field experience. Students will work at community child care centers or the Hayes Child Development Center on the Lakewood campus, allowing them to apply classroom study to on-the-job situations. Includes a scheduled seminar.

## ECS 183

ECE PRACTICUM III 5CR
Provides students with practical field experience. Students will work at community child care centers or the Hayes Child Development Center on the Lakewood campus, allowing them to apply classroom study to on-the-job situations. Includes a scheduled seminar.

## ECS 202

PRESCHOOL ACTIVITIES 2CR
Covers developmentally appropriate activities for preschoolers. This is a hands-on class that will provide a chance for making and sharing samples.

## ECS 206

SIGNING WITH INFANTS \& TODDLERS

2CR
Signing for basic communication with infants and toddlers with an emphasis on working with children who exhibit language delays.

## ECS 217 <br> ECE PRACTICUM IV INFANTS/ TODDLERS

Provides students with the opportunity for practical field experience with specialization in infants and toddlers.

## ECS 220

CURRICULUM FOR SCHOOL AGE 2CR
Focuses on curriculum suitable for the development of school-age children.

## ECS 225

SCHOOL AGE ENVIRONMENT 2CR
Focuses on suitable environments for the development of school-age children.

ECS 230
ECE PRACTICUM IV SCHOOL AGE 3CR
Provides students with opportunities for practical field experience with school-age specialization.

## ECS 235

ISSUES \& TRENDS
Research that covers some of the current issues and trends in the ECE field.

## ECS 260

CURRICULUM FOR FAMILY CHILD CARE
A focus on developmentally appropriate curriculum for children in family child care settings with multiple ages.

## ECS 266

LEADERSHIP IN EARLY
CHILDHOOD EDUCATION 4CR
Designed for leaders in the early childhood field. Essential skills for effective leadership will be covered: creating a shared vision, team building, managing change, personal development, communication, conflict management, staff development, and empowerment strategies.

## ECS 277

PROFESSIONALISM \& ETHICS 2CR
Examines NAEYC's Code of Ethical Conduct. Includes determining an Early Childhood professional's responsibilities to children, families, colleagues, and the community, using frameworks for ethical decision-making and exploration of personal and professional growth.

## ECS 286

PRACTICUM IV LEADERSHIP 3CR
Provides students with the opportunity for practical field experience with a leadership specialization. Includes a seminar component and observations. Focuses on emotional intelligence and conducting meetings.

ECS 287
PRACTICUM IV PRESCHOOL 3CR
Provides students with opportunities for a practical field experience with a preschool specialization. Includes a seminar component and observations.

## ECS 288

PRACTICUM IV FAMILY
CHILDCARE PROFESSIONAL 3CR
Provides students with the opportunity for a practical field experience with a family child care specialization. Includes a seminar component and observations.

## ECS 290

MENTORING IN ECE 1CR
Learn fundamental skills needed for early childhood mentors who practice as trainers and coaches. Covers concepts of adult learning, communication, observation, feedback, and conflict resolution.

## ECS 292

THEORIES OF
CHILD DEVELOPMENT 3CR
Exploration of child development theories and their application to the education of young children.

## ECS 297

PRACTICUM IV SPECIAL NEEDS 3CR
Provides students with the opportunity for a practical field experience with specialization in special needs. Includes a seminar component.

## EDUC\& 115

CHILD DEVELOPMENT
Build a functional understanding of the foundation of child development, from prenatal to early adolescence. Observe and document physical, social, emotional, and cognitive development of children, reflective of cross-cultural and global perspectives.

## EDUC\& 130

GUIDING BEHAVIOR
Examine the principles and theories promoting social competence in young children and creating safe learning environments. Develop skills promoting effective interactions, providing positive individual guidance, and enhancing group experiences.

EDUC\& 134
FAMILY CHILD CARE MANAGEMENT
Learn the basics of family home childcare program management. Topics include: licensing requirements; business management; relationship building; health, safety, and nutrition; guiding behavior; and promoting growth and development.

EDUC\& 136
SCHOOL AGE CARE
MANAGEMENT
Students will develop skills to provide developmentally appropriate and culturally relevant activities and care, specifically: preparing the environment, implementing curriculum, building relationships, guiding academic/social skill development, and community outreach

## EDUC\& 150

CHILD, FAMILY AND COMMUNITY 3CR
Students working with children (ages birth through school age) and their families will learn how to integrate the family and community contexts in which a child develops. Students will learn how to explore cultures and demographics of families in society, community resources, strategies for involving families in the education of their child, and tools for effective communication.

## ECONOMICS

## ECON 10

PRINCIPLES OF ECONOMICS
5CR
An overview of both micro and macroeconomics. Topics include: organization and operation of the U.S. economy, including unemployment, inflation, and GDP issues; fiscal and monetary policies; supply and demand; market structures; determination of prices in a market economy; and income distribution

Prerequisite(s): Appropriate Accuplacer placement score or equivalent or successful completion of MAT 099.

## ECON\& 201

## MICROECONOMICS

Study of scarcity; the allocation of resources; supply and demand; production; market structures; determination of output and prices, with emphasis on a market economy; labor and capital markets; role of government in a market economy; comparative advantage; international trade; and distribution of income.

Prerequisite(s): Appropriate Accuplacer placement score or equivalent or successful completion of MAT 099.

## ECON\& 202

MACROECONOMICS
Study of the organization and operation of the U.S. economy, including: unemployment, inflation and GDP issues; the business cycle and long-run growth; national income accounting; aggregate supply and aggregate demand; government spending, taxation, and budget deficit/surplus; fiscal policy; the monetary system and the Federal Reserve Banking System; monetary policy; interest rates; and international trade.

Prerequisite(s): Appropriate Accuplacer placement score or equivalent or successful completion of MAT 099.

## ELECTRICIAN LOW

 VOLTAGE FIRE/SECURITY
## EFS 105

AC/DC ELECTRICITY: BASIC THEORY, FRACTIONS \& OHM'S LAW
$7 C R$
Introduces basic theory of electricity, electrical measurements of circuits, fractions, Ohm's law, decimals, and decimal fractions. Covers formulas in electrical work, positive and negative numbers, exponents, powers of 10, and solving Ohm's law.

## EFS 106

AC/DC ELECTRICITY: SERIES PARALLEL \& COMBINATION CIRCUITS
Introduces students to voltage, current, resistance, total values, and control of current in a series circuit. Introduction to parallel circuits, current and resistance, and voltage in a parallel circuit.

Prerequisite(s): Successful completion of EFS 105 or instructor's permission.

## EFS 107

AC/DC ELECTRICITY:
ELECTRICAL POWER \& POWER APPLICATIONS
Introduces electric power in electric circuits, solving the power formula for current and voltage. Algebra for complex electric circuits. Resistance of wire of different sizes and length, sizing wire for a given load. Instantaneous values, maximum values, and phase angles of an AC sine wave.
Prerequisite(s): Successful completion of EFS 106 or instructor's permission

EFS 108
NATIONAL ELECTRICAL CODE PRINT READING
Introduces students to practical print reading as it applies to the National Electrical Code.
Prerequisite(s): Successful completion of EFS 105, EFS 106, and EFS 107, or instructor's permission.

## EFS 109

NATIONAL ALARM INSTALLER TRAINING PROGRAM 7CR
Introduces students to basic alarm systems through comprehensive lessons, videos, and lesson tests. With final test, students will have a thorough exposure to alarm systems.
Prerequisite(s): Successful completion of EFS 105, EFS 106, and EFS 107, or instructor's permission.

## EFS 110

CCTV APPLICATION \& DESIGN 7CR
Introduces students to basics of closed-circuit television systems design and applications.
Prerequisite(s): Successful completion of EFS 105, EFS 106, and EFS 107, or instructor's permission.

## EFS 118

NATIONAL ELECTRICAL CODES 6CR Introduces National Electrical Codes. Through individual tests, students will be able to research applicable electrical codes.
Prerequisite(s): Successful completion of EFS 108, EFS 109, and EFS 110, or instructor's permission.

## EFS 119

NATIONAL FIRE CODES 6CR
Introduces the National Fire Codes. Through individual tests, students will be able to research applicable fire codes.

Prerequisite(s): Successful completion of EFS 108, EFS 109, and EFS 110, or instructor's permission.

## EFS 121

CCTV FIELD SERVICE \& INSTALLATION
Introduces basic systems service and installation of closed-circuit television systems. Through individual lessons, students will be exposed to the basics of CCTV field service and installation.
Prerequisite(s): Successful completion of EFS 108, EFS 109, and EFS 110, or instructor's permission.

EFS 124
WASHINGTON
ADMINISTRATIVE CODES
Introduces students to the Washington
Administrative Codes pertaining to industrial safety and to electrical installations in the state of Washington.

Prerequisite(s): Successful completion of EFS 108, EFS 109, and EFS 110, or instructor's permission.

## EFS 207

ADDRESSABLE FIRE SLC SYSTEMS/DESIGN 7CR
Introduces Addressable and Intelligent Fire Alarm Systems using Signaling Line Circuits (SLC). Includes comprehensive lessons, lecture, and hands-on practical application and design.
Prerequisite(s): Successful completion of the Electrician Low Voltage Fire/Security Certificate, or instructor's permission.

## EFS 211

BIOMETRICS ACCESS 7CR
Introduces Biometrics Access Control. Various
Biometrics Systems are explored, as well as Computer Programmed Access-Control Systems. Includes comprehensive lessons and lecture, as well as hands-on practical application, installation, and design.

Prerequisite(s): Successful completion of EFS 207 or instructor's permission.

## EFS 216

ADVANCED VOICE EVACUATION FIRE ALARM SYSTEMS
Introduces Advanced Voice Evacuation Fire Alarm Systems as used in high-rise applications. Includes comprehensive lessons, lecture, and hands-on practical application, installation, and design.
Prerequisite(s): Successful completion of EFS 211 or instructor's permission.

## EFS 221

FIRE CODES, NICET, NFPA 7CR Introduces Fire Codes, AHJ (Authority Having Jurisdiction), NICET (National Institute for Certification of Engineering Technologies), and NFPA (National Fire Protection Association). Includes comprehensive lessons, lecture, and hands-on practical application, installation, and design.

Prerequisite(s): Successful completion of EFS 216 or instructor's permission.

EFS 226
HIGH SECURITY STRUCTURED CABLING

7CR
Introduces High Security Structured Cabling in residential and commercial applications. Explores cabling as a total package. Includes most applications of security and low voltage needs. Includes comprehensive lessons, lecture, and hands-on practical application, installation, and design.

Prerequisite(s): Successful completion of EFS 221 or instructor's permission.

## EFS 231 ${ }^{\text {cAp }}$

CCTV DIGITAL NETWORK SOLUTIONS
Introduces Closed-Circuit Television (CCTV) Digital Network Solutions. Explores applications that require the camera to be recorded and viewed digitally or remotely via various networks. Includes comprehensive lessons, lecture, and hands-on practical application, installation, and design.
Prerequisite(s): Successful completion of EFS 226 or instructor's permission.

## ENGLISH

## ENG 091

BASIC READING \& WRITING 5 CR
Introduces and develops basic reading and writing skills. Focus is on writing proper sentences and sound paragraphs that express a main idea clearly and fully with a minimum of errors in sentence structure, punctuation, and spelling. Coursework emphasizes writing from observation, as well as writing in response to reading. Helps refine reading comprehension and increase vocabulary for college-level reading requirements.
Prerequisite(s): Appropriate placement score or equivalent.

## ENG 092

SPEAKING AND LISTENING FOR ESL STUDENTS IN PROFTECH PROGRAMS 5CR
This course works with non-native speakers to improve their speaking. Idioms, pronunciation, and clarity of spoken English will be demonstrated and practiced. Vocabulary for different situations will be discussed and used. Students will practice many levels of both personal and professional conversation.
Prerequisite(s): Successful completion of ENG 094 or equivalent.

ENG 094
ADVANCED READING \& WRITING 5CR
Enhances writing ability with emphasis on organization, unity, coherence, and adequate development of short essays. Introduction to various types of paragraphs and essays and review of the rules and conventions of standard written English. Both paper and electronic communication tools will be used

Prerequisite(s): Successful completion of ENG 091 or equivalent

## ENG 096

BUSINESS ENGLISH I FOR AMT SUPPORT COURSE
Designed to support the development of reading, writing, speaking, and listening skills for AMT students in Business English. Emphasis will be on reviewing English structure, content, and usage explored in ENGL 105, providing additional guidance for students in sentence structure, vocabulary, and reading comprehension as well as an additional component for practicing speaking and listening skills as it relates to business communications.

## ENG 097

BUSINESS ENGLISH II FOR AMT SUPPORT
Designed to support the continued development of reading, writing, speaking, and listening skills for AMT students in Business English. Emphasis will be on reviewing English structure, content, and usage explored in ENGL 106, providing additional guidance for students in sentence structure, vocabulary, and reading comprehension as well as an additional component for practicing speaking and listening skills as it relates to business communications.

## ENG 102

COMPOSITION:
ARGUMENTATION \& RESEARCH 5CR
Continues to develop student writing skills practiced in ENGL\& 101 with an emphasis on writing research papers and writing argumentative/persuasive essays. Through lecture, discussion, research, collaboration, reading, and writing, students will become familiar with the types of reasoning and other classical elements of argument.

Prerequisite(s): Successful completion of ENGL\& 101.

ENG 104
BUSINESS WRITING 5CR
Review structure, content, and usage as applied to business correspondence. Emphasis will be placed on writing clear, effective written communication, including memoranda, email, letters, resumes, and feasibility reports. Students will compile a portfolio. Course requires researching and documenting data using electronic databases and the Internet.

Prerequisite(s): Successful completion of ENG 094 or equivalent.

## ENG 105

BUSINESS ENGLISH I FOR AMT 3CR
Introduction to Basic English structure, content, and usage as it applies to business documents, manuals, and forms. Emphasis will be placed on vocabulary and reading comprehension of business documents as well as listening and responding to verbal communication with clear and effective communication methods. Course requires researching and documenting data using electronic publications and related business manuals.

Prerequisite(s): Students will take TOEFL or IELTS test in their county and pass with the required scores for admission to be allowed into ENG 105. Accuplacer score between 250-259 or placement into ENG 094 is required for all other International students.

## ENG 106

BUSINESS ENGLISH II FOR AMT 3CR Review and expand upon knowledge of English structure, content, and usage as it applies to spoken and written communication scenarios in aerospace and manufacturing and related business fields. Emphasis on technical reading comprehension using business documents and verbal communication with coworkers and supervisors. Written communication skills will also include writing resumes, cover letters, and required reports as it applies to aerospace and manufacturing. Course requires researching and documenting data using electronic publications and related business manuals.

Prerequisite(s): Students will take TOEFL or IELTS test in their county and pass with the required scores for admission to be allowed into ENG 105. Accuplacer score between 250-259 or placement into ENG 094 is required for all other International students.

## ENGL\& 101

ENGLISH COMPOSITION I 5CR
Utilize the writing process to write clearly with consideration of audience, purpose, and tone, using standard grammar and punctuation conventions along with common discourse modes and patterns of organization. Read and process sources using independent and critical thinking skills, following established conventions for incorporating and documenting sources in writing.

Prerequisite(s): Successful completion of ENG 094 or equivalent.

## ENGL\& 235

TECHNICAL WRITING
Focuses on technical writing skills and projects for industry and professions. Strong emphasis will be placed on principles of good writing and research techniques. Students will use appropriate technology and research to prepare letters, resumes, reports, proposals, newsletters, specifications, and other writing tasks typically required in a technical work setting. Discovery and knowledge of workplace ethics and guidelines as they pertain to writing will be researched, discussed, and used to enhance research. Requires use of technology including, but not limited to, computers, printers, and scanners.

## Prerequisite(s): Successful completion of

 ENGL\& 101.
## ENGL\& 243

AMERICAN LITERATURE I
This course covers selected works in American literature from its beginnings to 1865 . The emphasis is on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. Authors and works vary but typically include Bradstreet, Franklin, Melville, Whitman, and Douglass.

Prerequisite(s): Successful completion of ENGL\& 101

ENGL\& 244
AMERICAN LITERATURE II
This course covers selected works in American literature from 1865 to 1945 . The emphasis is on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. Authors and works vary but typically include Twain, Crane, Wharton, Hughes, and Hurston.

Prerequisite(s): Successful completion of ENGL\& 101.

## ENGL\& 245

AMERICAN LITERATURE III 5CR
Surveys post-WWII American literature to the present. The emphasis is on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. Authors and works vary but typically include Steinbeck, Williams, Morrison, Wallace, and Cisneros.

Prerequisite(s): Successful completion of ENGL\& 101.

## ENVIRONMENTAL SCIENCES \& TECHNOLOGY

## ENV 109

INTRODUCTION TO ECOLOGY 4CR
Covers the basic topics of ecology, including population biology, plant and animal species characterization, and habitat restoration.

## ENV 131

haZARDOUS WASTE SITE
OPERATIONS - 40 HOURS
4CR
Provides 40 hours of instruction and mandated training in hazardous materials, personal protection, and safety, in compliance with Occupational Safety and Health Administration (29 CRF 1910.120
HAZWOPER) for hazardous waste site operations. Training shall include theory and application of incident management/command structures, response operation, toxicology, and planning, in addition to the statutory requirements. Mandatory attendance required to receive certificate.

## ENV 135

HAZARDOUS WASTE SITE OPERATIONS

8CR
Training in hazardous materials, personal protection, and safety provided in accordance with 29 CFR 1910.120 HAZWOPER Standard and WAC 296-843-20010. Training includes theory and application of incident management/command structures, response operation, toxicology, and planning, in addition to statutory requirements. Mandatory attendance required to receive certificate.

## ENV 141

ORIENTATION TO
ENVIRONMENTAL SCIENCE 4CR
Survey the wide range of duties and career choices available to environmental technicians.

Prerequisite(s): ENG 094 (or co-requisite) or higher, or appropriate placement score.

## ENV 154

SITE CHARACTERIZATION 4CR
Focuses on providing students with a wide variety of mapping skills necessary for many phases of environment-related investigations. Also will provide hands-on application of established methods for evaluation of water, soil, and air. Biological, chemical, and physical investigations in accordance with generally accepted methodologies will be studied and conducted. This will be accomplished using hands-on training, with a wide variety of map resources and texts.

## ENV 157

ENVIRONMENTAL SITE
ASSESSMENT 4CR
Includes studying potential liability associated with property transfers. Students learn and implement historical research, site investigation, liability assessment, and regulatory assessment.

## ENV 161

ENVIRONMENTAL LAW I 5CR
Provides an overview of the American legal system and how the branches of government work together to create and enforce laws.
Focuses on environmental legislation and case law.

## ENV 162

GENERAL CHEMISTRY WITH LAB 6CR Provides the basic concepts, principles, and applications of inorganic chemistry germane to the environmental field. Related instruction includes mathematics used in designing, conducting, and interpreting analytical procedures. Laboratory methods, chemical calculations, properties of solutions, and properties of acids and bases are also covered.
Prerequisite(s): MAT 099 or MAT 103 or higher (or co-requisite), or appropriate placement score.

## ENV 163

ENVIRONMENTAL CHEMISTRY

## WITH LAB

6CR
Continuation of ENV 162 General Chemistry with progressive instruction in laboratory methods; chemical calculations; properties of solutions, acids and bases; and an introduction to organic chemistry.

## ENV 230

RURAL TECHNOLOGIES 4CR
Explores potential job areas in which students might seek employment. The rural aspect examines agriculture, forestry, fish, and wildlife.
Prerequisite(s): Successful completion of GEOL\& 110 and all ENV 100 -level courses, except ENV 135 .

ENV 231
ISSUES IN THE URBAN ENVIRONMENT
Course explores a variety of urban environmental issues. Storm-water management, sewage treatment, drinkingwater treatment, and waste disposal.

Prerequisite(s): Successful completion of GEOL\& 110 and all ENV 100 -level courses, except ENV 135 .

## ENV 240cAp

INTERNSHIP
10CR
All students finishing the program are required to complete an internship. This is a temporary full-time position in the public or private sector where students gain confidence and experience in a chosen area of employment. Students experience on-the-job opportunities and make a skilled contribution to the internship provider. Opportunities to find internships are provided, but the student is in charge of finding his or her own internship.
Prerequisite(s): Successful completion of at least 25 credits of ENV 200-level courses or instructor's permission. Enrollment in ENV 246 required.

## ENV 245 ${ }^{\text {cl }}$

ENVIRONMENTAL LAW II 5CR
Places an emphasis on correct, accurate interpretation of environmental regulations and their applications. Students will be able to research, interpret, and use a variety of regulations upon completion. Regulations include RCRA; CERCLA; CWA; Washington Drinking Water Rules; Washington State Water Quality regulations; SDWA; and other applicable state, federal and local regulations. Course also covers Federal Energy Policy, including development of fossil fuels and alternative energy sources.
Prerequisite(s): Successful completion of GEOL\& 110 and all ENV 100-level courses, except ENV 135.

## ENV 246CAP <br> ENVIRONMENTAL SCIENCE <br> CAPSTONE

Accompanies ENV 240 Internship. The Capstone Project integrates the CPTC core abilities with the internship and identification of how core abilities apply in the workforce.
Prerequisite(s): Successful completion of at least 25 credits of ENV 200-level courses or instructor's permission. Enrollment in ENV 240 required.

## ENV 248

HYDROLOGY
Provides the basic principles of applied surface-water hydrology, ground-water hydrology, and water quality. Emphasis is placed on a watershed-based approach that uses water-quality standards to regulate surface-water quality. The concepts and principles of biologically-based water quality standards are also introduced. Covers the occurrence, movement, and quality of water beneath the earth's surface; aquifers; well-testing methods; and sampling techniques.
Prerequisite(s): Successful completion of GEOL\& 110 and all ENV 100 -level courses, except ENV 135

## ENV 250 <br> INTRODUCTION TO AIR POLLUTION

Provides a basic knowledge of the sources, mechanisms, and health effects of noise and atmospheric air pollution and their interaction with the weather and other climatological conditions. Methods of regulatory-required air monitoring, sampling, and data interpretation will also be introduced.
Prerequisite(s): Successful completion of GEOL\& 110 and all ENV 100 -level courses, except ENV 135

## ENV 251

ENVIRONMENTAL CRITICAL AREAS
Covers environmental critical areas, including wetlands, wildlife conservation areas, aquifer recharge areas, flood hazard, and landslide areas. Focus is on wetland delineation and reporting. Appropriate sections of federal, state, and local regulations are addressed. Includes field trips to local sites and delineation projects on the campus wetland.

## ENV 260

INTRODUCTION TO SOILS 5CR
Course focuses on basic physical, biological, and chemical concepts of soil science.
Practical exercises and projects will be used to demonstrate how soil data is commonly used in regulatory, legal, and scientific land-use interpretations and decisions.
Prerequisite(s): Prerequisite(s):
Successful completion of GEOL\& 110 and all ENV 100-level courses, except ENV 135.

ENV 261
WATERSHED ANALYSIS 4CR
Focuses on issues associated with timber, fish, and wildlife watershed analysis. Study various modules and make an in-depth presentation to the class using visual aids. Monitoring and analytical skills will be covered and demonstrated through the collection of field data in remote areas. Willingness to be outdoors in rough terrain is a consideration.

Prerequisite(s): Successful completion of all ENV 100-level courses, except ENV 135 and GEOL\& 110.

## ENV 270

HAZARDOUS MATERIALS TRANSPORTATION
Covers the requirements associated with transportation of hazardous materials as defined in Title 49 Code of Federal Regulations (49CFR) and 171.8 (not including radioactive). Meets the hazmat employee training requirements found in 49 CFR 172 Subpart H.

## GEO 215

GPS TECHNOLOGIES
Uses global positioning system equipment to create maps and files for use in ArcGIS (geographic information system). Focuses on Trimble GPS technologies. Covers analysis tools and layout features for map creation.

## ESTHETIC SCIENCES

ES 105
ANATOMY AND PHYSIOLOGY FOR ESTHETICIANS 2CR
A comprehensive survey of the body systems and how they work as they relate to the practice of esthetics. Class projects include eukaryotic cell, cranial puzzle, muscles of the head and neck, and muscle flash cards.

ES 110
HISTOLOGY AND PHYSIOLOGY OF THE SKIN
A comprehensive examination of the epidermis, dermis, and hypodermis, including specialty cells and dermal adnexa. Examination of the physiology of the epidermal basement membrane, accessory organs of skin, and epidermal differentiation as they relate to the practice of esthetics.

ES 113
INTRODUCTION TO COSMETIC CHEMISTRY
Fundamentals of chemistry, including differences between organic and inorganic matter, simple chemical reactions, pH for estheticians, and composition of, as well as indications for, commonly used products for esthetic salon services.

## ES 114

FACIAL PROCEDURES
Introduction to facial procedures, including client intake and assessment, skin analysis, clinical indications and contraindications.
European facial instruction, product selections, and recommendations.

Prerequisite(s): Successful completion of ES 105, ES 110, ES 113, ES 116, ES 120, and ES 123.

Co-requisite(s): ES 118, ES 130, ES 132, ES 134, and ES 137.

## ES 116

MEDICAL CHART NOTATION
AND MEDICAL TERMINOLOGY
FOR ESTHETICIANS
4CR
Survey of common medical charting notations and terminology employed in medical practice, particularly as they relate to spa, salon, and medical office environments.

## ES 118

TEMPORARY HAIR REMOVAL 4CR
Survey of temporary hair removal to include: indication; contraindications; and methods of epilation using multiple modalities including, but not limited to, hard wax, soft wax, and sugaring, lash and brow tinting as well as all safety and sanitation employed in the esthetics profession.

Prerequisites(s): Successful completion of ES 105, ES 110, ES 113, ES 116, ES 120, and ES 123.

Co-requisite(s): ES 114, ES 130, ES 132, 134, and ES 137.

## ES 120

SKIN DISEASES AND DISORDERS 5CR
Identify normal skin and anomalies of skin, including primary, secondary, and vascular lesions, as well as irregularities of skin pigmentation. Identification of skin diseases and differentiating from common noncontagious lesions is included.

## ES 123 <br> BACTERIOLOGY, SALON SAFETY

 AND SANITATION 4CR Overview of pathological and non-pathological microorganisms including bacteria, viruses, endoparasites and ectoparasites, disease vectors, and transmission. Covers levels of decontaminations pertaining to salons, spas, and medical offices.ES 130
MAKEUP APPLICATIONS 2CR
Exploration of color theory, basic makeup
allocation techniques, and general product
knowledge
Prerequisite(s): Successful completion of ES 105, ES 110, ES 113, ES 116, ES 120, and ES 123.

Co-requisite(s): ES 114, ES 118, ES 132, ES 134, and ES 137.

## ES 132

SKIN CARE AND BODY TREATMENTS

4CR
Body treatments to include: foot soaks, mud wraps, body scrubs, wet and dry room techniques, and back treatments.
Prerequisite(s): Successful completion of ES 105, ES 110, ES 113, ES 116, ES 120, and ES 123.

Co-requisite(s): ES 114, ES 118, ES 130, ES 134, and ES 137.

## ES 134

MACHINE FACIALS 4CR
Includes indications, contraindications, and safety for electrical modalities including galvanic, high frequency, and other electrical equipment such as magnifying lamps, steamers, and hot towel warmers.
Prerequisite(s): Successful completion of ES 105, ES 110, ES 113, ES 116, ES 120, and ES 123.

Co-requisite(s): ES 114, ES 118, ES 130, ES 132, and ES 137.

## ES 136 <br> MICRODERMABRASION AND SUPERFICIAL PEELS

4CR
Covers clinical exfoliation and desquamation techniques employing chemical and mechanical methods.
Prerequisite(s): Successful completion of ES 114, ES 118, ES 130, ES 132, ES 134, and ES 137.

Co-requisite(s): ES 140, ES 145, ES 154, and ES 159.

ES 137
SPA/CLINICAL OPERATIONS 1CR
Introduction to realistic training in our student-run clinic, incorporating point of sale, dispensary, laundry, spa and clinical operations, and management positions.
Prerequisite(s): Successful completion of ES 105, ES 110, ES 113, ES 116, ES 120, and ES 123. Co-requisite(s): ES 114, ES 118, ES 130, ES 132, and ES 134.

## ES 140

CLINICAL APPLICATIONS I 7CR
Realistic training in our student-run clinic, incorporating every aspect of an exemplar esthetics practice.
Prerequisite(s): Successful completion of ES 125, ES 128, ES 130, ES 132, ES 134, and ES 137.
Co-requisite(s): ES 136, ES 145, ES 154, and ES 159.

## ES 141 ${ }^{\text {cL }}$

CLINICAL APPLICATIONS II 5CR
Realistic training in our student-run clinic, incorporating every aspect of an exemplar esthetics practice and advanced modalities.
Prerequisite(s): Successful completion of ES 136, ES 140, ES 145, ES 154, and ES 159.
Co-requisite(s): ES 149, ES 150, ES 153, ES 157, and ES 158.

## ES 145

## CORRECTIVE CONCEALING

MAKEUP
3CR
Theory and application of corrective and concealing techniques for makeup applications.

Prerequisite(s): Successful completion of ES 114, ES 118, ES 130, ES 132, ES 134, and ES 137.

Co-requisite(s): ES 136, ES 140, ES 154 and ES 159.

## ES 149

LASER THEORY AND
APPLICATIONS
5CR
Didactic and hands-on applications of multiple laser modalities. Course will include all related safety and first aid components.

Prerequisite(s): Successful completion of ES 136, ES 140, ES 141, ES 145, ES 154, and ES 159.

Co-requisite(s): ES 141, ES 150, ES 153, ES 157, and ES 158.

ES 150
MEDIUM DEPTH PEELS
2CR
Didactic and hands-on applications of clinical-based medium-depth peels. Course includes all related safety and first aid measures.
Prerequisite(s): Successful completion of ES 136, ES 140, ES 145, ES 154, and ES 159.
Co-requisite(s): ES 141, ES 149, ES 153, ES 157, and ES 158.

## ES 153 ${ }^{\text {cl }}$

ADVANCED COSMETIC
CHEMISTRY
In-depth study of cosmetic chemicals and product knowledge. Students will write research papers on chemical products, ingredients, and contraindications that may occur during an esthetic treatment.
Prerequisite(s): Successful completion of ES 136, ES 140, ES 145, ES 154, and ES 159.
Co-requisite(s): ES 141, ES 149, ES 150, ES 157, and ES 158.

ES 154
ADVANCED SKIN CARE AND
MASSAGE TECHNIQUES
5CR
This course includes advanced modalities of skin care, including MLD and other industryrelated techniques.

Prerequisite(s): Successful completion of ES 114, ES 118, ES 130, ES 132, ES 134, and ES 137.

Co-requisite(s): ES 136, ES 140, ES 145, and ES 159 .

## ES 157cAP

BUSINESS PLANNING
2CR
Independent research and preparation of a business plan and portfolio as capstone project.
Prerequisite(s): Successful completion of ES 136, ES 140, ES 145, ES 154, and ES 159.
Co-requisite(s): ES 141, ES 149, ES 150, ES 153, and ES 158.

## ES 158

STATE BOARD PREP
2CR
This course includes kit preparation and simulation of state board examinations.
Prerequisite(s): Successful completion of ES 136, ES 140, ES 145, ES 154, and ES 159.
Co-requisite(s): ES 141, ES 149, ES 150, ES 153, and ES 157.

## ES 159

INTRODUCTION TO
BUSINESS PLANNING AND
PROFESSIONAL DEVELOPMENT 1CR
This course introduces students to outlining business plans by obtaining demographics, researching profit and loss statements, and outlining startup costs.
Prerequisite(s): Successful completion of ES 114, ES 118, ES 130, ES 132, ES 134, and ES 137.

Co-requisite(s): ES 136, ES 140, ES 145, and ES 154.

## MASTER ESTHETICS

## ES 202

ADVANCED ESTHETIC THEORY 2CR
Covers advanced anti-aging modalities of skin care. Students will learn and practice advanced and holistic practices of face and body to benefit both themselves and their clients.
Prerequisite(s): Valid Washington State Esthetics License.
Co-requisite(s): ES 204, ES 206, ES 208, and ES 210.

## ES 204

WOUND HEALING/
INFLAMMATION IN ESTHETICS 2CR
Covers the theory and application process of how wound healing occurs with advanced modalities and the use of proper ingredients in skin care products to reduce effects of aggressive treatments.
Prerequisite(s): Valid Washington State Esthetics License.

Co-requisite(s): ES 202, ES 206, ES 208, and ES 210.

## ES 206

ADVANCED COSMETIC
CHEMISTRY
2CR
In-depth study of cosmetic chemicals and product knowledge. Research papers produced consisting of chemical products, ingredients, and contraindications that may occur during an esthetic treatment.

Prerequisite(s): Valid Washington State Esthetics License.

Co-requisite(s): ES 202, ES 204, ES 208, and ES 210.

ES 208
ADVANCED EXFOLIATION PROCEDURES

4CR
Covers the theory and application of multiple advanced exfoliation techniques as they pertain to esthetic skin care practices.
Prerequisite(s): Valid Washington State Esthetics License.
Co-requisite(s): ES 202, ES 204, ES 206, and ES 210.

ES 210
EVENING CLINICAL APPLICATIONS I 3CR
Covers realistic training in our student-run clinic, incorporating the point of sale, dispensary, laundry, spa and clinical operations, retail sales, and clinic management. Services will include every aspect of an exemplar esthetics practice and advanced modalities performed in a safe and sanitary manner.
Prerequisite(s): Valid Washington State Esthetics License.

Co-requisite(s): ES 202, ES 204, ES 206, and ES 208.

## ES 218

MEDIUM DEPTH PEELS
2CR
Introduces and covers didactic and hands-on applications of clinical-based medium-depth chemical peels. Students learn and practice all related safety and first aid measures.
Prerequisite(s): Valid Washington State Esthetics License. Successful completion of ES 202, ES 204, ES 206, ES 208, and ES 210.
Co-requisite(s): ES 220, ES 222, and ES 224.

## ES 220

INTRO TO ASSESSMENT AND BUSINESS PRACTICE

2CR
Covers clinical client charting practices and advanced skin analysis techniques in theory and practical applications. Students prepare research for a business plan and client portfolio of clinical treatments as the foundation of their second quarter capstone project.
Prerequisite(s): Valid Washington State Esthetics License. Successful completion of ES 202, ES 204, ES 206, ES 208, and ES 210.

Co-requisite(s): ES 218, ES 222, and ES 224.

ES 222
LASER AND LIGHT THERAPY 4CR
Covers didactic and hands-on applications of LED and other light therapy modalities, including all related safety and first aid components.
Prerequisite(s): Valid Washington State Esthetics License. Successful completion of ES 202, ES 204, ES 206, ES 208, and ES 210.

Co-requisite(s): ES 218, ES 220, and ES 224.

## ES 224

EVENING CLINICAL APPLICATIONS II
Participate in realistic training in our student-run clinic, incorporating every aspect of an exemplar esthetics practice and advanced modalities performed in a safe and sanitary manner.

Prerequisite(s): Valid Washington State Esthetics License. Successful completion of ES 202, ES 204, ES 206, ES 208, and ES 210.
Co-requisite(s): ES 218, ES 220, and ES 222.

## ES 228 <br> EVENING STATE BOARD

 PREPARATION4CR
Prepares students for state board examinations. Course covers state board kit preparation and simulation of state board examinations.
Prerequisite(s): Valid Washington State Esthetics License. Successful completion of ES 218, ES 220, ES 222, and ES 224.
Co-requisite(s): ES 230, ES 232, ES 234, and ES 236 .

## ES 230 <br> CORRECTIVE CONCEALING MAKEUP

2CR
Prepares students for state board examinations. Course covers state board kit preparation and simulation of state board examinations.
Prerequisite(s): Valid Washington State Esthetics License. Successful completion of ES 218, ES 220, ES 222, and ES 224.
Co-requisite(s): ES 228, ES 232, ES 234, and ES 236 .

ES 232
ADVANCED ASSESSMENT AND BUSINESS PRACTICE

3CR
Covers advanced diseases and disorders with in-depth study of cosmetic chemicals and product knowledge. Students prepare research papers consisting of chemical products, ingredients, and contraindications that may occur during an esthetic treatment. Students complete a business plan and portfolio as capstone project.
Prerequisite(s): Valid Washington State Esthetics License. Successful completion of ES 218, ES 220, ES 222, and ES 224.
Co-requisite(s): ES 228, ES 230, ES 234, and ES 236.

## ES 234

PRE/POST PROCEDURES 2CR
Determining what procedures will be appropriate for patients preparing for more invasive services - for example, laser or plastic surgery - and how the esthetician plays a vital role in the successful outcome of these advanced services.

Prerequisite(s): Valid Washington State Esthetics License. Successful completion of ES 218, ES 220, ES 222, and ES 224.
Co-requisite(s): ES 228, ES 230, ES 232, and ES 236.

## ES 236 <br> EVENING CLINICAL <br> APPLICATIONS III

Participate in realistic training in our
student-run clinic, incorporating every aspect of an exemplar esthetics practice and advanced modalities performed in a safe and sanitary manner.
Prerequisite(s): Valid Washington State Esthetics License. Successful completion of ES 218, ES 220, ES 222, and ES 224.

Co-requisite(s): ES 228, ES 230, ES 232, and ES 234.

> FUNDAMENTAL SKILLS
> FOR MANUFACTURING AND ENGINEERING

FSME 101
WORKSHOP SAFETY
3CR
Covers occupational safety and health for workers in manufacturing and engineering workshop environments.
Prerequisite(s): Instructor's permission.

FSME 111
QUALITY PRINCIPLES, INSPECTION AND TEST 5CR
Provides students with a foundational set of measurement, data analysis, and documentation skills. Teaches students how to interpret manufacturing drawings and schematics, how to take measurements and analyze data, and introduces quality principles and terminology used in industry.

Prerequisite(s): Instructor's permission.

## FSME 112

FABRICATION FUNDAMENTALS I 5CR
Teaches students the basic workshop skills needed to fabricate parts and structures. Also introduces students to the properties of common materials used in manufacturing and engineering.
Prerequisite(s): Instructor's permission.

## FSME 113

FABRICATION FUNDAMENTALS II 5CR
Introduces students to more advanced manufacturing and engineering fabrication techniques, including welding, the use of machine tools, composites, and electrical wiring.
Prerequisite(s): Instructor's permission.

## GEOLOGY

GEOL\& 110
ENVIRONMENTAL GEOLOGY

## WITH LAB

5CR
Focuses on the geological impacts associated with human activities. Emphasis includes internal and surface processes and the basic formation of the earth. Also covers conflicts associated with resource development and human responses to natural hazards.

## GRAPHIC TECHNOLOGIES

GTC 110
ART, DESIGN \& VISUAL THINKING 5CR
Introduction to visual arts and design principles. Stresses the components of visual thinking and visual language underlying design for digital media. A series of real-life case studies and exercises applies the design process and use of basic elements of design, typography, images, color, and layout.

## GTC 123 ${ }^{\text {cl }}$

MACINTOSH OPERATIONS \& IMAGE ACQUISITION
Introduction to Macintosh computer operations and file management. Covers image acquisition and archiving from Internet and analog sources.

GTC 130
DIGITAL IMAGING I: PHOTOSHOP 5CR Introduces the fundamentals of Photoshop to include basic tools, image editing, painting, color correction, and the creation, use, and management of layers and channels.

## GTC 143

ELECTRONIC PUBLISHING \& LAYOUT
Apply typographic terms, vocabulary, and concepts; examine type identification and explore the relationships or essence of typographic design. Apply and solve mathematical problems common to typography. Apply basic page layout and create files. Explore proofreading and correcting copy changes.

## GTC 149

DIGITAL IMAGING II: PHOTOSHOP5CR
Builds on the fundamentals of Photoshop and introduces advanced imagery to include blending, advanced layers, advanced selections, vector tools, filters, and color correction.
Prerequisite(s): Successful completion of GTC 130 or instructor's approval.

## GTC 164

## PREPRESS I

5CR
Students will create, edit, and manipulate PDF files, combine files into PDF presentations, and secure PDF documents. They will also work with many of the advanced features of Adobe Acrobat to include OCR text recognition, preflight, print production tasks, touch and commenting, proofing, live review, and collaboration.

## GTC 169

INTRO TO VECTOR-BASED
ILLUSTRATION SOFTWARE
5CR
Vector-based software, tools and features will be used to create text and logos, apply image effects, and design web graphics. The course incorporates branding and identifiers when designing products and enables students to design for both print and web.

## GTC 174

INDESIGN I 5CR
Perform techniques of the application of InDesign on the Macintosh or PC-based computer. Create files for electronic output; create documents, using style sheets, color/ swatches, and tabs, along with understanding color separations for creating a variety of projects such as menus, booklets, brochures, forms, and other documents. Explore PDF and postscript files, service bureaus, and production speed
Prerequisite(s): Successful completion of GTC 143 or instructor's approval.

## GTC 203

PREFLIGHT
5CR
Explore the prepress environment using page layout, vector object-oriented, and imaging software applications. Create projects in color to collect for output and packaging of files. Use Acrobat Professional to create and Distill PDF files, edit files, transfer files, and create an electronic portfolio. Perform electronic and laser separations for digital output, creating Postscript and EPS files for graphic manipulation.
Prerequisite(s): Successful completion of GTC 164, GTC 209, and GTC 276, or instructor's approval.

GTC 209
ADVANCED VECTOR DIGITAL ILLUSTRATION
Perform advanced techniques using Adobe Illustrator, create documents using color swatches and color separations for a variety of projects. Explore the abilities of different tolls/ panels, effects, and filters. Integrate Adobe Acrobat Pro as soft proofing software from within Illustrator and prepare files for electronic output ready for a service provider.

## GTC 210

DIGITAL IMAGING III:
PHOTOSHOP
5CR
From combining multiple images into a single design to manipulating existing photos and creating entirely new digital artwork from scratch. Adobe Photoshop is one of the most universal and powerful tools in the professional graphic design arsenal. The projects in this course were designed to reflect a variety of assignments that you might encounter in your graphic design career.

Prerequisite(s): Successful completion of GTC 149 or instructor's approval.

## GTC 223

PREPRESS II 5CR
Advanced prepress production topics are covered through lecture, research and practice. Topics include: fonts, postscript, Acrobat, file management, and raster image processing. Students will produce printing plates with halftones through the use of the Adobe suite and raster image processing.
Prerequisite(s): Successful completion of GTC 164 or instructor's approval.

GTC 225
ADVANCED PAGE LAYOUT PRINCIPIES

5CR
Apply advanced layout techniques using industry-standard software to produce files for output. Preflight and package press-ready files. Output composite and separations to postscript. Impose jobs for output service provider.
Prerequisite(s): Successful completion of GTC 164, GTC 209, and GTC 276, or instructor's approval

## GTC 254cAP

CAPSTONE CLASS 5CR
Preparation of personal job-hunting package of student's chosen specialty within the graphic technologies program, including industry research, business cards, cover letters, resumes, personal sales pitches, and portfolios.

Prerequisite(s): Successful completion of GTC 223 or instructor's approval.

GTC 260
WEB ANIMATION DESIGN 5CR
Offers experience using industry-standard tools for basic web animation. Students will develop familiarity with a timeline, layers, symbols, vector tools, and introductory animation techniques.

Prerequisite(s): Successful completion of GTC 276 or instructor's approval.

## GTC 264

PAPER, PRICING \& ESTIMATING 5CR Explore paper choices and costs within the printing industry. Estimate both materials and time for various printing processes. Produce a comprehensive business package from research to print-ready package. Present the business package with estimates to a group.

## GTC 265

WEB PROGRAMMING BASICS 5CR
Apply basic programming and graphical user-interface techniques for developing effective and useful websites. Become familiar with current HTML code syntax and CSS code for styling. Through progressive enhancement of skills, students will build multi-page websites, culminating in a personal portfolio website.

Prerequisite(s): Successful completion of GTC 276 or instructor's approval.

GTC 273
WEB GRAPHIC DESIGN AND USER EXPERIENCE
Learn techniques and best practices for designing graphics to be used on the web. Build website layout mock-ups, style guides, and user interface elements using Adobe Photoshop and Illustrator. Using modern design principles, create layouts that are both appealing and easy to use.

Prerequisite(s): Successful completion of GTC 276 or instructor's approval.

GTC 276
INDESIGN II 5CR
Students will perform advanced techniques with InDesign, create documents, use color and color separations for a variety of projects, and prepare files for electronic output.
Prerequisite(s): Successful completion of GTC 174 or instructor's approval.

## GTC 278

INDEPENDENT STUDY
This course explores student competency in the student's specialty skills area of the Graphic Technologies program. Students will produce a capstone project showing work accomplished and skills summarized.

Prerequisite(s): Successful completion of GTC 254 or instructor's approval.

## GTC 280

INTERNSHIP
Provides on-the-job field experience relevant to visual communications. Apply classroom skills to work-related supervised learning experience. Internships may be paid or non-paid assignments and occur at on- or off-campus locations.

Prerequisite(s): Successful completion of GTC 254 or instructor's approval.

## HEALTH UNIT <br> COORDINATOR

## HUC 106

ANATOMY \& PHYSIOLOGY FOR HEALTH UNIT COORDINATOR
Introduces basic word elements used in building medical terminology and identifies the different types of word elements present in each medical term by name. Introduces medical terms, body structure, and pathology in relation to each body system:
integumentary, musculoskeletal, sensory, circulatory, nervous, endocrine, and digestive systems.
Prerequisite(s): Must provide evidence of a current CPR card on the first day of enrollment, or by instructor's permission.

Co-requisite(s): Enrollment in HUC 108, HUC 114, and HUC 120.

## HUC 108

INTRODUCTION TO HEALTH UNIT COORDINATING
This course will focus on orientation and introduction to campus policies and rules of conduct. This course will also introduce students to program policies, dress code, attendance, classroom, and workplace rules of conduct, program goals, and grading system. This course also focuses on the use of various communication devices and introduces the EMR/HER and related Windows programs used in the hospital.
Prerequisite(s): Must provide evidence of a current CPR card on the first day of enrollment, or by instructor's permission.
Co-requisite(s): Enrollment in HUC 106, HUC 114, and HUC 120.

## HUC 112

UNIT COORDINATOR TASKS \& PROCEDURES II
Focuses on cognitive knowledge and performance skills in the computer laboratory. Students will demonstrate performance skills for maintaining medical records, accurately transcribing physicians' orders to the appropriate chart forms and Kardex, as well as completion of pseudo patient charts.
Prerequisite(s): Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120.
Co-requisite(s): Enrollment in HUC 113, HUC 118, HUC 122, HUC 126, and HUC 132.

## HUC 113

INTRODUCTION TO
COMMUNICATION IN THE HEALTH UNIT COORDINATOR ROLE
Students will learn to describe and use good listening skills as a means of preventing and/ or solving conflicts with a variety of people in different situations. This course also focuses on developing skills for the role of the communicator for the nursing unit. Students will also be given the tools for developing and practicing assertive communication, interpersonal relationships, and confidentiality skills.
Prerequisite(s): Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120.
Co-requisite(s): Enrollment in HUC 112, HUC 118, HUC 122, HUC 126, and HUC 132.

## HUC 114

UNIT COORDINATOR TASKS \& PROCEDURES I

7CR
Enables identification of the forms commonly used in the patient's chart. Students will learn to explain the purpose of a patient's chart and recognize the charting responsibilities for each health care team member. Presents instruction and procedures for scheduling appointments by telephone, computer, and writing. Also focuses on students' performance in the computer-skill laboratory, demonstrating their cognitive knowledge for maintaining medical records; ordering laboratory and diagnostic exams; accurately transcribing physicians' orders; recognizing treatment orders; ordering nursing supplies; identifying abbreviations, symbols, and terms used in a medication order; and charting information accurately to the appropriate forms and the Kardex for their pseudo patients.
Co-requisite(s): Enrollment in HUC 106, HUC 108, and HUC 120.

## HUC 118

ADVANCED
COMMUNICATIONS IN THE HEALTH UNIT COORDINATOR ROLE
Improves communication among diverse cultures and incorporates the relevant needs of culturally diverse groups in the medical field. Provide students with an overview and understanding of the fundamentals of communication.

Prerequisite(s): Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120.
Co-requisite(s): Enrollment in HUC 112, HUC 113, HUC 122, HUC 126, and HUC 132.

## HUC 120

UNIT MANAGEMENT I 3CR
Covers management responsibilities for the nursing unit, including time management and identification of possible fire and safety hazards on the nursing unit.
Co-requisite(s): Enrollment in HUC 106, HUC 108, and HUC 114.

## HUC 122

UNIT MANAGEMENT II 3CR
Focuses on cognitive knowledge for managing the nursing unit and developing verbal and written communication skills. Students will develop leadership and performance skills by practicing classroom management.
Prerequisite(s): Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120.

Co-requisite(s): Enrollment in HUC 112, HUC 113, HUC 118, HUC 126, and HUC 132.

## HUC 126

LEGAL/ETHICAL ASPECTS OF UNIT COORDINATING
Enables students to identify legal elements that are necessary in regard to preparing legal documents, discussing hospital and patient confidentiality, or witnessing signatures on consents for treatment. The ethics of this profession will be explored, and students will learn how to apply these ethics in professional behaviors. Covers AIDS education, bloodborne pathogens, HIPAA and hepatitis information.
Prerequisite(s): Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120.
Co-requisite(s): Enrollment in HUC 112,
HUC 113, HUC 118, HUC 122, and HUC 132.

## HUC 132

CLINICAL EXPERIENCE 7CR
Enables students to use the cognitive and performance objectives from courses HUC 106 through 126 in the clinical setting. The course focuses on resume preparation, employment application, and an employment interview. In order to participate in the clinical aspect of the program, students must receive a "No Record On File" report from the Washington State Patrol regarding crimes against persons. Clinical hours vary from six to eight hours per day, four days per week. Students unable to complete course HUC 132 will have the option of completing a clinical rotation with the next available program, on approval from the instructors, within six months.
Prerequisite(s): Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120.
Co-requisite(s): Enrollment in HUC 112, HUC 113, HUC 118, HUC 122, and HUC 126.

## HUC 204

ELECTROCARDIOGRAM
MONITOR TECHNICIAN 3CR
Examines basic cardiac function, normal and abnormal cardiac rhythms, etiology of arrhythmias, and interpretation of EKG tracing. Class time will consist of lectures, identifying rhythms, and group challenges. This course provides students with an excellent baseline understanding of both simple and more complex rhythms.

## HEATING \& AIR CONDITIONING SERVICE TECHNICIAN

## HAC 102

## BASIC ELECTRICITY <br> 5CR

Discusses the structure of matter, movement, electrons, conductors, insulators, direct and alternating currents, and electrical units of measurement. Students will also study electrical circuits and measurements, Ohm's law, series and parallel circuits, and electrical power. Also includes magnetic fields, inductance, transformers, capacitance, impedance, sine waves, and use of electrical measuring instruments.

Co-requisite(s): HAC 105, HAC 120, HAC 162 , HAC 163, HAC 164, and HAC 169, or instructor's permission.

## HAC 105

ELECTRICAL CIRCUITS
Discusses types of automatic control devices that respond to thermal change, the bimetal device, control by fluid expansion, the thermocouple, and electronic sensing devices. Covers space temperature controls (both high and low voltage), sensing temperatures of solids, pressure-sensing devices, oil-pressure safety controls, air-pressure controls, devices that control fluid flow, and maintenance of mechanical and electromechanical controls.

Co-requisite(s): HAC 102, HAC 120, HAC 162 , HAC 163, HAC 164, and HAC 169, or instructor's permission.

## HAC 120

ADVANCED CONTROLS \& TROUBLESHOOTING 4CR Covers control terminology, applications and electronic control circuits. Pneumatic controls and direct digital controls are also explored, along with programmable thermostats. Also covers procedures for troubleshooting basic and complex circuits, thermostats, and high-voltage circuits controlled by thermostats. Describes procedures for measuring amperage and voltage in lowvoltage circuits and discusses pictorial and line diagrams.
Co-requisite(s): HAC 102, HAC 105, HAC 162, HAC 163, HAC 164, and HAC 169, or instructor's permission.

## HAC 162 <br> ELECTRIC MOTORS \& THEIR APPLICATIONS

4CR
Discusses types of electric motors, along with starting and running components and characteristics, motor speeds, and power supplies. Specific topics also included are single and split-phase motors, the centrifugal switch, electronic replay, capacitor start motors, capacitor run motors, permanent split capacitor motors, shaded pole motors, single-phase hermetic motors, positive temperature coefficient motors, and variablespeed motors. Includes discussions of various characteristics and insulations, bearings, mountings, and motor drives.
Co-requisite(s): HAC 102, HAC 105, HAC 120 , HAC 163, HAC 164, and HAC 169, or instructor's permission.

## HAC 163

REFRIGERATION CONTROLS
3CR
Fundamentals of refrigeration controls and defrost systems.
Prerequisite(s): Must have required hand tools of the trade.
Co-requisite(s): HAC 102, HAC 105, HAC 120, HAC 162, HAC 164, and HAC 169.

## HAC 164

ELECTRIC MOTORS \& TROUBLESHOOTING
Discusses mechanical and electrical motor troubleshooting. This includes drive assemblies, belt tension, pulley alignment, open and shorted windings, shorts to ground, capacitor problems, wiring and connectors, and troubleshooting hermetic motors.
Co-requisite(s): HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, HAC 169 or instructor's permission.

## HAC 169

ADVANCED MOTOR THEORY 2CR
Understanding variable-speed and capacity control motors (ECMs, Offloaders, Compressors, Inverter Drives).

Prerequisite(s): Must have required hand tools of the trade.

Co-requisite(s): HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, and HAC 164.

HAC 170
HEATING I
Covers controls, thermal physics, electric heating, and equipment for residential and light commercial heating system installation and servicing, with emphasis on electric heating and gas heating.

Prerequisite(s): Successful completion of HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, HAC 164, and HAC 169. Must have required hand tools of the trade.
Co-requisite(s): HAC 175, HAC 181, and HAC 184.

## HAC 175

HEATING I LAB
5CR
Teaches students to troubleshoot and repair gas-burning appliances. Thermal physics and equipment for heating systems analysis and efficiency are studied. This is a hands-on class using live projects.
Prerequisite(s): Successful completion of HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, HAC 164, and HAC 169. Must have required hand tools of the trade.
Co-requisite(s): HAC 170, HAC 181, and HAC 184.

HAC 181
HEATING II
Covers controls, thermal physics, and equipment for residential and light commercial heating system installation and servicing with emphasis on electric and gas fuel heating.

Prerequisite(s): Successful completion of HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, HAC 164, and HAC 169. Must have required hand tools of the trade.
Co-requisite(s): HAC 170, HAC 175, and HAC 184.

## HAC 184

HEATING II LAB
4CR
Teaches students to competently troubleshoot and repair electric, gas, and fuel heating equipment; thermal physics, gas safety, and equipment for heating systems analysis and efficiency are studied. This is a hands-on class using live projects.
Prerequisite(s): Successful completion of HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, HAC 164, and HAC 169. Must have required hand tools of the trade.
Co-requisite(s): HAC 170, HAC 175, and HAC 181.

HAC 202
ADVANCED REFRIGERATION 10CR
Covers competently troubleshooting and repair of refrigeration equipment, thermal physics and equipment for refrigeration systems analysis and efficiency. This is a hands-on class utilizing live projects.

Prerequisite(s): Must have required hand tools of the trade.

Co-requisite(s): HAC 249 and HAC 257.
HAC 230
EPA REFRIGERANT CERTIFICATION 1 CR
Will give students the knowledge to properly recover and charge refrigerants \& dispose of them as defined by EPA. Pass a national examination.

HAC 237
BASIC REFRIGERATION I 7CR
Introduction to controls, thermal physics, and equipment for residential and light commercial air conditioning and refrigeration system installation and servicing, with emphasis on refrigeration.
Prerequisite(s): Successfully completed HAC 102, HAC 105, HAC 120, HAC 162, HAC 164, and HAC 169 or equivalent, or instructor's permission. Must have required hand tools of the trade.

Co-requisite(s): HAC 242, HAC 246, and HAC 255.

HAC 242
BASIC REFRIGERATION I LAB 5CR
Covers troubleshooting and repair of refrigeration equipment, thermal physics, and equipment for refrigeration systems analysis and efficiency. This is a hands-on class utilizing live projects. Students will build a basic capillary tube refrigeration unit using basic temperature controls.
Prerequisite(s): Successfully completed HAC 102, HAC 105, HAC 120, HAC 162, HAC 164, and HAC 169 or equivalent, or instructor's permission. Must have required hand tools of the trade.
Co-requisite(s): HAC 237, HAC 246, and HAC 255.

HAC 246
BASIC REFRIGERATION II 6CR
Introduction to controls, thermal physics, and equipment for residential and light commercial air conditioning and refrigeration system installation and servicing, with emphasis on commercial refrigeration and heat pumps.
Prerequisite(s): Successfully completed HAC 102, HAC 105, HAC 120, HAC 162, HAC 164, and HAC 169 or equivalent, or instructor's permission. Must have required hand tools of the trade.
Co-requisite(s): HAC 237, HAC 242, and HAC 255.

HAC 249
JOB READINESS
5CR
Covers resume writing, cover letter preparation, Internet job search, Work Source job readiness workshop, and tips on filling out job applications.
Prerequisite(s): Must have required hand tools of the trade.

## Co-requisite(s): HAC 202 and HAC 257.

## HAC $255^{\text {cAP }}$

BASIC REFRIGERATION II LAB 3CR
Hands-on experience with introduction to controls, thermal physics, and equipment for air-conditioning system installation and servicing.
Prerequisite(s): Successfully completed HAC 102, HAC 105, HAC 120, HAC 162, HAC 164, and HAC 169 or equivalent, or instructor's permission. Must have required hand tools of the trade.

Co-requisite(s): HAC 237, HAC 242, and HAC 246.

## HAC 257CAP

COMMERCIAL REFRIGERATION/ ADVANCED REFRIGERATION 7CR
Troubleshoot and repair commercial refrigeration through study material and DVD format. Refrigeration fundamentals, refrigeration electrical controls, and refrigeration charging are explored. This is a hands-on class utilizing live projects.
Prerequisite(s): Must have required hand tools of the trade.
Co-requisite(s): HAC 202 and HAC 249.

## HEMODIALYSIS

## HDT 106

PATIENT CALCULATIONS 2CR
Emphasis on fractions, combined percentages, the metric system, apothecary measurements and conversions, Roman numerals and dosage calculation formulas. Self-paced lab. (For hemodialysis students only).
Prerequisite(s): Successful completion of ENG 091 or equivalent.

## HDT 108

HEALTH INFORMATION
TECHNOLOGY IN PATIENT

## SERVICES

Covers the issues, trends, and impacts of electronic and networked information technology on health care services in general. Explores specific issues related to the hemodialysis technician profession.

## HDT 116

COMPUTER APPLICATIONS/ KEYBOARDING

2CR
Students will use computers to develop touch control and proper keyboarding and keypad techniques, with emphasis on alpha/numeric data entry. Course includes skill building; keyboarding alphabetic, figure, and symbol keys; and continued keyboarding drills and practice to develop a minimum speed and accuracy of 45 WPM/150 KSPM at 98 percent accuracy. Includes an introduction to MS Office Suite for basic business correspondence. Students will use Internet navigation for research projects.

## HDT 123

HEMODIALYSIS TERMS/
ANATOMY \& PHYSIOLOGY
Provides the basic techniques of medical word building to be applied in acquiring an extensive medical vocabulary. Introduces anatomical, physiological, and pathological terms relating to body systems and medical abbreviations.

## HDT 130

HEMODIALYSIS PRINCIPLES \& PROCEDURES I
Defines the basic principles of diffusion, filtration, fluid dynamics, and osmosis relating to the dialysis process. Includes overviews of the dialysis environment and kidney functions. Covers patient vitals and monitoring treatment, including identification of normal and abnormal values. Students will perform laboratory tests and use patient documentation procedures. Students will learn to identify causes, signs, symptoms, preventions, and interventions for medical and technical complications that may occur during dialysis. Includes patient dietary and nutrition requirements.

HDT 142
WATER TREATMENT FOR HEMODIALYSIS

2CR
Basic concepts of water treatment and dialyzer reuse are covered, including instruction on the varied devices used in hemodialysis. Also studied are advantages and disadvantages of filters, carbon tanks, deionizers, ultraviolet light, and reverse osmosis in the treatment of water for dialysis. Students will work in small groups to build a model of a water treatment room as their final project.

Prerequisite(s): Students must complete HDT 106, HDT 108, HDT 116, HDT 123, HDT and HDT 130 with a score of 80 percent or higher.

## HDT 150

VASCULAR ACCESS
2CR
This course covers the history and importance of vascular access, including the major types of permanent and temporary vascular access. Covers use of appropriate needle insertion for arteriovenous fistulae and grafts; catheter care and connections; the four types of anastomosis used for internal arteriovenous fistulae; and management of thrombosis, infection, hematoma, bleeding, steal syndrome, aneurysm, and catheter dislodgement.
Prerequisite(s): Students must complete HDT 106, HDT 108, HDT 116, HDT 123, HDT and HDT 130 with a score of 80 percent or higher.

## HDT 151

PROFESSIONAL INTERACTION 3CR
Explores the relationship and psychological boundaries between the technician, the patient and the renal facility. Includes concepts of patient education. Covers basic interpersonal verbal and non-verbal communication, with a focus on adapting to an individual's special needs or cultural orientation. Students will be given the tools to develop listening skills by practicing assertive communication and developing appropriate interpersonal relationships using the concepts of patient confidentiality.
Prerequisite(s): Students must complete HDT 106, HDT 108, HDT 116, HDT 123, HDT and HDT 130 with a score of 80 percent or higher.

HDT 153
HEMODIALYSIS PRINCIPLES \& PROCEDURES II
Defines the basic principles of diffusion, filtration, fluid dynamics, and osmosis relating to the dialysis process. Includes overviews of the dialysis environment and kidney functions. Covers patient vitals and monitoring treatment, including identification of normal and abnormal values. Students will perform laboratory tests and use patient documentation procedures. Students will learn to identify causes, signs, symptoms, preventions, and interventions for medical and technical complications that may occur during dialysis. Includes patient dietary and nutrition requirements.
Prerequisite(s): Students must complete HDT 106, HDT 108, HDT 116, HDT 123, HDT and HDT 130 with a score of 80 percent or higher.

## HDT 160

CLINICAL PRACTICUM I
During the clinical experience, students will participate in a dialysis facility as a member of the health care team in applying principles of hemodialysis, standard precautions, fluid management, initiating and concluding a dialysis treatment, patient and equipment monitoring, and treatment of routine hemodialysis problems in accordance with the standard dialysis procedures and policies of the facilities. Student will need to complete a total of 300 hours in the clinic.
Prerequisite(s): Students must successfully complete HDT 142, HDT 150, HDT 151, HDT and 153 with a score of 80 percent or higher. Completion of all required immunizations with lab results as outlined. Students must be able to pass background check and drug screening requirements per clinical site. Current "American Heart Association" (Healthcare Provider CPR/FirstAid BLS) - no substitutions.

## HDT 165

CLINICAL PRACTICUM II 6CR
During the clinical experience, students will participate in a dialysis facility as a member of the health care team in applying principles of hemodialysis, standard precautions, fluid management, initiating and concluding a dialysis treatment, patient and equipment monitoring, and treatment of routine hemodialysis problems in accordance with the standard dialysis procedures and policies of the facilities. Student will need to complete a total of 300 hours in the clinic.

Prerequisite(s): Students must successfully complete HDT 142, HDT 150, HDT 151, HDT and 153 with a score of 80 percent or higher. Completion of all required immunizations with lab results as outlined. Students must be able to pass background check and drug screening requirements per clinical site. Current "American Heart Association" (Healthcare Provider CPR/FirstAid BLS) - no substitutions.

## PHLEB 114

PHLEBOTOMY PROGRAM 4CR
Develop the skills necessary to draw blood specimens for analysis in a laboratory.
Includes an introduction to the structure and function of a clinical laboratory. Safety procedures and universal precautions are included. Provides hands-on practice in phlebotomy.
Prerequisite(s): Students must complete HDT 106, HDT 108, HDT 116, HDT 123, HDT and HDT 130 with a score of 80 percent or higher.

## HISTORY

## HIST\& 146

US HISTORY I
Surveys the history of North America in the colonial era to the Civil War. Emphasis is placed on the establishment of European colonies, relations between colonists and Native Americans, the development of slavery, economic and social developments, the relationship with the British Empire, the Revolutionary War, and emergence of the U.S. as a nation.

Prerequisite(s): Successful completion of ENG 094 or appropriate placement.

## HIST\& 147

US HISTORY II
Surveys the history of the U.S. from the Civil
War era through World War I. Emphasis is placed on Native American-white relations, slavery, territorial expansion, the Civil War, and economic, social, and political developments leading to World War I.

Prerequisite(s): Successful completion of ENG 094 or appropriate placement.

## HIST\& 148

US HISTORY III
Survey of U.S. History from World War II to present. Emphasis is placed on the Cold War Era, Vietnam, Civil Rights, the liberal consensus, the rise of modern conservatism, minority relations, the 1990s, and post-9/11 American society.
Prerequisite(s): Successful completion of ENG 094 or appropriate placement.

HUMAN SERVICES
HS 115

## THERAPEUTIC

COMMUNICATION SKILLS
5CR
Acquaints students with the basic methods of therapeutic communication. Emphasis is placed on building basic active listening skills. Students will demonstrate mastery of theory through classroom activities, including mock interviews and videotaping.
Prerequisite(s): Successful completion of ENGL\& 101, PSYC\& 100, any 100-level Computer Applications class of 3 or more credits, and COLL 102 with a grade of "C" or higher.

## HS 120 <br> SOFT SKILLS FOR THE HUMAN SERVICES PROFESSIONAL

Designed to prepare students for the internship portion of the program, as well as employment. Students will develop professional résumés, cover letters, and employment preparation materials in line with human services industry standards. Topics include workplace communication skills, including written and oral communication, team building, time and self-management, stress management, and conflict resolution for the workplace. Students will explore the supervisor-supervisee relationship, including the functions of evaluation, self-evaluation, and professional development.
Prerequisite(s): Successful completion of HS 115, HS 127, and HS 237.

HS 125
HIV/AIDS/BLOOD-BORN
PATHOGENS \& BRIEF RISK INTERVENTION FOR THE
CHEMICALLY DEPENDENT
Increase student's knowledge of HIV/AIDS \& blood-borne pathogens. Students will gain knowledge of the history of HIV/AIDS and related issues. Provides 10 hours of HIV/AIDS training in the areas of transmission, occupational safety, and standard precautions.
Prerequisite(s): Successful completion of ENG 094 and MAT 092 or equivalent.

## HS 127

INTRODUCTION TO HUMAN SERVICES
Introduces students to human services as a profession and includes a historical and philosophical framework of human service delivery. Contemporary roles and the human service worker will be covered, including: typical duties and tasks of human service workers, income, maintenance, children's services, family services, aging, substance abuse, mental health, services for persons with disabilities, and the sociocultural aspects of providing services in a multiculturally diverse society. Students will also examine the competencies and qualifications required to become an effective human services worker, as well as the occupational and educational alternatives for graduates.
Prerequisite(s): Successful completion of ENGL\& 101, PSYC\& 100, any 100-level Computer Applications class of 3 or more credits, and COLL 102 with a grade of " C " or higher.

## HS 152

INTERNSHIP I 3CR
Students will participate in on-the-job training in the human services field of their choice. Duties and tasks are supervised. Students will perform relevant job duties and tasks within an agency of their choice, attend supervision meetings, identify applicable community resources, and perform other job duties as assigned. Instructor's permission is required for site choice.
Prerequisite(s): Successful completion of HS 120, HS 125, HS 225, and HS 227.

## HS 215

HUMAN DEVELOPMENT FOR THE HUMAN SERVICES PROFESSIONAL 5CR
Human development for the human services professional is a lifespan development course looking at the physical, social, cognitive, and emotional development from conception to death. Cultural dynamics, diversity, and social contexts are examined in their relationship to the developmental process. Implications for parenting, education, case management, and social policy making will be discussed in terms of the application for human services professionals.
Prerequisite(s): Successful completion of HS 222, HS 230, HS 241, and HS 245.

HS 222
APPLIED COUNSELING FOR THE HUMAN SERVICES PROFESSIONAL5CR
Increases student knowledge of a variety of counseling theories, theorists, and techniques, from both a historical and contemporary viewpoint. Students will explore the practical application and appropriate uses of these theories in the human services system.
Prerequisite(s): Successful completion of HS 152, HS 226, and HS 234.

## HS 225

## SURVEY OF COMMUNITY

## RESOURCES

$3 C R$
Introduces students to a variety of community-based human service agencies through examination of their services, functions, and service populations. The class will participate in field visits, guest lectures, and exercises designed to assist them in understanding the relevance of each service component to the whole community, regional, and state system.
Prerequisite(s): Successful completion of HS 115, HS 127, and HS 237.

## HS 226

MENTAL HEALTH ASSESSMENT \& EVALUATION
Explores current perspectives of mental health in the helping professions by focusing on the identification, definition, diagnostic criteria, and assessment and evaluation of psychological disorders. Emphasizes the continuum between normal and abnormal behavior by examining biological, psychological, and sociocultural causal factors as they relate to adults and children.

Prerequisite(s): Successful completion of HS 120, HS 125, HS 225, and HS 227.

## HS 227

BEHAVIORAL HEALTH \& WELLNESS5CR Introduces students to the dimensions of wellness, including physical, emotional, social, and spiritual components. Students explore strategies for personal behavioral health and wellness, including coping strategies, personal boundaries, self-awareness, and how to avoid burnout on the job.
Prerequisite(s): Successful completion of HS 115, HS 127, and HS 237.

## HS 230

CASE MANAGEMENT
This course introduces students to the fundamentals of case management practice. Students will review different models of case management and learn about common case management functions, such as outreach, engagement, assessment, planning, accessing resources, coordination, and advocacy.
Prerequisite(s): Successful completion of HS 152, HS 226, and HS 234.

## HS 234DV <br> CULTURALLY COMPETENT <br> PRACTICE

5CR
Provides students with an awareness of the historical, cultural, socioeconomic, biological, and psychosocial influences that define diversity. Examines culturally competent standards that influence best practice standards for human service workers. Students will explore culture, guidelines for culturally sensitive practices, the impact of inequality on a variety of service populations, racism, prejudice, and inclusion strategies

Prerequisite(s): Successful completion of HS 120, HS 125, HS 225, and HS 227.

HS 237
LAW \& ETHICS FOR HUMAN SERVICES
Presents an overview of the ethical and professional issues that human services workers face in the field. Includes ethical decision making, professional responsibilities, liability, confidentiality, records and rights of clients, professional codes of ethics, core values and personal issues, supervision, leadership, and the legal system.

Prerequisite(s): Successful completion of ENGL\& 101, PSYC\& 100, any 100-level Computer Applications class of 3 or more credits, and COLL 102 with a grade of "C" or higher.

## HS 238

SPECIAL PROJECTS
Increases students' knowledge and skill by formulating and implementing a special project related to the human services field. Students must obtain authorization from the instructor for the project prior to enrolling in course

## HS 239

SELECTED TOPICS
Students will be responsible for performing a literature review and/or a research paper on a human services-related topic. Students must obtain authorization from the instructor for the project prior to enrolling in the course.

## HS 240

SURVEY OF ADDICTION
Focuses on addiction in modern society by surveying prevalent addictions and common co-occurring disorders. Students will gain an overview of causal factors and the consequences of addiction as they relate to the individual, family, and community. A strengths-based perspective will focus on the biological, psychological, and sociocultural factors influencing addiction and recovery.

Prerequisite(s): Successful completion of HS 222, HS 230, HS 241, and HS 245

## HS 241

DYNAMICS OF VIOLENCE $5 C R$
Presents an overview of the dynamics of violence in relationship to both the perpetrator and the victim. Areas of emphasis include child neglect, child sexual and physical abuse, missing and exploited children and adolescents, domestic violence, the cycle of violence, elder abuse, and violence's impact on the family system. Strategies for treatment and community intervention are explored.

Prerequisite(s): Successful completion of HS 152, HS 226, and HS 234.

## HS 245

INTERNSHIP II
3CR
Students will participate in on-the-job training in the human services field of their choice. Duties and tasks are supervised. Students perform relevant job duties and tasks within their agency of choice, attend supervision meetings, identify applicable community resources, and perform other job duties as assigned. Instructor's permission is required for site choice. Successful completion of Internship I is required.

Prerequisite(s): Successful completion of HS 152.

## HS 246

GROUP PROCESS 3CR
An introduction to the dynamics of group interaction, with emphasis on the student's firsthand experience as a group leader and member. Highlights the factors involved in problems of communication, effective emotional responses, and personal growth. Emphasizes group process as a means of changing behavior. This course is designed to assist human services students, who will function as group leaders and co-leaders.
Prerequisite(s): Successful completion of HS 222, HS 230, HS 241, and HS 245.

## HS 255

INTERNSHIP III 3CR
Students will participate in on-the-job training in the human services field of their choice. Duties and tasks are supervised. Students perform relevant job duties and tasks within their agency of choice, attend supervision meetings, identify applicable community resources, and perform other job duties as assigned. Instructor's permission is required for site choice. Successful completion of Internship II is required.

Prerequisite(s): Successful completion of HS 245.

## HSCD 134

INTRODUCTION TO ADDICTIONS 5CR
Focuses on substance and behavioral addictions in modern society by surveying prevalent addiction trends and common co-occurring disorders. Students will gain an overview of causal factors and the consequences of addiction as they relate to the individual, family, and community. A strengths-based perspective will focus on the biological, psychological, and sociocultural factors influencing addiction and recovery.

Prerequisite(s): Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255 .

## HSCD 150

THE NEURO-PHARMACOLOGY OF ADDICTION $\qquad$
This course provides an overview of the effects of drug use and chemical dependency on the body, including physiological, emotional, and behavioral implications. Topics include drug interactions, brain-body chemistry, and the management of chronic and acute conditions of drug misuse.

Prerequisite(s): Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, HS 255, and HSCD 134.

## HSCD 155

CHEMICAL DEPENDENCY COUNSELING I: INDIVIDUALS \& GROUPS

5CR
This course explores learning in a collaborative process that facilitates the client's progress toward mutually determined treatment goals and objectives. Students will learn counseling competencies that will include sensitivity to the client's individual characteristics and culture, the role of the counselor, approaches to counseling and addiction disorders, use of warmth, respect, genuineness, concreteness and empathy, and the therapeutic use of power and authority. Group dynamics and CD group counseling requirements as per the WAC and RCW will be covered.

Prerequisite(s): Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255.

## HSCD 180

ADDICTIONS TREATMENT: ETHICS \& THE LAW
This course examines the federal and state laws that pertain to chemical dependency for individuals, families, and service agencies, including the relevant WAC and RCW. Students will be introduced to the local criminal, civil, and juvenile court systems. Core topics include the examination and adherence of the ethical standards for chemical dependency professionals in the helping relationship, including implications for clinical supervision and continuing education. Includes ethical decision-making, professional responsibilities, liability, confidentiality, records and rights of clients, professional codes of ethics, core values and personal issues, supervision, leadership, and the legal system.
Prerequisite(s): Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255 .

HSCD 215
CASE MANAGEMENT \& RECORDKEEPING FOR THE CHEMICAL DEPENDENCY PROFESSIONAL
This course provides basic chemical dependency case management skills of service coordination, referral practices, community services, ongoing evaluation of treatment progress, client needs, HIV Brief risk intervention for the chemically dependent, and learning documentation standards and applicable laws.
Prerequisite(s): Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255 .

HSCD 227
CHEMICAL DEPENDENCY ASSESSMENT \& EVALUATION
Students will be introduced to a variety of industry-standard screening, evaluation and assessment tools for both adolescents and adults. Students will be able to determine a client's readiness for treatment and change and have an understanding of the appropriate levels of care. ASAM placement and the stages of change will be focal topics.
Prerequisite(s): Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255 .

## HSCD 229

SUICIDE PREVENTION FOR THE CHEMICAL DEPENDENCY PROFESSIONAL 1CR
This course provides an overview of contributing factors to suicidality, including mental health, substance use, and lifespan development. Evidence-based prevention strategies for adolescents, adults, and older adults are discussed, including differentiations between Death with Dignity statutes for the terminally ill.
Prerequisite(s): Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255 .

## HSCD 235

CHEMICAL DEPENDENCY

## PRACTICUM

Students will work in a supervised chemical dependency agency, as approved by the internship supervisor. Students adhere to ethical and professional responsibilities as per their agency, WAC, RCW, and NAADAC guidelines. The course will provide both individual and group supervision provided by agency and instructional professionals to share experiences and further develop workrelated skills. Students will complete 115 hours of supervised clinical experience.
Prerequisite(s): Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, HS 255, and HSCD 134.

## HSCD 249

CHEMICAL DEPENDENCY COUNSELING II: ADOLESCENTS \& FAMILIES 5CR
Acquaints students with culturally competent models of diagnosis and intervention for families and adolescents, as well as building an understanding for the dynamics among family members impacted by chemical dependency. Provides an overview of adolescent psychology and development and family systems theory. Discusses client, family, and community education for substance misuse.

Prerequisite(s): Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, HS 255, and HSCD 155.

## HSCD 251

RELAPSE PREVENTION
$3 C R$
Familiarizes students with the basic philosophy and techniques of relapse prevention for substance abuse and the ongoing process that involves all aspects of the person's wellness and culture. Learn to recognize the warnings signs for relapse, the 12-step approach to recovery, and general wellness concepts.
Prerequisite(s): Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255 .

## HUMANITIES

## HUM\& 101

INTRODUCTION TO HUMANITIES 5CR
An introduction to the humanities through investigation of current cultural events offered by local communities. Study of the arts painting, sculpture, architecture, drama, film, music, and dance - will be enhanced by attending performances and on-location field trips to sites in the community. Students will become familiar with terminology of the arts and with community performance/ demonstrations of these same arts (Multicultural content) (Writing intensive).
Prerequisite(s): Completion of ENG 094 with a minimum grade of " C " or equivalent.

## INTERIOR DESIGN

## DSN 105

DRAFTING I 6CR
This course introduces students to the fundamental skills and concepts necessary for interior design planning and drawing, including use of drafting tools, exercises in line weight and line type quality, architectural scale, dimensioning, and architectural lettering.

## DSN 119

## INTERIOR DESIGN \& THE

 CREATIVE DESIGN PROCESS 4CRThis course will introduce students to concepts to successfully steer an idea on its journey from imagination to object and to focus on where the idea is going. This introduction describes the nature of a designer's journey, maps the path a designer will take, and explores the path of what happens along the way. This course is an introduction to inspiration, conceptualization, communication, and elements and principles of design and trend spotting.

## DSN 121

DRAFTING II
5CR
This course introduces students to the fundamental principles needed to create an as-built plan set to include floor plan, power/ mechanical plan, and elevation. Introduces field surveys, symbols and graphics, and formatting of drawings.
Prerequisite(s): Successful completion of DSN 105.

DSN 123
MATERIALS, METHODS AND TECHNIQUES OF INTERIOR DESIGN
This course is an introduction to the fundamental design materials and applications for interior environments, including hard and resilient flooring, soft flooring, paint, wall coverings, cladding, acoustics, metal, plaster, glass, and millwork. Students will also learn to visually present material selections in a professional manner.

## DSN 124

COLOR THEORY
This course is an introduction to the world of color, encompassing the following: the three dimensions of color, color systems, color theory, coloring agents, dimensions of color in compositions, principles and elements of design in color, color interactions, symbolisms, influence of color, and exercises of putting color to use.

## DSN 132

LIGHTING
This course introduces students to the fundamental skills and concepts of lighting design. It is an approach to quality lighting, with a primary focus on the design process. Covers basic lighting, human factors, sustainability, products, and design fundamentals.

## DSN 136

INTRODUCTION TO DRAWING \& RENDERING
Introduction to Drawing and Rendering is a beginning look at some of the drawing methods and materials used by interior designers. This course begins with the fundamental concepts of freehand sketching and gaining the ability to think threedimensionally. It is also an introduction for methods to communicate your design vision through hand-drawn renderings. This is shown by the use of shade, shadow, texture, pattern, color, and material qualities.

## DSN 140

TEXTILES 4CR
This course is a comprehensive study of the textile products available for use in residential interior design, with an emphasis on window treatments, upholstery, the proper selection of materials, and working with drapery and upholstery showrooms and workrooms.

## DSN 145

RESIDENTIAL PLANNING, DESIGN \& EXTERIOR SPACES
Completion of this course will provide students with the understanding of interior space planning basics and concepts using diagrams, residential codes, planning guidelines, and presentation techniques. Students will also learn exterior elements and finishes that help to enclose the space.

Prerequisite(s): Successful completion of DSN 121.

## DSN 152

FURNITURE \& CABINET DESIGN 2CR
This course covers the fundamentals of custom furniture and cabinet design. Students will design a unique custom piece of furniture based on the study of furniture design theory, function, social use, materials, and fabrication.

## DSN 153

DRAFTING III
Completion of this course provides students with an understanding of typical planning dimensions and guidelines for residential interiors, as well as proper techniques to combine cabinetry, appliances, and applied measurements for graphic presentation standards.

Prerequisite(s): Successful completion of DSN 121.

## DSN 158

HISTORY OF INTERIORS
4CR
This course is a comprehensive overview of the history of interior design and furniture from antiquity to the present day, with special emphasis on design elements.

## DSN 159

INTRO TO TECHNOLOGY FOR INTERIOR DESIGNERS
Learn basic computer skills for interior designers. Contents include computer use for file management and Internet research, as well as introductions to computer-generated 3D modeling and design software for editing and presentation.

## DSN 202

ELEMENTS OF KITCHEN \& BATH DESIGN

5CR
This course is an introduction to the principles and elements of design for kitchens and bathrooms, including basic components, mechanical and lighting systems, color theory and construction applications.

## DSN 204

INTRODUCTION TO
COMMERCIAL INTERIOR DESIGN 4CR
This course provides an introduction to commercial interiors. Contents include areas of practice, ADA and code compliance, and commercial design case studies.

## DSN 206

20/20 DRAFTING
Learn to design kitchen and bath spaces using 20-20 Design software. Skills learned include the execution of floor plans, elevation
drawings, rendered perspectives, reports, and design layouts.

## DSN 208

MATERIALS \& ESTIMATING
4 CR
This course is an introduction to recommending and calculating quantities for cabinetry, appliances, plumbing fixtures, lighting, hardware, and surfacing materials for kitchens and bathrooms.

## DSN 211

BUSINESS PROCEDURES \& SALES 4CR This course provides students with the understanding of business practices generally conducted by interior designers. The study will acquaint students with the basic procedures, documents, ethical conduct, associations, and certification requirements within various business formats. This course is designed to address current topics on interior design and help prepare students for a professional job search.

## DSN 215

SUSTAINABLE DESIGN: AN OVERVIEW
Explores the history and principles associated with green and sustainable design. This course uncovers how the built environment affects people and the natural environment, environmental movements throughout history, green building assessment methods and certification programs, and the environmental responsibilities associated with the interior design profession.
Prerequisite(s): Basic competency with computers and navigating the web.

## DSN 216

CAD I
5CR
Learn to use the basic functions of AutoCAD software to produce 2D drawings for interior design.
Prerequisite(s): Basic competency with computers.

## DSN 224

SUSTAINABILITY FOR RESIDENTIAL \& COMMERCIAL

## APPLICATIONS

4CR
Examines sustainable approaches to the built environment, including preservation, rehabilitation, restoration, and reconstruction. This course also looks at applying sustainable design elements to residential and a variety of commercial project types.
Prerequisite(s): It is recommended to have completed or be concurrently enrolled in DSN 215. Basic competency with computers and navigating the web.

## DSN 225

DESIGN I
This course introduces space planning for commercial interiors, including programming, design schematics and development, as well as relevant ADA Standards for Accessible Design and building codes.
Prerequisite(s): Successful completion of DSN 204 and DSN 216.

## DSN 226

SUSTAINABLE STRATEGIES IN DESIGN
Introduces sustainable strategies for the integrated interior environment, including identifying materials, products, lighting systems, and building components that embody the principles of sustainability.
Prerequisite(s): It is recommended to have completely or be concurrently enrolled in DSN 215. Basic competency with computers and navigating the web.

## DSN 227

COMMERCIAL SPECIFICATIONS 4CR
This course covers general notes used within construction documents, the specification of products, fabrication, and applications for commercial interior design. It also covers the liabilities of the designer in regard to specification writing for codes, standards, and federal regulations that are an essential part of designing building interiors.
Prerequisite(s): Successful completion of DSN 225.

## DSN 229

SUSTAINABLE INTERIORS \& THE INTEGRATED DESIGN PROCESS 5CR
Covers the steps to design and present a green interior space. Students will learn more about the integrated design process, develop their own sustainable interior design, and present it in a professional manner in preparation for real-life sustainable design proposals.
Prerequisite(s): Completed or concurrently enrolled in DSN 215, DSN 224, and DSN 226. Basic competency with computers and navigating the web.

## DSN 231

HISTORIC PRESERVATION 20TH CENTURY DESIGN \& PHILOSOPHY 3CR
Includes the study of historically significant 20th- and 21st-century designers and architects, their philosophies, and the role of their significant historic works.

## DSN 236

## DESIGN II

Through site visits, research and building plans, students will develop and present a space plan and design concept incorporating sustainable practices for a project of commercial nature, using an existing space as a model. Students will also be introduced to building code topics, such as occupant load and means of egress. Upon completion of the project, students will give a verbal and visual presentation of their design concept.
Prerequisite(s): Successful completion of DSN 225.

DSN 239 ${ }^{\text {c }}$
CAD II
5CR
This course includes the intermediate-level use of 2-dimensional CAD (computer-aided drafting). To develop increased knowledge, speed, and accuracy, students will use AutoCAD software to develop an interior drawing set using AutoCAD layouts.
Prerequisite(s): Successful completion of DSN 216.

## DSN 241

BUSINESS PRACTICES 4CR
This course is an introduction to business practices as generally conducted by interior designers. The intent of this study is to acquaint students with some of the daily basic procedures, documents, ethical conduct, associations, certification requirements, and fees associated with the profession of interior design within various business formats. This course is designed to address current topics within the profession and help prepare students for internships and the job search.

## DSN 245

INTERNSHIP
4CR
Interact with established businesses or related businesses of interior design by going to a place of business and working in the field. Students will arrange to work with a sponsor and will observe and assist the sponsor with meaningful design activities for a total of 80 hours.
Prerequisite(s): Successful completion of DSN 119, DSN 123, DSN 124, DSN 132, DSN 136, DSN 140, DSN 145, DSN 153, DSN 158, DSN 159, DSN 204, DSN 227, DSN 231, DSN 236 , and DSN 239, or instructor's permission.

## DSN 251

## CONTRACT FURNITURE

3CR
This course provides an introduction to the various types of furniture used in commercial design. Concentrates on the selection, specification, and use of furnishings, as well as contracts, documents, and the procurement of contract furniture.

## DSN 265

(OPTIONAL) INDEPENDENT STUDY3CR Explore or expand knowledge of interior design within an independent study format. With guidance and instructor's approval, students will select a meaningful project within an area of interest to strengthen their range of abilities. Students will fulfill several pre-approved objectives at the conclusion of the course, completing a self-assessment and final presentation to the instructor.
Prerequisite(s): Instructor's approval.

## DSN 266 ${ }^{\text {CAP }}$

PORTFOLIO/PROFESSIONAL
PRESENTATION
7CR
Create and present a professional portfolio of work illustrating your level of design and technical skills. Students will learn to present themselves and their work professionally to prepare for the job search, interviews, and employment in the interior design industry.
Prerequisite(s): Successful completion of DSN 119, DSN 124, DSN 136, DSN 145, DSN 153, DSN 159, DSN 227, DSN 236, and DSN 239, or instructor's permission.

## DSN 270

(OPTIONAL) INDEPENDENT STUDY4CR Explore or expand knowledge of interior design within an independent study format. With guidance and instructor's approval, students will select a meaningful project within an area of interest to strengthen their range of abilities. Students will fulfill several pre-approved objectives at the conclusion of the course, completing a self-assessment and final presentation to the instructor.
Prerequisite(s): Instructor's approval.

## DSN 275

(OPTIONAL) INDEPENDENT STUDY5CR
Explore or expand knowledge of interior design within an independent study format. With guidance and instructor's approval, students will select a meaningful project within an area of interest to strengthen their range of abilities. Students will fulfill several pre-approved objectives at the conclusion of the course, completing a self-assessment and final presentation to the instructor.

Prerequisite(s): Instructor's approval.

## LEADERSHIP

## LEADR 100

LEADERSHIP I
1-6CR
Students taking this course will gain a basic understanding of the concept of leadership theory while developing a personal philosophy of leadership, an awareness of the moral and ethical responsibilities of leadership, and developing and improving their own leadership skills. This course integrates leadership studies through study, observation and application. This course will encourage a high level of class discussion and active participation. You will have a chance to work through case studies, participate in simulations, interact with experienced leaders, analyze popular films using leadership themes, and discuss the impact of current events and the realities of leadership.

## LEADR 101

## LEADERSHIP II

 1-6CRStudents taking this course will gain a basic understanding of the concept of leadership theory while developing a personal philosophy of leadership, an awareness of the moral and ethical responsibilities of leadership, and developing and improving their own leadership skills. This course integrates leadership studies through study, observation and application. This course will encourage a high level of class discussion and active participation. You will have a chance to work through case studies, participate in simulations, interact with experienced leaders, analyze popular films using leadership themes, and discuss the impact of current events and the realities of leadership.

## LEADR 102

LEADERSHIP III
1-6CR
Students taking this course will gain a basic understanding of the concept of leadership theory while developing a personal philosophy of leadership, an awareness of the moral and ethical responsibilities of leadership, and developing and improving their own leadership skills. This course integrates leadership studies through study, observation and application. This course will encourage a high level of class discussion and active participation. You will have a chance to work through case studies, participate in simulations, interact with experienced leaders, analyze popular films using leadership themes, and discuss the impact of current events and the realities of leadership.

## LEADR 103

LEADERSHIP IV
1-6CR
Students taking this course will gain a basic understanding of the concept of leadership theory while developing a personal philosophy of leadership, an awareness of the moral and ethical responsibilities of leadership, and developing and improving their own leadership skills. This course integrates leadership studies through study, observation and application. This course will encourage a high level of class discussion and active participation. You will have a chance to work through case studies, participate in simulations, interact with experienced leaders, analyze popular films using leadership themes, and discuss the impact of current events and the realities of leadership.

## MANUFACTURING

## MCH 101

ORIENTATION/MACHINE SHOP SAFETY
Provides an overview of the program, orientation to shop procedures, and the responsibilities associated with personal safety and the safety of others.
Prerequisite(s): Instructor's permission.

## MCH 105

SHOP MATH/BLUEPRINT I
Provides a review of basic arithmetic: addition, subtraction, fractions, and decimal fractions. Includes a study of drawings and prints and an overview of basic measuring tools.

Prerequisite(s): Instructor's permission and MCH 101.

## MCH 107

SHOP MATH/BLUEPRINT II
Provides study of basic geometry concepts and introduction to calculators. Includes advanced study of prints and reading of machine details.

Prerequisite(s): Instructor's permission and MCH 101.

MCH 109
SHOP MATH/BLUEPRINT III
6CR
An introduction to trigonometric functions, practical machine mathematical applications, the Cartesian coordinate system, geometric dimensioning, and tolerancing.
Prerequisite(s): Instructor's permission and MCH 101.

## MCH 111

SHOP MACHINES \& TOOLS 6CR
Use and care of hand and machine tools used in measurement, layout, and inspection. Beginning machine tool operation of pedestal grinders, drill presses, and power saws.

Prerequisite(s): Instructor's permission and MCH 101.

## MCH 117

LATHES I $\qquad$
Progressively difficult operations on lathes with emphasis on setups, speeds, and feeds, turning, facing, grooving, threading, and tapers. Actual turning jobs from industry may be used.

Prerequisite(s): Instructor's permission and MCH 101.

## MCH 121

MILLS I
6CR
Progressively difficult operations on milling machines, with emphasis on setups, speeds, and feeds, end milling, side milling, shell milling, drilling, and tapping. Actual machining jobs from industry may be used.
Prerequisite(s): Instructor's permission and MCH 101.

## MCH 122

LATHES \& MILLS II 8CR
Intermediate calculations and machining operations, with emphasis on accessories for lathes and milling machines. Actual machining jobs from industry may be used.

Prerequisite(s): Instructor's permission and MCH 101.

## MCH 125

LATHES \& MILLS III
10CR
Progressively advanced turning and milling techniques, with emphasis placed on precision setup using geometric dimensioning and tolerancing. Actual machining jobs from industry may be used.
Prerequisite(s): Instructor's permission and MCH 101.

## MCH 126

LATHES \& MILLS IV
Progressively advanced turning and milling techniques, with emphasis placed on the use of all shop equipment to complete advanced precision projects. Actual machining jobs from industry may be used.

Prerequisite(s): Instructor's permission and MCH 101.

## MCH 129

SURFACE GRINDING 4CR
Progressively difficult grinding operations, with emphasis on surface grinding, mounting, dressing, and truing grinding machine wheels.
Prerequisite(s): Instructor's permission and MCH 101.

## MCH 133

TOOL \& CUTTER GRINDING $5 C R$
Progressively difficult tool and cutter grinding, with emphasis on milling cutters, reamers, and form tools.
Prerequisite(s): Instructor's permission and MCH 101.

## MCH 201

CATIA I
5CR
Gain introductory knowledge of 3D and parametric design using CATIA V5 software to create basic parts and assemblies in solids and wireframe.
Prerequisite(s): Instructor's permission.

## MCH 202

INTRODUCTION TO CNC 7CR
Introduction to CNC programming software and setups using CAD/CAM interfacing and project milling, drilling, and lathe turning. Actual machining jobs from industry may be used.
Prerequisite(s): Instructor's permission and MCH 101.

## MCH 203

CATIA II
3CR
Build upon modeling and parametric design using CATIA $V_{5}$ software to apply graphic skills to create parts, assemblies, and profiles in solids and wireframe.

Prerequisite(s): Instructor's permission.

## MCH 206

CATIA III
3CR
Apply more advanced modeling and parametric design using CATIA V5 software to create complex parts and assemblies in solids and wireframes.

Prerequisite(s): Instructor's permission.

## MCH 211

INTERMEDIATE CNC
10CR
Covers understanding and operating
Computer Numerical Control (CNC)
machinery. Also includes writing programs and manual data input. Actual machining jobs from industry may be used.

Prerequisite(s): Instructor's permission and MCH 101.

## MCH 216

ADVANCED CNC 12CR
Covers progressively advanced CNC
machining techniques, with emphasis placed on program troubleshooting and increased production. Actual machining jobs from industry may be used.
Prerequisite(s): Instructor's permission and MCH 101.

MCH 219
CAREER OPPORTUNITIES 4CR
Covers writing a resume, researching employers and job search techniques.
Prerequisite(s): Instructor's permission and MCH 101.

## MCH 223

INSPECTION TECHNIQUES 6CR
Covers proper use of inspection tools and equipment. Emphasis is on applied use of geometric dimensioning and tolerancing, with use of granite layout surfaces.
Prerequisite(s): Instructor's permission and MCH 101.

MCH 229
METALLURGY \& HEAT TREATMENT 4CR Provides insight into the study of the properties and compositions of metals. Emphasis is on heat treatment of metals.
Prerequisite(s): Instructor's permission and MCH 101.

## MCH 231 ${ }^{\text {CAP }}$ <br> MANUFACTURING RESOURCES

 \& RESEARCHThis course is a study of resources for machining information, with emphasis on methods of research.

Prerequisite(s): Instructor's permission and MCH 101.

## MCH 240

TRAINING \& PRACTICE 1-10CR Special instruction to suit the individual's needs. Repeated enrollment ensures progressively advanced training. The number of times a student may enroll is based on the student's needs and is at the instructor's advisement.
Prerequisite(s): Instructor's permission and MCH 101.

## MASSAGE

## MASST 110

ANATOMY, PHYSIOLOGY \& PATHOLOGY I

5CR
Introduces students to anatomy and physiology, cytology, integumentary, osteology, myology, and the nervous system.

## MASST 111

ANATOMY, PHYSIOLOGY \& PATHOLOGY II

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5 \mathrm{CR}
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Explores endocrinology, cardiovascular, digestive, and respiratory systems.
Prerequisite(s): Successful completion of MASST 110.

## MASST 112

SWEDISH MASSAGE THEORY 4CR
Introduces students to the history, application, and principles of Swedish massage. This includes not only the massage strokes, but also client safety, communication, and charting of results.

Prerequisite(s): Potential students entering the program must test at college level (283 or higher) in reading on the Accuplacer or equivalent or have completed ENG 094. Students must also have documentation of training in standard first aid and CPR and a four-hour HIV/AIDS/blood-borne pathogens class prior to progressing to second quarter. A Washington State Patrol check will be required during the first quarter of study to progress to the second quarter. Some results from the background check may prevent individuals from participating in certain classes.
Co-requisite(s): MASST 120.

## MASST 115

CLINICAL MASSAGE TECHNIQUES 4CR
Covers a variety of massage techniques used in clinical massage. Students will learn and practice when and how to employ these techniques in order to safely and effectively treat their clients.

Prerequisite(s): Successful completion of the Swedish Massage Practitioner program, completion of a similar program from another accredited institution, or current Washington state massage practitioner license.

## MASST 116

COMPLEMENTARY MASSAGE MODALITIES I
Introduces students to a variety of massage modalities that can be safely integrated into a massage practice. Modalities covered include fascial techniques, acupressure, seated massage, and side-lying. Indications, contra-indications, and treatment modifications will be identified.

Prerequisite(s): Successful completion of MASST 112 and MASST 120.

## MASST 120

SWEDISH MASSAGE PRACTICE 4CR Students will apply knowledge and techniques taught in Swedish Massage Theory. This class prepares students to practice safe, relaxing, therapeutic, and effective Swedish massage. In addition to proper use and application of Swedish massage strokes, students will also practice proper self-care techniques and learn how to care for their equipment.

Co-requisite(s): MASST 112.

## MASST 123 <br> CLINICAL APPLICATION OF MASSAGE THERAPY

Introduces and prepares students to recognize, assess, and effectively treat common musculoskeletal pathologies. Other information covered is scope of practice, tissue healing, defining causes of injury, stages of rehabilitation, and common mistakes that massage therapists make.
Prerequisite(s): Successful completion of Swedish Practitioner course or equivalent, or current Washington state massage practitioner license.

## MASST 126

KINESIOLOGY: UPPER EXTREMITY 2CR Introduces students to the study of movement. Presents the beginning principles and skills for locating and identifying bony landmarks and muscles of the upper extremity using palpation techniques, movement, and anatomical terminology.

## MASST 130

KINESIOLOGY: TRUNK 1CR
This course continues the study of movement. Builds upon the principles and skills for locating and identifying bony landmarks and muscles of the trunk using palpation techniques, movement, and anatomical terminology.
Prerequisite(s): Successful completion of MASST 126.

## MASST 131 <br> ASSESSMENT \& TREATMENT OF <br> THE BACK <br> 2CR

Detailed and extensive review of the structure and function of the back. Students will explore common musculoskeletal and neurological pathologies that can affect the back and will formulate a treatment plan to safely and effectively assess and treat those conditions.
Prerequisite(s): Successful completion of MASST 115 and MASST 123.

## MASST 132

DEEP TISSUE MASSAGE THEORY 3CR
Introduces students to a variety of massage treatment techniques, providing groundwork for clinical massage applications. Indications, contraindications, and treatment
modifications will be identified and discussed.
Prerequisite(s): Successful completion of MASST 112 and MASST 120.

## Co-requisite(s): MASST 135

## MASST 135

DEEP TISSUE MASSAGE PRACTICE 4CR Building on the massage techniques learned in Swedish massage theory and practice, students become proficient in a variety of deep-tissue techniques.
Prerequisite(s): Successful completion of MASST 112 and MASST 120.
Co-requisite(s): MASST 132.

## MASST 136

COMPLEMENTARY MASSAGE MODALITIES II
Introduces students to a variety of massage modalities that can be safely integrated into a massage practice. Modalities covered include pregnancy massage, sports massage, and hydrotherapy, including hot stone massage. Indications, contraindications, and treatment modifications will be identified.

Prerequisite(s): Successful completion of MASST 112 and MASST 120.

## MASST 137

KINESIOLOGY: HEAD AND NECK 1CR Continues the study of movement. This course builds on the principles and skills for locating and identifying bony landmarks and muscles of the head and neck, using palpation techniques, movement, and anatomical terminology.

Prerequisite(s): Successful completion of MASST 126.

MASST 139
CLINICAL MASSAGE BUSINESS \& ETHICS
Prepares students to communicate with other health care practitioners through proper and thorough documentation.
Prerequisite(s): Successful completion of Swedish Massage Practitioner program, completion of a similar program from another accredited institution, or currently a Washington state licensed massage practitioner.

## MASST 143

MASSAGE BUSINESS \& ETHICS I 2 CR Introduces the learner to important business knowledge, skills, and professional ethics vital to the successful practice of massage therapy after licensure. Students will know and follow professional ethics as related to massage, learn and practice universal safety precautions, use and understand common medical terms, research the different avenues of employment available, and begin the process of building a successful massage business.

## MASST 145

ORTHOPEDIC ASSESSMENT 4CR Detailed analysis of joints, ligaments, and how surrounding structures affect movements. Integrating basic assessment and treatment of common musculoskeletal injuries and conditions.

Prerequisite(s): Successful completion of MASST 126, MASST 130, MASST 137 and MASST 146, or current Washington state massage practitioner license.

## MASST 146

KINESIOLOGY: LOWER EXTREMITY 2CR Continue the study of movement. This course builds on the principles and skills for locating and identifying bony landmarks and muscles of the lower extremity using palpation techniques, movement, and anatomical terminology.
Prerequisite(s): Successful completion of MASST 126.

## MASST 147 <br> CLINICAL MASSAGE ANATOMY

 \& PHYSIOLOGY IExplores body systems, with an emphasis on the common pathologies of those systems. In addition to covering the cause and effect of those pathologies, students will also be presented with common allopathic treatments their clients may be receiving for those conditions. Pharmacology will include effects and side-effects of medications, and how those relate to the indications and contraindications of massage.
Prerequisite(s): Successful completion of Swedish Massage Practitioner program, completion of a similar program from another accredited institution, or current Washington state massage practitioner license.

## MASST 148

MASSAGE BUSINESS \& ETHICS II 1 CR
Learn and demonstrate a variety of successful business strategies, from marketing to record keeping, in addition to becoming knowledgeable regarding state and local laws that govern massage therapy in Washington state.
Prerequisite(s): Successful completion of MASST 143.

## MASST 150 <br> CLINICAL MASSAGE THEORY: SPECIAL POPULATIONS

4CR
Explores how massage can be modified to safely and effectively treat individuals who have unique situations that could include physical, emotional, and health-related challenges. Indications and contraindications will be discussed as they apply to each population.
Prerequisite(s): Successful completion of Swedish Massage Practitioner program, completion of a similar program from another accredited institution, or current Washington state massage practitioner license.
Co-requisite(s): MASST 151.
MASST 151
CLINICAL MASSAGE PRACTICE: SPECIAL POPULATIONS
Students will practice techniques and positioning to adapt massage to safely and effectively treat individuals who have unique situations that could include physical, emotional, and health-related challenges. Indications and contraindications will be discussed as they apply to each population.
Prerequisite(s): Successful completion of Swedish Massage Practitioner program, completion of a similar program from another accredited institution, or current Washington state massage practitioner license.

Co-requisite(s): MASST 150.

## MASST 153

ASSESSMENT \& TREATMENT: UPPER EXTREMITY

2CR
Detailed and extensive review of the structure and function of the upper extremity. Students will explore common musculoskeletal and neurological pathologies that can affect the arm and shoulder and will learn how to safely and effectively assess and treat those conditions.

Prerequisite(s): Successful completion of MASST 115 and MASST 123, or current Washington state massage practitioner license.

## MASST 155

ASSESSMENT \& TREATMENT:
LOWER EXTREMITY 2CR
Detailed and extensive review of the structure and function of the lower extremity. Students will explore common musculoskeletal and neurological pathologies that can affect the lower extremity and will learn how to safely and effectively assess and treat those conditions.
Prerequisite(s): Successful completion of MASST 115 and MASST 123, or current Washington state massage practitioner license.

## MASST 157 <br> ASSESSMENT \& TREATMENT: HEAD \& NECK 2CR

Detailed and extensive review of the structure and function of the head and neck. Students will explore common musculoskeletal and neurological pathologies that can affect the head and neck and formulate a treatment plan to safely and effectively assess and treat those conditions.
Prerequisite(s): Successful completion of MASST 115 and MASST 123, or current Washington state massage practitioner license.

## MASST 158

PRACTICUM I 3CR
Allows students to choose and pursue individual workplace experience opportunities. This opportunity may be in a supervised internship setting, at on-site events, or at Clover Park Technical College's student-run massage clinic.
Prerequisite(s): Successful completion of Swedish Massage Practitioner program, completion of a similar program from another accredited institution, or current Washington state massage practitioner license.

## MASST 159

CLINICAL MASSAGE BUSINESS \& ETHICS II
Prepares students to communicate with insurance companies and leads students through the process of billing insurance companies for services, from codes to filling out forms and follow-up.
Prerequisite(s): Successful completion of MASST 139, or current Washington state massage practitioner license.

## MASST $160{ }^{\text {cap }}$

## PRACTICUM II

Allows students to choose and pursue individual workplace experience opportunities. This opportunity may be in a supervised internship setting, at on-site events, and/or at Clover Park Technical College's student-run massage clinic.
Prerequisite(s): Successful completion of Swedish Massage Practitioner program, completion of a similar program from another accredited institution, or current Washington state massage practitioner license.

## MASST 162

STUDENT CLINIC 2CR
Students will gain first-hand knowledge and experience by running a massage clinic. In addition to providing relaxation and deeptissue massage, each student will also have an opportunity to experience the administrative positions in a clinic by rotating through the receptionist, cashier, and scheduling manager positions.
Prerequisite(s): Successful completion of MASST 112 and MASST 120. Student must have current First Aid/CPR certification and must have completed a minimum of four hours of HIV-AIDS training. Students must have a report from the Washington State Patrol.
Some results from the background check may prevent individuals from participating in the student clinic.

## MASST 163

CLINICAL MASSAGE ANATOMY \& PHYSIOLOGY II

3CR
Continues the exploration of body systems, with an emphasis on the common pathologies of those systems started in MASST 147. In addition to covering the cause and effect of those pathologies, this course will also present students with the common allopathic treatments their clients may be receiving for those conditions. Pharmacology will include effects and side-effects of the medications and how those relate to the indications and contraindications of massage.
Prerequisite(s): Successful completion of MASST 147.

## MATERIAL SCIENCE

MS 123
FUNDAMENTALS OF WELDING FOR THE NON-WELDING MAJOR 5CR
Students will identify, perform, or witness various basic welding processes for prospective visual and non-destructive inspectors.

## MS 126

FUNDAMENTALS OF COMPOSITES FOR THE NON. COMPOSITES TECHNICIAN
Introduces the various kinds of composite parts. This course explores the different types of resin, matrices, fibers, cores, and laminates. Students will explore their mechanical properties and the advantages of each type of composite structure. Covers the layup, winding, molding, curing, and repair of composite parts. Explores the role of NDT in testing composite parts after fabrication and after repair and the kinds of defects found.

## MS 128

OSHA, OCCUPATIONAL, HEALTH AND SAFETY
Introduces OSHA policies, procedures, and standards, as well as construction safety and health principles. Topics include scope and application of the OSHA construction standards. Special emphasis is placed on those areas that are the most hazardous, and includes hazard identification, avoidance, control, and prevention, using OSHA standards as a guide.

## MS 131

BLUEPRINT READING
FUNDAMENTALS
Covers basic lines and views of drawings, identifying and interpreting weld and fabrication symbols, and locating NDT requirements.

## MATHEMATICS

## MAT 092 (FORMERLY MAT 082)

 PRE-ALGEBRACovers basic operations with whole numbers, fractions, decimals, percentages, ratios and proportions, signed numbers, algebraic expressions, linear equations, order of operations, basic geometry, units of measurement, and introduction to statistics.

Prerequisite(s): Accuplacer arithmetic score of 230 or equivalent or higher.

## MAT 093 (FORMERLY MAT

 088)INTRODUCTION TO ALGEBRA FOR INDUSTRIAL AND BUSINESS MATH
Develops algebraic topics, including polynomials, factoring, and rational expressions. This class can be used as a prerequisite for MAT 105 and MAT 103.
Prerequisite(s): Accuplacer quantitative score of 230 or equivalent or successful completion of MAT 092.

MAT 094 (FORMERLY MAT 091) INTRODUCTION TO ALGEBRA 5CR Develops algebraic topics, including algebraic expressions, solving linear equations and inequalities, coordinate graphing, systems of equations, polynomials, factoring, and introduction to rational expressions.

Prerequisite(s): Accuplacer quantitative score of 230 or equivalent or successful completion of MAT 092.

## MAT 099

INTERMEDIATE ALGEBRA
Expands on algebraic topics, including solving equations and inequalities, graphing of linear and nonlinear equations, and rational expressions. Develops topics, including roots and radicals; solving absolute value equations and inequalities; solving quadratic, exponential and logarithmic equations; and introduction to functions.

Prerequisite(s): Accuplacer quantitative score of 252 or equivalent or successful completion of MAT 094.

## MAT 103

BUSINESS MATHEMATICS 5CR
Develops elements of algebra applied to percentages, markup and markdown, discounts, payroll, and simple and compound interest. Scientific calculator required.
Prerequisite(s): Successful completion of MAT 092.

## MAT 105

MATHEMATICS FOR INDUSTRIAL PROFESSIONALS Develops elements of algebra, geometry, metric measure, and trigonometry to calculate areas, volumes, and angles for polygonal objects, objects with smooth curves, and composite objects. Includes applications to material strength, tapers, pulleys, gears, screw threads, and elementary engines. Scientific calculator required.
Prerequisite(s): Successful completion of MAT 092.

MAT 108
MATH FOR HEALTH
OCCUPATIONS
Develops elements of algebra, including quadratic equations with real roots and unit conversion processes applied to U. S. and metric measure, calculation of dosages, and intravenous infusions. Covers solutions and dilutions, elementary chemical calculations, and elementary non-linear functions. Scientific calculator required.
Prerequisite(s): Accuplacer advanced algebra score of 233 or equivalent, or successful completion of MAT 094.

MAT 111
MATH FOR COSMO/ESTH
PROFESSIONALS
This course is designed to prepare students interested in the cosmetology career to gain confidence in the mathematics and problem solving they may encounter. Topics covered include: methods of mathematical operations; order of operations; fractions; percentages; decimals; mathematical expressions and equation; solving variable equations and formulas; markdowns and markups; simple business math calculations; unit analysis, including US and metric measuring systems; time management; handling payroll.
Prerequisite(s): Successful completion of MAT 092.

## MATH \& 107

MATH IN SOCIETY
Exploration of mathematical concepts, with emphasis on observing closely, developing critical thinking, analyzing and synthesizing techniques, improving problem-solving skills, and applying concepts to new situations. Core topics are probability and statistics. Additional topics may be chosen from a variety of math areas useful in our society.
Prerequisite(s): Appropriate Accuplacer advanced algebra score of 233 or equivalent or successful completion of MAT 099.

## MATH\& 141

PRECALCULUS I
5CR
Covers linear, quadratic, polynomial, rational, absolute value, exponential, logarithmic, and inverse functions and equations; composite functions, linear and quadratic inequalities, graphs of functions, relations, and inequalities; and graphic transformations. Introduces limits, linear and quadratic curve fitting, and mathematical modeling, including exponential growth and decay. Graphing calculator required.

Prerequisite(s): Appropriate Accuplacer advanced algebra score of 233 or equivalent or successful completion of MAT 099.

## MATH\& 142 <br> PRECALCULUS II, FUNCTIONAL TRIGONOMETRY

Covers circular, trigonometric, and inverse trigonometric functions and graphs; trigonometric and inverse trigonometric identities; trigonometric equations; vectors and elementary vector operations; De Moivre's theorem and equations with complex solutions; and polar and parametric equations and their graphs. Graphing calculator required.
Prerequisite(s): Appropriate Accuplacer advanced algebra score of 263 or equivalent or successful completion of MATH\& 141 or equivalent.

## MATH\& 146

INTRODUCTION TO STATISTICS
Descriptive and inferential statistics, including measures of central tendency, dispersion or variation, and skewness. Students are introduced to basic concepts in probability, as well as discrete and continuous probability distribution functions. Statistical inference includes sampling, elementary experimental design, and hypothesis testing using normal, student's T, and F-distributions; linear regression and correlation; and the chi-square distribution. Graphing calculator is required.

Prerequisite(s): Appropriate Accuplacer advanced algebra score of 263 or equivalent or successful completion of MAT 099 is required.

## MATH\& 151

CALCULUS I
5CR
Covers algebraic and transcendental functions, continuity, limits (including indeterminate forms), derivatives and differentials of algebraic and transcendental functions (e.g., exponential, logarithmic, and trigonometric forms), applications of differential calculus, and an introduction to antiderivatives or indefinite integrals. Graphing calculator is required.
Prerequisite(s): Successful completion of MATH\& 142 or equivalent.

MATH\& 152
CALCULUS II
5CR
Topics of calculus are presented geometrically, numerically, and symbolically. MATH\& 152 topics include applications of integration, differentiation, and methods of integration, including improper integrals. Graphing calculator required.
Prerequisite(s): Successful completion of MATH\& 151 or equivalent.

## MECHATRONICS

MEC 115
DC CIRCUITS
5CR
Covers DC electrical terms, equations and theory. Presents techniques used for solving problems involving resistance, voltage, and current in circuits. Presents fundamental laws and relationships applied to the analysis of circuits, including capacitors and/or inductors. Basic circuit fabrication techniques and standard instrumentation used in test and measurement of DC circuits will also be covered.
Prerequisite(s): Successful completion of FSME 113
Prerequisite or co-requisite: MAT 099 or higher or appropriate placement.
Co-requisite(s): MEC 140.

## MEC 116

AC CIRCUITS
5CR
Covers AC circuit analysis. Network theorems are applied to the solution of AC circuits. Resonance, filters, AC power and three-phase circuits are covered in detail. Introduces standard instrumentation used in testing AC circuits and measurement of AC circuits and systems. Discusses wiring techniques for AC power systems.
Prerequisite(s): Successful completion of MEC 115.
Co-requisite(s): MEC 130.

## MEC 120

COMPUTER AIDED DESIGN I 5CR
Introduces the use of parametric computeraided design (CAD) software to design parts working from engineering sketches and/or prototypes.

## MEC 121

COMPUTER AIDED DESIGN II 5CR Covers the use of 3D parametric ComputerAided Design (CAD) software to create individual parts and mated assemblies working from engineering sketches and/or prototypes.
Prerequisite(s): Successful completion of MEC 120.

## MEC 125

HYDRAULICS AND PNEUMATICS 5CR
Provides students with an understanding of design, installation, maintenance, and repair techniques for the hydraulic and pneumatic systems used in automated systems.
Prerequisite(s): Successful completion of FSME 113, PHYS\& 114, and MATH\& 141.
Co-requisite(s): MEC 150.

MEC 128
APPLIED STATICS AND
STRENGTHS OF MATERIALS 5CR
Study of forces acting on structures at rest: free-body diagrams, trusses, friction and related material, which may include hydrostatic pressures and loads, cables, and arches. Includes analysis of tension, compression, shear, deformation, and stress acting on members. Also includes analysis of material properties and their classification and characterization.
Prerequisite(s): Successful completion of MATH\& 141.

## MEC 130

ELECTRIC MOTORS AND DRIVES 5CR
Gives a broad perspective of DC motors, AC motors (both single- and three-phase), and variable speed drives. Industrial applications of variable speed drives for constant torque, constant horsepower, and variable torque/ variable horsepower are covered. Stepper Motors and Servo Motors are discussed, along with their advantages and applications.
Prerequisite(s): Successful completion of MEC 115.
Co-requisite(s): MEC 116.

## MEC 132

LEAN MANUFACTURING 5CR
This course offers students opportunities to deploy and apply lean principles, concepts, and methods locally - within a work cell, work, group or value stream. The course focuses on workshop and project implementation of specific lean concepts and techniques and the qualities and habits that characterize a culture of continuous quality improvement.

## MEC 135

DIGITAL ELECTRONICS AND NETWORKS 5CR
Introduces logic fundamentals, numbering systems, codes, gates, truth tables, basic Boolean theorems, and combination logic circuits. Also introduces the elements used to create TCP/IP-based industrial networks, including switches, routers, and firewalls. The course will include network troubleshooting and the use of network diagnostic tools.
Prerequisite(s): Successful completion of MEC 115 .
Co-requisite(s): MEC 160.

## MEC 140 ${ }^{\text {cL }}$ <br> COMPUTER PROGRAMMING AND LOGIC 5CR

Introduces computer programming and problem solving. Topics include language syntax, data types, program organization, algorithm design, and logic control structures. Also covers program design techniques, such as flowcharts and the use of pseudocode.
Prerequisite(s): Successful completion of MATH\& 141

Co-requisite(s): MEC 115.

## MEC 150

MECHANICAL SYSTEMS
Develops an understanding of mechanical components used in typical mechatronic systems, such as positioning mechanisms, cranks and sliders, and belts and pulleys. Includes fabrication, test, and troubleshooting of prototype devices.
Prerequisite(s): Successful completion of FSME 113, PHYS\& 114, and MATH\& 141.

## Co-requisite(s): MEC 125

## MEC 160 ${ }^{\text {cL }}$

PROGRAMMABLE CONTROLS I 5CR
Covers programmable logic controller (PLC) architecture, configuration, and
programming. Teaches students what PLCs do and where they are used. Introduces the Relay Ladder Diagram (RLD) programming language. Students will write and test PLC RLD programs and create a PLC system using digital and analog $\mathrm{I} / \mathrm{O}$ simulators.

Prerequisite(s): Successful completion of MEC 140.

## Co-requisite(s): MEC 135.

## MEC 163

INDUSTRIAL SURVEY
This course is an exploration of current mechatronics applications in regional industry. Students will examine and analyze the implementation of various mechatronics improvements and process solutions through field tours, interviews with experts, and presentations by local industry professionals.

Prerequisite(s): Successful completion of MEC 115, MEC 116, MEC 125, MEC 150, and MEC 160.

## MEC 165

ROBOTICS
Covers basic robot terminology and operational skills, including safety, moving a robot in joint and world modes, and creating Teach Pendant programs. Students will also learn about preventative maintenance and program a robot to carry out simple tasks representative of industrial practice.

Prerequisite(s): Successful completion of MEC 140.

## MEC 170

SENSORS AND ACTUATORS 5CR
Students will develop an understanding of how actuators and sensors are chosen for and used in automated systems. Students will demonstrate understanding by integrating actuators and sensors into prototype equipment.
Prerequisite(s): Successful completion of MEC 115 and MEC 125.

## MEC 173

APPLIED MECHATRONICS 5CR
In this course, students develop applied systems by integrating elements of the constituent fields of mechatronics: electrical, mechanical, communication, control, and computing processes and devices. Students revisit fundamental skills and apply them to multidisciplinary challenges in the lab. Projects may include construction and modification of equipment to increase the capacity of the mechatronics lab.

Prerequisite(s): Successful completion of MEC 115, MEC 116, MEC 125, MEC 150, and MEC 160.

## MEC 200

PROGRAMMABLE CONTROLS II 5CR
Exercises students' PLC programming and integration skills through the completion of a project representative of modern industrial control practice. Students will also learn about installation, maintenance, and troubleshooting of PLC systems.
Prerequisite(s): Successful completion of MEC 160.

## MEC 210

METROLOGY AND CALIBRATION 5CR Introduces students to basic concepts of metrology, including common technical terms, basic measurement concepts, electronics related to measurement instruments, and math used in calibration. Also teaches various techniques used to make good measurements using calibration equipment and the standards and requirements for implementation and maintenance of calibration and measurement equipment.

Prerequisite(s): Instructor's permission.

MEC 220
MAINTENANCE MANAGEMENT 5CR
Introduces students to some of the tools used to plan and manage the maintenance function in manufacturing organizations, including consideration of Total Productive Maintenance (TPM) and corrective, preventative, riskbased, and condition-based maintenance strategies. Students will also be introduced to Computerized Maintenance Management Software (CMMS) and will demonstrate their understanding of the subject by developing a maintenance plan for a typical manufacturing organization.
Prerequisite(s): Successful completion of MEC 125, MEC 130, and MEC 150.

MEC 281
INDEPENDENT STUDY I
A theoretical and/or lab-based investigation into a topic directly related to mechatronics. Students meet in person with an instructor and agree to an appropriate course of study. Students registering for independent study must submit, at or before registration, a description and timetable for completion, signed by both the instructor supervising the independent study and the student.
Prerequisite(s): Successful completion of ENGL\& 101, MATH\& 141, and PHYS\& 114, and instructor's permission.

## MEC 282

INDEPENDENT STUDY II
A theoretical and/or lab-based investigation into a topic directly related to mechatronics. Students meet in person with an instructor and agree to an appropriate course of study. Students registering for independent study must submit, at or before registration, a description and timetable for completion, signed by both the instructor supervising the independent study and the student.
Prerequisite(s): Successful completion of ENGL\& 101, MATH\& 141, and PHYS\& 114, and instructor's permission.

## MEC 289

INTERNSHIP/WORK EXPERIENCE 5CR
Provides students with practical on-the-job experience and offers students a way to combine classroom study with related work experience under the supervision of an employer. Work experience must be related to the student's educational and career objectives in the field of mechatronics. Includes a weekly seminar component. Students must submit, at or before registration, a description of the proposed internship, signed by the employer, the instructor, and the student.

Prerequisite(s): Instructor's permission.

MEC 290 ${ }^{\text {CAP }}$
MECHATRONICS CAPSTONE PROJECT
A required capstone project to be completed prior to graduation as a final check of competency. Students meet in person with an instructor and agree to a project that will apply the skills and competencies that students have acquired in the program, and that will result in a portfolio piece showcasing their abilities. Students must submit, at or before registration, a description and timetable for completion, signed by both the instructor supervising the capstone project and the student. This course is to be taken the final quarter of the program.

Prerequisite(s): Instructor's permission.

## MEDICAL ASSISTANT

MAP 107
INTRODUCTION TO MEDICAL ASSISTING

3CR
Learn and demonstrate asepsis and infection control. Perform anthropometric measurements, vital signs and physical examination. Instruction and discussion also includes the overall function of the medical assistant within the health care team, including legal responsibilities and limitations. College and program policies and procedures are extensively discussed. This course must be successfully completed in order to proceed in the program.

Prerequisite(s): Students must attend a mandatory information session/advising meeting with an instructor before or once the student has registered for MAP 107.

Co-requisite(s): CAH 102, CAH 105, and COLL 102.

## MAP 121

BODY SYSTEMS THEORY 101 4CR
Caring for patients with disorders associated with hematology, endocrinology, obstetrics and gynecology, urology and male reproduction, and gastroenterology. Instruction will include anatomy and physiology, pathophysiology, pharmacology, and terminology.
Prerequisite(s): Successful completion of CAH 102, CAH $105{ }^{\text {CL }}$, COLL 102, and MAP 107.

Co-requisite(s): MAP 124.

MAP 124
BODY SYSTEMS
APPLICATIONS 101 3CR
Practice fundamental skills relating to Body Systems Theory 101. Skills include microhematocrit, blood glucose monitoring, care and use of the microscope, pregnancy testing, physical and chemical urinalysis, and UA slide preparation.
Prerequisite(s): Successful completion of CAH 102, CAH $105{ }^{\text {CL }}$, COLL 102, and MAP 107.

Co-requisite(s): MAP 121.

## MAP 146

BODY SYSTEMS
APPLICATIONS 102 4CR
Practice fundamental skills relating to Body Systems Theory 102. Skills include practicing care and usage of the otoscope, vision exams, audiometry testing, peak flow meters and small volume nebulizers, and performing ECGs, as well as phlebotomy skills.

Prerequisite(s): Successful completion of MAP 121 and MAP 124.

Co-requisite(s): MAP 147.
MAP 147
BODY SYSTEMS THEORY 102 4CR
Caring for patients with disorders associated with ophthalmology and otolaryngology, pulmonary medicine, neurology and mental health, cardiology, phlebotomy, and microbiology. Instruction will include anatomy and physiology, pathophysiology, pharmacology, and terminology.
Prerequisite(s): Successful completion of MAP 121 and MAP 124.

Co-requisite(s): MAP 146.

## MAP 164 <br> BODY SYSTEMS APPLICATIONS 103

4CR
Practice fundamental skills relating to Body Systems Theory 103. Skills include wound and burn care; assisting with application and removal of sutures, surgical staples and casting; asepsis and infection control; identifying surgical instruments and proper care of instruments; assisting with minor office surgery; and operating the autoclave. Also includes activities related to safety and emergency practices.

Prerequisite(s): Successful completion of MAP 146 and MAP 147.

Co-requisite(s): MAP 166, MAP 173, MAP 177, and MAP 209.

## MAP 166

BODY SYSTEMS THEORY 103 4CR
Caring for patients with disorders associated with dermatology, orthopedic medicine, and surgical asepsis, as well as learning procedures and safety and emergency practices. Instruction will include anatomy and physiology, pathophysiology, pharmacology, and terminology.
Prerequisite(s): Successful completion of MAP 146 and MAP 147
Co-requisite(s): MAP 164, MAP 173, MAP 177, and MAP 209.

## MAP 171

AUTOMATED COMPUTER
APPLICATIONS
Practice fundamental skills relating to ICD-10 and CPT coding using computers. Includes computerized patient scheduling and procedures for accounts receivable management for both private patients and insurance companies.

Prerequisite(s): Successful completion of MAP 182 and MAP 184.

Co-requisite(s): MAP 179.
MAP 173
ACCOUNTING PRACTICES 4CR
Covers basics of accounting and bookkeeping. Includes expanded discussion on manual procedures for accounts receivable management for both private patients and insurance companies.
Prerequisite(s): Successful completion of MAP 171, MAP 179, and MAT 092 or higher.
Co-requisite(s): MAP 164, MAP 166, MAP 177 and MAP 209.

## MAP 177

## FINANCIAL PRACTICES

Continues developing skills from Accounting Practices course. Instruction also includes bank accounts, cash funds, and methods of preparation for employee and employer payroll and business taxes.
Prerequisite(s): Successful completion of MAP 171, MAP 179, and MAT 092 or higher.
Co-requisite(s): MAP 164, MAP 166, MAP 173 and MAP 209.

MAP 179
HEALTH INSURANCE, CODING PRACTICES \& BILLING \& COLLECTING
Acquire information regarding private and public insurance programs. Practice fundamental skills relating to ICD-10 and CPT. Included are patient scheduling and procedures for accounts receivable management for both private patients and insurance companies.

Prerequisite(s): Successful completion of MAP 182 and MAP 184.

Co-requisite(s): MAP 171.

## MAP 182

PATIENT RECEPTION \& LEGAL COMPONENTS
Emphasis on customer service within the health care field, focusing on effective communication with the patient while projecting and promoting a positive image of the profession and the office. This course also includes telephone techniques, patient scheduling, introduction to chart management, and business correspondence for the medical office, including cover letter and resume preparation. Define law and ethics relating to the health care field focusing on components specific to medical assistants.
Prerequisite(s): Successful completion of CAH 102, CAH 105CL, COLL 102, and MAP 107.

Co-requisite(s): MAP 184.

## MAP 184

MEDICAL RECORDS
MANAGEMENT
Instruct and apply knowledge relating to medical records, including the creation, management, and legality of both the paper and electronic record, as well as filing systems utilized within the health care office. Focus will also include assisting patients in obtaining health and community services, as well as supplies and inventory control.

Prerequisite(s): Successful completion of CAH 102, CAH 105CL, COLL 102, and MAP 107.

Co-requisite(s): MAP 182.

## MAP 209

EXTERNSHIP PREPARATION 1 3CR
Introduction of pharmacology math (with estimation components), administering oral and parental (intramuscular, subcutaneous, and intradermal) medications, performance of phlebotomy and microbiology while adhering to medical/surgical asepsis and universal/ standard precautions. Also included are student demonstrations of patient flow and uploading immunizations into the college designated database.
Prerequisite(s): Successful completion of MAP 121, MAP 124, MAP 146, MAP 147, MAP 171, MAP 179, MAP 182 , and MAP 184. This course must be taken the quarter immediately prior to Quarter 5 courses. If more than one quarter passes before beginning Quarter 5, students will have to repeat this course.
Co-requisite(s): MAP 164, MAP 166, MAP 173, and MAP 177.

## MAP 212

## EXTERNSHIP PREPARATION 2 <br> 3CR

Demonstrate competencies of skills acquired throughout the Medical Assistant Program. Each student will perform and must pass the following skills at a mastery level while adhering to standard precautions: medical/ surgical asepsis, blood pressures, patient workups, growth charting, phlebotomy skills, urinalysis, hematocrit, blood glucose check, audio and visual exam, electrocardiogram, telephone techniques and appointment scheduling used within the medical office, computerized accounts payable/receivable, the electronic record, and chart management. Instruction will include caring for pediatric patients and geriatric patients.

Prerequisite(s): Successful completion of MAP 164, MAP 166, MAP 173, MAP 177, and MAP 209. Successful completion of general education courses and compliance with the MAP immunization policy and personal health insurance policy.
Co-requisite(s): MAP 215 and MAP 222.

## MAP 215

EXTERNSHIP
Capstone course gives students practical experiences in physician offices and/or clinics. Student must successfully pass MAP 212 in order to be eligible for this course.
Co-requisite(s): MAP 212 and MAP 222.

MAP 222
COMMUNITY EMPLOYMENT OPPORTUNITIES \& LOCATIONS
Locates the major medical employers (including hospitals) in the student's community, along with their human resources departments. This course also includes interviewing techniques, updating your resume, and methods of applying for employment through a variety of sources.

Co-requisite(s): MAP 212 and MAP 215 .

## MEDICAL HISTOLOGY

## HISTO 105 <br> ORIENTATION TO THE

HISTOLOGY LABORATORY
Introduces laboratory and chemical safety, as well as universal precautions. Covers basic overview of standard histology instrumentation, quality-control procedures, specimen accessioning, record keeping, and documentation. Explores laboratory and personnel certification requirements.
Prerequisite(s): Successful completion of BIOL\& 175, CHEM\& 110, and ENGL\& 101.

## HISTO 110

HISTOTECHNOLOGY I
Explores the theory and principles of fixation, processing, embedding, sectioning, and cover slipping of tissue sections.
Prerequisite(s): Successful completion of BIOL\& 175, CHEM\& 110, and ENGL\& 101.
Co-requisite(s): HISTO 115.

## HISTO 115

HISTOTECHNOLOGY LAB I
Explores work in a simulated histology laboratory on campus. Students will participate in hands-on training in basic grossing techniques, as well as in-depth training in processing, embedding, and cutting tissue sections. Students will also learn to identify basic tissue structures using a light microscope.

Co-requisite(s): HISTO 110.
HISTO 120
HISTOTECHNOLOGY II
10CR
Covers and expands upon the knowledge and skills learned in Histotechnology I. Students will begin to learn the theory and principles of hematoxylin and eosin staining, as well as the basic principles and procedures of carbohydrate stains and cytology.

Prerequisite(s): Successful completion of HISTO 105, HISTO 110, and HISTO 115.

Co-requisite(s): HISTO 125 and HISTO 130.

## HISTO 125

HISTOTECHNOLOGY LAB II
Expands upon the knowledge and skills learned in Histotechnology Lab I. Students will continue to increase their skills in embedding and tissue sectioning, including the cutting and staining of frozen tissue specimens. Students will learn to do carbohydrate and Amyloid stains.
Co-requisite(s): HISTO 120 and HISTO 130.
HISTO 130
MATH APPLICATIONS FOR HISTOLOGY
Introduces laboratory mathematics, with an emphasis on solution preparation.
Co-requisite(s): HISTO 120 and HISTO 125.

## HISTO 135

HISTOTECHNOLOGY III 10CR
Covers theory and techniques learned in Histotechnology I and II. Students will study more complicated special stains, focusing on methods used for microorganisms, pigments, minerals, the nervous system, connective tissue, and muscle stains.

Prerequisite(s): Successful completion of HISTO 120, HISTO 125, and HISTO 130.

Co-requisite(s): HISTO 140 and HISTO 145.

## HISTO 140

HISTOTECHNOLOGY LAB III
Expands upon the knowledge and techniques learned in Histotechnology Lab I and II. Students will perform more complicated special stains focusing on methods used to demonstrate microorganisms, pigments, and minerals. Students also perform special stains commonly run on brain, muscle, and connective tissue.
Co-requisite(s): HISTO 135 and HISTO 145.

## HISTO 145

IMMUNOHISTOCHEMISTRY 5CR
Covers basic immunohistochemistry and
Enzyme histo-Chemistry theory and techniques.
Co-requisite(s): HISTO 135 and HISTO 140.

## HISTO 150 CAP <br> HISTOLOGY INTERNSHIP 10CR

Covers the clinical phase of working in an affiliated histology laboratory. The staff of the affiliated laboratory directly supervise students. A report of "No Record On File" related to crimes against persons from the Washington State Patrol is required for participation in this class.
Prerequisite(s): Successful completion of HISTO 135, HISTO 140, and HISTO 145.
Co-requisite(s): HISTO 160.

## HISTO 160

HISTOLOGY SEMINAR 5CR
Covers what students have learned while working in an affiliated histology laboratory. Students will also review for their certification exam.
Co-requisite(s): HISTO 150.

## MEDICAL LABORATORY TECHNICIAN

## MLT 110 <br> INTRODUCTION TO THE LABORATORY

Orients students to the campus, the program, and the laboratory field. Covers school and program policies, the metric system, basic techniques, microscopy, physiological processes, human anatomy, medical terminology, and laboratory organization. A large block of time is dedicated to discussing laboratory safety and standard precautions, HIPAA, and professionalism. These topics are then integrated into the applied academic courses for the remainder of the program. This course is presented spring quarter.
Prerequisite(s): High school diploma or equivalent. Completion of a college course in biology with lab and a college course in chemistry with lab with a grade of " B " (3.0) or better. Students must pass a colorblind test. Documentation regarding the test from a medical professional must be submitted on or before the first day of class.

## MLT 205

HEMATOLOGY 11 CR
Review microscopy, standard precautions, and the basic concepts of quality assurance plans in the Hematology laboratory before studying the red blood cell production, function, and relevant red blood cell morphology. Study of erythrocytes and leukocytes will include principles of production, function, normal reference ranges, and associated diseases. Assigned online learning modules will be administered to gain a better understanding and correlation of analyzer results with performed manual differentials. Laboratory practice includes manual and automated counting of all cell types, and routine basic procedures in a Hematology laboratory.
Prerequisite(s): Successful completion of MLT 110.

## MLT 207

HEMOSTASIS
This course begins with the study of production and function of thrombocytes, including counts, function tests, and associated diseases; it continues with the processes involved in coagulation (hemostasis), both primary and secondary, and culminates with a discussion of fibrinolysis. Normal coagulation activities, as well as coagulation deficiencies, are presented, and routine coagulation procedures are performed in the student laboratory. This course is offered in spring quarter.
Prerequisite(s): Successful completion of MLT 205.

## MLT 209

## PHLEBOTOMY/PROCESSING 4CR

Learn to collect both venous and capillary
blood specimens, as well as to separate plasma or serum from cells, when necessary for testing. The color-coding of evacuated tubes, the specimen requirements for major procedures, and, particularly, the practice of standard precautions are all stressed throughout the course. Recognize preanalytical and analytical variables regarding specimen labeling and specimen integrity.
Prerequisite(s): Successful completion of MLT 110.

## MLT 211

IMMUNOLOGY
Covers the immune process in terms of active-versus-passive, innate-versus-acquired, and humoral-versus-cell-mediated immunities. Laboratory procedures employing a variety of in vitro demonstrations of antigen-antibody reactions are performed. This course is offered spring quarter.
Prerequisite(s): Successful completion of MLT 207.

## MLT 215

IMMUNOHEMATOLOGY
Applies the principles of antigens and antibodies covered in MLT 211 to red blood cell antigens and antibodies, with emphasis on blood banking procedures, and culminating in performance of pre-transfusion cross matching. This course is offered summer quarter.
Prerequisite(s): Successful completion of MLT 211 and MLT 217.

## MLT 217

MICROBIOLOGY
10CR
This course begins with an introduction to bacterial growth, culture requirements, sterilization procedures, and biochemical activity. This introductory material is followed by detailed study of the gram positive cocci, the gram negative cocci, the enterobacteriaceae, and the non-fermentative gram negative bacilli. Particular attention is paid to human pathogenic versus normal flora organisms depending on body site. Identification by classical and packaged systems is followed by susceptibility studies. Brief presentations on anaerobes, parasitology, and mycology conclude the course. This course is offered summer quarter.
Prerequisite(s): Successful completion of MLT 228.

## MLT 218

## URINALYSIS

Perform routine urine analysis, both macroscopic and microscopic, with attention to abnormal results and their possible cause. An overview of the anatomy and physiology of the excretory system and the normal and abnormal constituents of urine accompany laboratory practice. This course is presented fall quarter.
Prerequisite(s): Successful completion of MLT 217.

## MLT 220

## CLINICAL BLOOD BANKING

Experience a mock clinical training rotation in blood banking under the direction of a blood banking specialist. Building on the procedures mastered in MLT 215, students will solve real-world blood banking problems, including identification of antibodies. Students will deal with daily inventory and temperature record-keeping, perform quality assurance procedures, and receive and complete stat orders.

Prerequisite(s): Successful completion of MLT 215.

## MLT 222

BODY FLUIDS
Introduces the production, collection, and analyses of various body fluids, including cerebrospinal and synovial fluids.

Prerequisite(s): Successful completion of MLT 205 and MLT 218.

## MLT 228

CLINICAL CHEMISTRY 7CR
Beginning with an overview of the digestive system, students will study the relationship between blood levels of many substances and normal-versus-abnormal physiology. In the student laboratory, students will perform manual and semi-automated procedures for the assay of commonly measured blood components. Preventative maintenance of instruments, troubleshooting, and quality assurance are stressed throughout the course.
Prerequisite(s): Successful completion of MLT 211.

## MLT 233

## CLINICAL EXPERIENCE I <br> 10CR

This course begins the clinical phase of training in an affiliated laboratory. During this course, students will complete nine weeks of the experience (either five eight-hour days each week or four nine-hour days each week). In the next courses (MLT 237 and 239), they will continue training for eleven more weeks. Over the course of approximately 19-20 weeks of clinical training, students will rotate through all departments and perform current routine procedures by state-of-the-art methodologies. Appropriate amounts of time are spent working in each particular discipline; to accomplish this, some students rotate through two or three different laboratories.

Prerequisite(s): Successful completion of MLT 220. Proof of current immunizations or laboratory verification of immune status, a "No Record On File" report related to crimes against persons from a national background check, current CPR for Health Care Providers from the American Heart Association, and personal medical/health insurance. Some clinical sites may have additional requirements.

## MLT 237

## CLINICAL EXPERIENCE II 8CR

Continues the clinical training begun in MLT 233. Students continue for six weeks of training (either five eight-hour days each week or four nine-hour days each week), rotating through those departments not yet experienced and continuing to meet objectives listed in the MLT 233 syllabus. Some clinical sites may assign $1-2$ weeks of either swing or night shift as part of the clinical phase.
Prerequisite(s): Successful completion of MLT 222 and MLT 233. Proof of current immunizations or laboratory verification of immune status, a "No Record On File" report related to crimes against persons from a national background check, current CPR for Health Care Providers from the American Heart Association, and personal medical/ health insurance. Some clinical sites may have additional requirements.

## MLT 239CAP

CLINICAL EXPERIENCE III 8CR
Complete the clinical training begun in MLT 233 and continued in 237. Students complete five more weeks of training (either five eight-hour days or four nine-hour days each week), completing the remainder of the objectives in the MLT 233 syllabus. Some clinical sites may also assign 1-2 weeks of either swing or night shift as part of the clinical phase.
Prerequisite(s): Successful completion of MLT 237. Proof of current immunizations or laboratory verification of immune status, a "No Record On File" report related to crimes against persons from a national background check, current CPR for Health Care Providers from the American Heart Association, and personal medical/health insurance. Some clinical sites may have additional requirements.

## MUSIC

MUSC\& 105
MUSIC APPRECIATION 5CR
Learn about elements of music, that is, the building blocks: pitch, melody, harmony, rhythm, texture, timbre, and dynamics. Study the evolution of music through the ages. This will not be a music history class, but rather an investigation of how music changed through time.

Prerequisite(s): Successful completion of ENG 094 or equivalent.

## NONDESTRUCTIVE TESTING

## NDT 108

INTRODUCTION TO NDT 5CR
This course is an introduction to terms and definitions and a method overview of nondestructive testing. Methods include eddy current, visual liquid penetrant, magnetic particle, radiography, and ultrasonic testing.

## NDT 113

MATERIAL AND PROCESSES FOR NDT I

5CR
Explores the properties of materials, both metals and non-metals, and their applications in design and manufacturing. Introduction to Lean Concepts and applications.

## NDT 120

VISUAL AND OPTICAL TESTING 5CR
Visual inspection is the most widely used method of nondestructive testing. Learn to detect various discontinuances related to the powerplant industry, structural steel fabrication and construction industries, aerospace industry, petrochemical industry,
and manufacturing processes. Exercises are performed using many visual inspection tools.
Prerequisite(s): Successful completion of NDT 185.

## NDT 121

MATERIALS AND PROCESSES FOR NDT II
Learn the major manufacturing processes used to fabricate parts, their possible discontinuities, and how to choose the appropriate NDT methods to inspect them.

## NDT 125

MAGNETIC PARTICLE TESTING 5CR
Covers the principles of magnetization, the selection of equipment, and the type of indications found. Students will operate, test, and maintain quality control of the equipment and report results.

## NDT 130

LIQUID PENETRANT TESTING
Covers principles and practices of liquid penetrant inspection. Students will learn why and when to use various types of penetrant materials and the proper techniques necessary for reliable inspection. Addresses the evaluation of liquid penetrant indications, interpreting standards and specifications, and checking penetrant system quality. Students will review fundamental liquid penetrant principles and techniques; develop and write procedures; and inspect welds, castings, forgings, and machined components. Parts are evaluated according to relevant codes and/or standards.

## NDT 140

EDDY CURRENT TESTING I 5CR
Covers electromagnetic theory, types of Eddy
Current sensing elements, selection of inspection parameters, readout mechanism and applications. Successful students will pass a simulated Level 1 general exam.
Prerequisite(s): Successful completion of NDT 125, NDT 185, and CAS 121.

## NDT 150

ULTRASONIC TESTING I 5CR
Covers the principles of acoustics. Introduces the basic pulse echo instruments, transducers and couplants. Covers the basic testing methods, calibration, and examinations to specific procedures. Successful students will pass a simulated Level 1 general examination.
Prerequisite(s): Successful completion of MS 123, MS 126, NDT 185, and CAS 121.

## NDT 160

RADIOGRAPHIC TESTING I 5CR
Introduces students to basic principles and theory of radiography, methods and applications, safety, image quality and formation, exposure parameters and techniques, dark room and film processing techniques, and film characteristics.
Prerequisite(s): Successful completion of MS 123, MS 126, and NDT 185.

## NDT 170

EDDY CURRENT TESTING II 5CR
Covers a continuation of Eddy Current theory: factors that affect coil impedance, signal-tonoise ratio, selection test frequency, coupling and field strength. Includes an explanation of standards and specifications used in eddy current testing. Students will learn about the selection of the appropriate instruments, probes and standards necessary to perform the required tests. Successful students will pass a simulated Level II general and specific exam.

## NDT 180

ULTRASONIC TESTING II 5 CR
Introduces the operation of various ultrasonic equipment and transducers in a variety of testing methods. Students will calibrate, test, and evaluate various product forms per procedures, standards, and codes. Successful students will pass a simulated Level II general and specific exam.
Prerequisite(s): Successful completion of NDT 185.

## NDT 185

PHYSICS FOR
NDT PROFESSIONALS 5CR
Covers physics concepts used in
nondestructive testing, including right-
triangle trigonometry, waves, sound, electric fields, electric current, resistance, circuits, magnetism, and the electromagnetic spectrum.
Prerequisite(s): Successful completion of MAT 099.

## NDT 187

INSPECTION
AND TEST EQUIPMENT 5CR
Teaches students about the use and care of inspection tools, including surface plates, height gauges, indicators, coordinate measuring machines (CMM), and electrical and electronic test instruments. Includes the use of Excel to gather, analyze, and present inspection data and the development of professional reports for the presentation of this information.

## NDT 189

INSPECTION PLANNING AND PROCESSES

4CR
Covers the development of acceptance sampling plans and processes for quality control. Includes the use of sampling tables and standards in preparing inspection plans for new product design, product improvement, incoming material control, and vendors' parts supply.
Prerequisite(s): Successful completion of NDT 187.

## NDT 190

RADIOGRAPHIC TESTING II 5CR Students will explore more advanced radiographic theory. Students will develop radiographic techniques commonly used in industrial testing. Includes a review of types and characteristics of defects and manufacturing processes. Students will explore safety principles and practices in working with radiographic equipment and isotopes. Covers the practical applications of radiographic evaluation and interpretation per applicable standards, codes, and procedures. Successful students will pass a simulated Level II general and specific exam.
Prerequisite(s): Successful completion of NDT 160.

## NDT 191

CONTINUOUS IMPROVEMENT TOOLS

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4 C R
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Introduction to key tools used for continuous improvement, including Six Sigma and Lean. Students will learn the background behind, and the terminology associated with, these tools, along with how to apply the "Define, Measure, Analyze, Improve, and Control" (DMAIC) model to improve production outcomes.

Prerequisite(s): Successful completion of MATH\& 146 and NDT 189.

## NDT 193

STATISTICAL PROCESS CONTROL 4CR Covers the use of statistical techniques for quality improvement. Includes the use of control charts for variable and attribute data and interpretation of the charts for process capability and probability of occurrences analysis. Also studied are ANOVA, R\&R gage capability, and sampling strategies.
Prerequisite(s): Successful completion of MATH\& 146.

## NDT $195^{\text {CAP }}$ <br> QUALITY INSPECTOR <br> CAPSTONE PROJECT

3CR
A required capstone project to be completed prior to completion of the program as a final check of competency. Students meet in person with an instructor and agree to a project that will apply the skills and competencies that students have acquired in the program and that will result in a portfolio piece showcasing their abilities. Students must submit a description and timetable for completion, signed by both the instructor supervising the capstone project and the student. This course is to be taken in the final quarter of the program
Prerequisite(s): Successful completion of MATH\& 146 and instructor's permission.

Co-requisite(s): NDT 191.

## NDT 210

EDDY CURRENT TESTING III 5CR
Covers an extension of advanced Eddy Current theory. Students will simulate a Level II practice exam through development of a technique and evaluation per applicable standards, codes, and procedures.
Prerequisite(s): Successful completion of NDT 170.

## NDT 220

ULTRASONIC TESTING III 5CR
Covers an overview of the basic principles and theories of Phased Array. Students will simulate a Level II practical exam through development of a technique and evaluation per applicable standards, codes, and procedures.
Prerequisite(s): Successful completion of MAT 099 and NDT 180.

## NDT 230

RADIOGRAPHIC TESTING III 5CR
Covers an overview of non-film radiography: computed radiography (CR), digital detector arrays (DDA), and computed tomography (CT), with emphasis on CR. Students will perform practical exercises to reinforce their understanding of the principles of CR. Students will take a simulated Level II practical exam with film radiography through development of a technique and evaluation per applicable standards, codes, and procedures.

Prerequisite(s): Successful completion of NDT 190.

## NDT 240CAP

CAPSTONE PROJECT
Designed to synthesize and integrate the knowledge gained in all previous courses and demonstrate the application of theory and practice through a project.

## NDT 250

NDI INTERNSHIP 1-11CR
Provides on-the-job practical experience under the supervision of an employer. Instructor's permission is required for site choice.
Prerequisite(s): Advanced standing and instructor's permission.

## NDT 255

## NDT SPECIAL PROJECTS

Strengthen technical skills in NDT topics by applying knowledge to projects of personal interest and/or assigned projects.
Prerequisite(s): Advanced standing with instructor's permission.

## NURSING

## NAC 108

NURSING ASSISTANT THEORY 5CR
The Nursing Assistant Certified program prepares students to take the state examination for nursing assistant certification licensure. All three courses in the program must be successfully completed for students to be eligible to take the state examination. This course provides an introduction to the role and responsibilities of being a nursing assistant and meets the theory requirements for Washington State Nursing Assistant training.
Prerequisite(s): Ability to lift up to 50 pounds.

## NAC 111

NURSING SKILLS FUNDAMENTALS 2CR
This course covers instruction and practice of nursing assistant skills. Students will not be allowed to participate in the final skills exam unless attendance for all clinical hours has been fulfilled.
Prerequisite(s): Documentation of required immunizations, ability to lift up to 50 pounds, and "No Record On File" from the Washington State Patrol and DSHS. Successful completion of NAC 108.

## NAC 114

## UNIT BASED CLINICAL

EXPERIENCE
2CR
This course includes clinical experience in a long-term facility under the supervision of an instructor.

Prerequisite(s): Documentations of required immunizations, ability to lift up to 50 pounds. Students must have "No Record On File" related to crimes against children or vulnerable adults from the Washington State Patrol and DSHS. Successful completion of NAC 111.

NURS 117
FUNDAMENTALS OF NURSING 4CR Explores the health care system and the profession of nursing, with emphasis on care with a diverse population of clients. Introduces the beginning practical nurse student to essential nursing concepts, such as therapeutic communication, infection control, patient safety, patient education, evidencebased practice, scope of practice, legal and ethical issues, principles of caring, promotion of comfort, and the nursing process.
Prerequisite(s): Admission to Practical Nursing program.

## NURS 120

MEDICAL/SURGICAL NURSING I 3CR
Focuses on the use of the nursing process in care of clients with selected health disturbances. Emphasis is given to psychological, sociocultural, and developmental factors. Nursing interventions, pharmacological considerations, and client teaching are integrated.
Prerequisite(s): Admission to Practical Nursing program.

NURS 121
NURSING CLINICAL SKILLS \& DATA COLLECTION I
Provides laboratory demonstration and supervised practice of nursing skills discussed in NURS 117 and NURS 120. Students will demonstrate competence in selected skills using principles taught. During laboratory practice, students will use simulated equipment and classmates as patients.

Prerequisite(s): Admission to Practical Nursing program.

## NURS 124

MENTAL HEALTH NURSING 3CR
Focuses on the continuum between mental health and illness and the therapeutic nurse-client relationship. Selected mental disorders will be discussed, with emphasis on nursing interventions, common interdisciplinary treatments, and services available for clients in inpatient and outpatient settings.

Prerequisite(s): Admission to Practical Nursing program.

## NURS 131

MEDICAL/SURGICAL NURSING II 3CR
Focuses on use of the nursing process in care of clients with selected health disturbances. Emphasis is given to psychological, sociocultural, and developmental factors. Pharmacologic and nutritional consideration and client teaching are integrated.

Prerequisite(s): Successful completion of NURS 117, NURS 120, NURS 121, and NURS 124.

## NURS 133

MEDICAL/SURGICAL NURSING III 4CR
Focuses on the use of the nursing process in care of clients with selected health
disturbances. Emphasis is given to psychological, sociocultural, and developmental factors. Pharmacologic and nutritional considerations and client teaching are integrated.
Prerequisite(s): Successful completion of NURS 131, NURS 134, and NURS 137.

## NURS 134

PHARMACOLOGY IN NURSING
Presents pharmacological concepts and principles for preparation and administration of medications, along with related client assessment and teaching. The role and responsibility of the practical nurse in drug therapy is emphasized. Students are prepared to participate safely and effectively in medication therapy.
Prerequisite(s): Successful completion of NURS 117, NURS 120, NURS 121, and NURS 124.

## NURS 137

NURSING CLINICAL SKILLS \& DATA COLLECTION II
Students will demonstrate competence in selected nursing skills using simulation and humans as clients. Focus will be on safe nursing practice, the nursing process, therapeutic communication, documentation, and client teaching.
Prerequisite(s): Successful completion of NURS 117, NURS 120, and NURS 124.

## NURS 140

MATERNITY AND PEDIATRIC NURSING 3CR
This course will cover concepts of antepartum, intrapartum, postpartum, and newborn nursing with only an assisting role in the care of clients during labor and delivery and those with complications. It will also address the principles necessary for the student to care for clients throughout the age continuum with special emphasis on developmental stages and how this impacts care. Common diseases and disorders related to each developmental stage are explored.
Prerequisite(s): Successful completion of NURS 131, NURS 134, and NURS 137.

## NURS 145

MEDICAL SURGICAL NURSING IV 4CR
Using a physiological systems approach, this class focuses on implementation of the nursing process in care of a diverse population of clients with health disturbances.
Prerequisite(s): Successful completion of NURS 133, NURS 140, NURS 149, and NURS 153.

## NURS 149

CLINICAL PRACTICUM I 5CR
Provides an opportunity for students to provide care to clients in long-term care, acute, and community settings. Experience involves direct client care, nursing procedures, and administration of medications to diverse clients of every stage of life. Focuses on safe nursing practice, nursing process,
communication, documentation, and client teaching.
Prerequisite(s): Successful completion of NURS 131, NURS 134, and NURS 137.

## NURS 153

CLINICAL PRACTICUM II 5CR
Provides an opportunity for students to provide care to clients in long-term care, acute, and community settings. Experience involves direct client care, nursing procedures, and administration of medications to diverse clients of every stage of life. Focuses on safe nursing practice, nursing process, communication, documentation, and client teaching.
Prerequisite(s): Successful completion of NURS 131, NURS 134, and NURS 137.

## NURS 154

ISSUES \& TRENDS IN NURSING 2CR
Prepares students for entry into nursing practice. Emphasis is on concepts of leadership, role of the practical nurse, and nursing laws governing practice. Career opportunities, preparation for licensure, and opportunities for further education in nursing are explored.
Prerequisite(s): Successful completion of NURS 133, NURS 140, NURS 149, and NURS 153.

## NURS 161

CLINICAL PRACTICUM III 4CR
Provides an opportunity for students to provide care to clients in long-term care and acute and community settings. Experience involves direct client care, nursing procedures, and administration of medication to diverse clients of every stage of life. Focus is on safe nursing practices, nursing process, communication, and practice in providing complete care for two or more clients.
Prerequisite(s): Successful completion of NURS 133, NURS 140, NURS 149, and NURS 153.

## NURS 164

CLINICAL PRACTICUM IV
4CR
Provides an opportunity for students to provide care to clients in long-term care and acute and community settings. Experience involves direct client care, nursing procedures, and administration of medication to diverse clients of every stage of life. Focus is on safe nursing practices, nursing process, communication, and practice in providing complete care for two or more clients.
Prerequisite(s): Successful completion of NURS 128, NURS 133, NURS 149, and NURS 153.

## NURS 205

NURSING CONCEPTS IV LAB 4CR
Utilizes a concept-based approach to learn, practice, and demonstrate competency on identified nursing skills within the scope of practice for the Registered Nurse.
Prerequisite(s): Admission to Associate Degree in Nursing (ADN) program.

## NURS 229

PSYCHOSOCIAL ISSUES IN HEALTH CARE

2CR
Utilizes a concept-based approach and focuses on the emotional, mental, and social wellbeing of the client throughout the lifespan within a diverse population.
Prerequisite(s): Successful completion of NURS 205, NURS 231, and NURS 243.

## NURS 231

NURSING CONCEPTS IV 3CR
Utilizes a concept-based approach to explore the nursing process in providing safe patient care for clients with complex health care issues. The focus of this course will be on assessment, clinical decision making, evidence-based practice, and managing care.
Prerequisite(s): Admission to Associate Degree in Nursing (ADN) program.

## NURS 243

NURSING CONCEPTS V 4CR
Utilizes a concept-based approach to explore the nursing process in providing safe patient care for clients with complex health care issues. The focus of this course will be on provision of comfort, mobility, health wellness and illness, safety, development, and elimination.
Prerequisite(s): Admission to Associate Degree in Nursing (ADN) program.

NURS 244
ETHICS AND POLICY IN HEALTH CARE

2CR
Utilizes a concept-based approach to address ethical issues and policies in health care.

Prerequisite(s): Successful completion of NURS 246, NURS 250, and NURS 254.

NURS 245
NURSING CONCEPTS VI 4CR
Utilizes a concept-based approach to explore the nursing process in providing safe patient care for clients with complex health care issues. The focus of this course will be on health- and illness-related concepts of infection, inflammation, and immunity.

Prerequisite(s): Successful completion of NURS 205, NURS 231, and NURS 243

## NURS 246

NURSING CONCEPTS VI CLINICAL 3CR Provides students with opportunities to learn and have direct involvement in responsibility and accountability for the provision of basic nursing care and comfort of clients with acute and chronic illnesses, pharmacological and parenteral therapies, and pain management.
Prerequisite(s): Successful completion of NURS 229, NURS 245, and NURS 248.

## NURS 248

NURSING CONCEPTS VII
Utilizes a concept-based approach to explore the nursing process in providing safe patient care for clients with complex health care issues. The focus of this course will be on health- and illness-related concepts: reproduction, tissue integrity, oxygenation, and perioperative care.

Prerequisite(s): Successful completion of NURS 205, NURS 231, and NURS 243.

## NURS 250

NURSING CONCEPTS VIII
Utilizes a concept-based approach to explore the nursing process in providing safe patient care for clients with complex health care issues. The focus of this course will be on health- and illness-related concepts: perfusion, digestion, acid-based balance, fluid and electrolytes, and metabolism.

Prerequisite(s): Successful completion of NURS 229, NURS 245, and NURS 248.

NURS 252 ${ }^{\text {CAP }}$
PRACTICAL CAPSTONE
4CR
Provides students with an opportunity to learn and have direct involvement in responsibility and accountability for the provision of care, within the scope of practice of a Registered Nurse, in a mentored clinical experience. Each student will be assigned a preceptor to work with for a minimum of 145 hours.

Prerequisite(s): Successful completion of NURS 246, NURS 250, and NURS 254.

## NURS 254

NURSING CONCEPTS IX
Utilizes a concept-based approach to explore the nursing process in providing safe patient care for clients with complex health care issues. The focus of this course will be on health- and illness related concepts: intracranial regulation, sensory perception, thermoregulation, and cellular regulation.
Prerequisite(s): Successful completion of NURS 229, NURS 245, and NURS 248.

## NUTRITION

## NUTR\& 101

## NUTRITION

An exploration of macronutrients (carbohydrates, proteins, and fats) and micronutrients (vitamins and minerals) and their role in growth, development, and optimal health throughout the lifespan. A study in the anatomy and physiology of the gastrointestinal tract and its relation to digestion, absorption, and metabolism of nutrients will be completed. Students will explore the role of nutrition in preventing nutrition-related diseases. A healthy dietary plan will be developed to assist students in making healthy changes in their nutritional status for themselves and other members of their community.

Prerequisite(s): Successful completion of ENGL\& 101.

## PASTRY ARTS

## BAKE 106

CHOCOLATE I (CONFECTIONS) 4CR
Explores the different types of chocolate used in making assorted treats, candies, and garnishes. Various methods of tempering, chocolate decorating, fudges, truffles, and other candies will be identified.

BAKE 110
PATISSERIE I
7CR
Provides students with the opportunity to attain fundamental cooking, time management, and production competencies in the program-run bistro. These include: making scones, muffins, and cookies; demonstrating how to read, write, and follow a standard recipe; and understanding the basic principles of various cooking methods. Students will uphold a high level of professionalism.

## BAKE 113

CAKES I (FILLINGS AND ICINGS) 4CR Introduces students to mixing methods, their ingredients, and their function in cake baking. Correct scaling, portioning, baking, and determining doneness of assorted cakes. Fillings and icings will be introduced in the presentation of basic cakes.

## BAKE 114

DESSERT ALTERNATIVES
(SUGAR FREE, GLUTEN FREE)
Covers how to make sugar-free, vegan, and gluten-free desserts. Students will explore how to develop and use special ingredients, techniques, and methods when making desserts not using standard ingredients, such as eggs, butter, white flour, and milk.

## BAKE 115

PATISSERIE II 7CR
Provides students with the opportunity to refine fundamental cooking, timemanagement, and production competencies in the program-run bistro. These include: making scones, muffins, cookies, and cake; demonstrating how to read, write, and follow a standard recipe; and understanding the basic principles of various cooking methods. Students will uphold a high level of professionalism.

## BAKE 117

FROZEN DESSERTS
Explores the world of frozen desserts. Students will develop recipes for various frozen desserts, such as gelato, sorbets, parfaits, and ice creams, along with savory desserts with the use of herbs, spices, and vegetables.

## BAKE 119

YEAST BREADS 4CR
Introduces students to the techniques used with starters and yeasts. Students will demonstrate how to cultivate yeast with proper proofing and baking techniques, along with completing a variety of yeast breads.

## BAKE 121

PATISSERIE III
Introduces students to the experience of managing, training, and mentoring fellow classmates. Provides students with the opportunity to further refine fundamental cooking, time-management, and production competencies in the program-run bistro. These include: making scones, muffins, cookies, and cake; demonstrating how to read, write, and follow a standard recipe; and understanding the basic principles of various cooking methods. Students will uphold a high level of professionalism.

## BAKE 131

PIES, TARTS, CUSTARDS AND FILLINGS4CR

Introduces students to a variety of pie crusts and the preparation of assorted fruit fillings.
Tarts, custards, and pastry cream will also be explored.

BAKE 134
QUICK BREADS, COOKIES, BROWNIES
Introduces students to the ingredients and function in preparation of quick breads and cookies. Students will explore the assorted doughs, shapes, and baking and finishing methods.

## BAKE 140

RESTAURANT (INDIVIDUAL)
DESSERTS AND PETIT FOURS 5CR
Introduces students to the challenges of creating individual desserts for restaurants. Students will make individual desserts for the college restaurant and learn the detailed art of the Petit Fours.

## BAKE 153

SUGAR WORK
3CR
Introduces students to the stages of sugar work. Students will demonstrate how to make various sugar-based candies and pulled sugar items. The coloring and handling of sugar
flowers and ribbons will also be demonstrated.

## BAKE 157

WEDDING CAKES
Covers elaborate techniques used in the composition, design, and execution of wedding cakes. Explores the use of gum paste, fondant, and modeling chocolate. Students will develop a cake rendering on the spot with a customer.

## BAKE 162

RETAIL AND CUSTOMER SERVICE 7CR
Familiarizes students with all aspects of retail service, cashiering, and retail displays.
Included are opening/closing procedures, retail layout and presentation, customer service, leadership, sanitation and safety, proper cash handling, and sales techniques. Instructor's permission required.

## BAKE 210

## CAKES II

Introduces students to advanced cakes, such as high ratio, chiffon cakes, and torts, along with buttercream icings and fondant.
Temperature and environmental factors in cake making will also be covered.

## PHARMACY <br> TECHNICIAN

PT 121
INTRODUCTION TO PHARMACY \& PHARMACY LAW 5CR
Orients students to the work of pharmacy technicians and the context in which technicians' work is performed. Covers the study of pharmacy law as it pertains to the practice of pharmacy in the state of Washington compared to the United States as a whole.

Prerequisite(s): High school diploma or high school equivalency diploma. Ability to speak, read, and write the English language. Successful completion of a college-level math course within the last 5 years (unless they hold a bachelor's degree, then the 5 -year rule does not apply), CAH 105 Computer Applications or equivalent, and a 5 -credit Medical Terminology course. All courses required for certificate or degree must be completed with a grade of "B" or better.

## PT 123

PHARMACOLOGY WITH DRUG NAMES, PART I 6CR
This course will begin the introduction of the top 200 commonly prescribed drugs in the United States. The drug action mechanisms, route of administration, and the effects on the body systems will be explored. Emphasis is placed on the uses, effects, and side effects of the major drug classes.
Prerequisite(s): High school diploma or high school equivalency diploma. Ability to speak, read, and write the English language. Successful completion of a college-level math course within the last 5 years (unless they hold a bachelor's degree, then the 5 -year rule does not apply), CAH 105 Computer Applications or equivalent, and a 5 -credit Medical Terminology course. All courses required for certificate or degree must be completed with a grade of "B" or better.

## PT 125

COMMUNITY PHARMACY WITH DOSAGE CALCULATIONS
Introduces the community pharmacy experience. Math specific to the practice of pharmacy will be emphasized.
Prerequisite(s): High school diploma or high school equivalency diploma. Ability to speak, read, and write the English language. Successful completion of a college-level math course within the last 5 years (unless they hold a bachelor's degree, then the 5 -year rule does not apply), CAH 105 Computer Applications or equivalent, and a 5 -credit Medical Terminology course. All courses required for certificate or degree must be completed with a grade of " $B$ " or better.

## PT 127

PHARMACY LAB \#1 2CR
Prescription filling with counting,
keyboarding, packaging, stocking, and labeling will be covered. Emphasis will be on nonsterile compounding following USP 795 guidelines.
Prerequisite(s): High school diploma or high school equivalency diploma. Ability to speak, read, and write the English language. Successful completion of a college-level math course within the last 5 years (unless they hold a bachelor's degree, then the 5 -year rule does not apply), CAH 105 Computer Applications or equivalent, and a 5 -credit Medical
Terminology course. All courses required for certificate or degree must be completed with a grade of "B" or better.

## PT 132

PHARMACOLOGY WITH DRUG NAMES, PART II 6CR
This course will continue the exploration of the top 200 commonly prescribed drugs in the United States. The drug action mechanisms, route of administration, and the effects on the body systems will be explored. Emphasis is placed on the uses, effects, and side effects of the major drug classes.

Prerequisite(s): Successful completion of PT 121, PT 123, PT 125, and PT 127, with grades of " B " or above in all courses.

## PT 135

HOSPITAL PRACTICE WITH

## STERILE PROCESSING

This course will introduce the differences between hospital practice and community pharmacy practice. Students will learn of inpatient drug distribution systems, unit dose systems, formularies, and specialized services, including sterile compounding. This course also includes infection control, inventory management, and medication orders.
Prerequisite(s): Successful completion of PT 121, PT 123, PT 125, and PT 127, with grades of " B " or above in all courses.

## PT 148

CLINICAL CAPSTONE RESEARCH 4CR This course explores professionalism, clinical readiness, and the Pharmacy Technician Certification Exam.

Prerequisite(s): Successful completion of PT 121, PT 123, PT 125, and PT 127, with grades of " B " or above in all courses.

## PT 154

PHARMACY LAB \#2
Students will apply techniques learned to prepare sterile compounding products. Emphasis will be on aseptic technique and USP 797 and USP 800 guidelines. Students will learn how to use inpatient drug distribution systems, unit dose systems, and bubble packing.

Prerequisite(s): Successful completion of PT 121, PT 123, PT 125, and PT 127, with grades of " B " or above in all courses.

## PT $163^{\text {CAP }}$

COMMUNITY PHARMACY
CLINICAL CAPSTONE
Provides $51 / 2$ weeks of clinical training in a community pharmacy. Students will put into practice skills learned in the classroom by arranging an internship with a community pharmacy. Students and faculty collaborate in arranging community practice sites. Students are directly supervised by a pharmacist preceptor and their staff, with ongoing contact with the instructor in the form of site visits and seminars.

Prerequisite(s): Successful completion of all in-class pharmacy technician courses (PT 121, PT 123, PT 125, PT 127, PT 132, PT 135, PT 148, and PT 154), with grades of "B" or above in all courses.

## PT $165^{\text {cAP }}$

INSTITUTIONAL CLINICAL
CAPSTONE
Students will spend five-and-a-half weeks in an institutional pharmacy setting. While in this capstone experience, students will perform the duties of an institutional pharmacy technician under the direct supervision of a pharmacist preceptor. There will be ongoing contact with the instructor in the form of site visits and seminars.

Prerequisite(s): Successful completion of all in-class pharmacy technician courses (PT 121, PT 123, PT 125, PT 127, PT 132, PT 135, PT 148, and PT 154), with grades of "B" or above in all courses.

## PHYSICS

## PHYS\& 114

GENERAL PHYSICS I WITH LAB 5CR Covers problem-solving concepts in physics, including one- and two-dimensional
kinematics, force, Newton's laws of motion, uniform circular motion, universal gravitation, work, energy, linear momentum, rotational motion, and angular momentum in an algebra-based approach.

Prerequisite(s): Successful completion of MAT 099.

## POLITICAL SCIENCE

## POLS 180 <br> CRITICAL ISSUES IN WORLD POLITICS

Examination of enduring political issues as well as political processes and institutions. Special emphasis is placed on studying some of the most pressing international issues facing the world today including war, global power shifts, democracy promotion, intervention, development, non-state actors such as multinational corporations and terrorist groups, security, and global issues.

Prerequisite(s): Successful completion of ENG 094 or appropriate placement.

## POLS\& 202

AMERICAN GOVERNMENT 5CR A survey of the structure and process of American politics and government, including the structure and function of the executive, legislative, and judicial branches and the American political party system. Special emphasis is placed on the relationship between political culture, thought, institutions, and the debate over public policy
Prerequisite(s): Successful completion of ENG 094 or appropriate placement.

## PROFESSIONAL PILOT

## AVP 105

PRIVATE PILOT I
Training in basic aircraft control, aircraft systems, airport procedures, and traffic pattern operations.

Prerequisite(s): FAA Class II Medical with Student Pilot Certificate prior to the first day of class. Instructor's permission only.

| AVP 105 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{\star}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 10 | $\$ 1,220.00$ | $\$ 450.00$ |
| SOLO | 0 | $\$ 0.00$ |  |
| PRE/POST | 10 | $\$ 120.00$ |  |
| TOTAL |  | $\$ 1,340.00$ | $\$ 450.00$ |
| COMBINED TOTAL |  |  |  |

*Aircraft costs vary with the current fuel market price.

AVP 110
PRIVATE PILOT II
Covers aircraft control, establishing and maintaining specific flight attitudes, and ground reference maneuvers.

Prerequisite(s): Successful completion of AVP 105 or equivalent. Instructor's permission only.

| AVP 110 | FLIGHT TRAINING |  |  |
| :---: | :---: | :---: | :---: |
|  | FLIGHT | AIRCRAFT* $^{*}$ | DUAL |
|  | HOURS |  |  |
| NON- <br> COMPLEX <br> AIRCRAFT | 10 | $\$ 1,220.00$ | $\$ 450.00$ |
| SOLO | .5 | $\$ 61.00$ |  |
| PRE/POST | 10.5 | $\$ 126.00$ |  |
| TOTAL |  | $\$ 1,407.00$ | $\$ 450.00$ |
| COMBINED TOTAL | $\$ 1,857.00$ |  |  |

*Aircraft costs vary with the current fuel market price.

## AVP 115

PRIVATE PILOT III 4CR
Basic performance maneuvers, traffic pattern procedures, and takeoffs and landings. Upon successful completion, students will solo the aircraft.

Prerequisite(s): Successful completion of AVP 110 or equivalent. Instructor's permission only.

| AVP 115 | FLIGHT TRAINING |  |  |
| :---: | :---: | :---: | :---: |
|  | FLIGHT | AIRCRAFT* $^{*}$ | DUAL |
|  | HOURS |  |  |
| NON- <br> COMPLEX <br> AIRCRAFT | 7.5 | $\$ 915.00$ | $\$ 337.50$ |
| SOLO | 2.0 | $\$ 244.00$ |  |
| PRE/POST | 9.5 | $\$ 114.00$ |  |
| TOTAL |  | $\$ 1,273.00$ | $\$ 337.50$ |
| COMBINED TOTAL | $\$ 1,610.50$ |  |  |

*Aircraft costs vary with the current fuel market price.

AVP 118
PRIVATE PILOT PRACTICAL TEST STANDARDS I

Receive additional flight and ground training as required to meet pilot certification requirements.
Prerequisite(s): Solo endorsement and completion of a solo flight. Instructor's permission only.

AVP 125
PRIVATE PILOT IV
4CR
Introduces knowledge, skills and aeronautical experience necessary to successfully complete the navigation and cross-country flight portion of flight training.
Prerequisite(s): Grade of "C" or better in AVP 115 or equivalent. Pre-solo written exam must be completed with a passing grade.
Instructor's permission only.

| AVP 125 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Airrcraft $^{*}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 5.5 | $\$ 671.00$ | $\$ 247.50$ |
| SOLO | 4.5 | $\$ 549.00$ |  |
| PRE/POST | 10 | $\$ 120.00$ |  |
| TOTAL |  | $\$ 1,340.00$ | $\$ 247.50$ |
| COMBINED TOTAL |  |  |  |

*Aircraft costs vary with the current fuel market price.

## AVP 130

PRIVATE PILOT V
Provides the knowledge, skill, and aeronautical experience necessary to read and understand disseminated weather reports and forecasts. Meets the requirements for cross-country navigation and basic instrument flight.
Prerequisite(s): Successful completion of AVP 125 or equivalent. Pre-solo written exam must be completed with a passing grade. Instructor's permission only.

| AVP 130 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Airrcraft $^{*}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 4 | $\$ 488.00$ | $\$ 180.00$ |
| SOLO | 6 | $\$ 732.00$ |  |
| PRE/POST | 10 | $\$ 120.00$ |  |
| TOTAL |  | $\$ 1,340.00$ | $\$ 180.00$ |
| $\mathbf{C O M B I N E D}$ TOTAL |  |  |  |

*Aircraft costs vary with the current fuel market price.

AVP 135동
PRIVATE PILOT VI 4CR
Gain the proficiency to meet the requirements necessary for FAA Private Pilot Certification with an Airplane Category and Single-Engine Class Rating.
Prerequisite(s): Successful completion of AVP 130 or equivalent. Pre-solo written exam must be completed with a passing grade.
Instructor's permission only.

| AVP 135 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{*}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 10 | $\$ 1,220.00$ | $\$ 450.00$ |
| SOLO | 0 | $\$ 0.00$ |  |
| PRE/POST | 10 | $\$ 120.00$ |  |
| TOTAL |  | $\$ 1,340.00$ | $\$ 450.00$ |
| COMBINED TOTAL |  | $\$ \mathbf{7 9 0 . 0 0}$ |  |

*Aircraft costs vary with the current fuel market price.

## AVP 138

PRIVATE PILOT PRACTICAL TEST
STANDARDS II
4CR
Receive additional flight and ground training as required to meet pilot certification requirements.

Prerequisite(s): Solo endorsement and completion of a solo flight. Instructor's permission only.

## AVP 140

INSTRUMENT PILOT I
4CR
Introduces skills that will establish a strong foundation in basic attitude instrument flying and basic instrument navigation.
Prerequisite(s): FAA Private Pilot Certificate. Instructor's permission only.

| AVP 140 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{\star}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 10 | $\$ 1,220.00$ | $\$ 450.00$ |
| PRE/POST | 10 | $\$ 120.00$ |  |
| TOTAL |  | $\$ 1,340.00$ | $\$ 450.00$ |
| COMBINED TOTAL | $\$ 1,790.00$ |  |  |

[^2]
## AVP 145

INSTRUMENT PILOT II
4CR
Perform precision attitude instrument flight, including advanced navigation techniques and procedures.

Prerequisite(s): Successful completion of AVP 140 or equivalent. Instructor's permission only.

| AVP 145 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{*}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 9 | $\$ 1,098.00$ | $\$ 405.00$ |
| PRE/POST | 9 | $\$ 108.00$ |  |
| TOTAL |  | $\$ 1,206.00$ | $\$ 405.00$ |
| COMBINED TOTAL |  | $\mathbf{y 1 , 6 1 1 . 0 0}$ |  |

*Aircraft costs vary with the current fuel market price.

## AVP 150

INSTRUMENT PILOT III
Apply advanced navigation techniques and perform holding pattern entry procedures.

Prerequisite(s): Successful completion of AVP 145 or equivalent. Instructor's permission only.

| AVP 150 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{*}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 11 | $\$ 1,342.00$ | $\$ 495.00$ |
| PRE/POST | 11 | $\$ 132.00$ |  |
| TOTAL |  | $\$ 1,474.00$ | $\$ 495.00$ |
| COMBINED TOTAL | $\$ 1,969.00$ |  |  |

*Aircraft costs vary with the current fuel market price.

## AVP 152

INSTRUMENT PILOT PRACTICAL STANDARDS III

## 4CR

Receive additional flight and ground training as required to meet pilot certification requirements.
Prerequisite(s): Instructor's permission only.

AVP 155
INSTRUMENT PILOT IV 4CR
Perform holding patterns and instrument approach procedures.
Prerequisite(s): Grade of "C" or better in AVP 150 or equivalent. Instructor's permission only.

| AVP 155 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{\star}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 10 | $\$ 1,220.00$ | $\$ 450.00$ |
| PRE/POST | 10 | $\$ 120.00$ |  |
| TOTAL |  | $\$ 1,340.00$ | $\$ 450.00$ |
| COMBINED TOTAL |  | $\$ 1,890.00$ |  |

*Aircraft costs vary with the current fuel market price.

## AVP 160

INSTRUMENT PILOT V 4CR
Perform cross-country flight using advanced navigation procedures. Use ATC communication procedures and conduct instrument departures, arrivals, and approaches.
Prerequisite(s): Successful completion of AVP 155 or equivalent. Instructor's permission only.

| AVP 160 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{*}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 8 | $\$ 976.00$ | $\$ 360.00$ |
| PRE/POST | 8 | $\$ 96.00$ |  |
| TOTAL |  | $\$ 1,072.00$ | $\$ 360.00$ |
| COMBINED TOTAL |  | $\$ 1,432.00$ |  |

*Aircraft costs vary with the current fuel market price.

## AVP 170 CAP

INSTRUMENT PILOT VI
4CR
Acquire the flight and aeronautical knowledge proficiency required for the issuance of the FAA Instrument-Airplane Rating.
Prerequisite(s): Successful completion of AVP 160 or equivalent. Instructor's permission only.

| AVP 170 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{\star}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 12 | $\$ 1,460.00$ | $\$ 540.00$ |
| PRE/POST | 12 | $\$ 144.00$ |  |
| TOTAL |  | $\$ 1,604.00$ | $\$ 540.00$ |
| COMBINED TOTAL |  | $\$ 2,144.00$ |  |

*Aircraft costs vary with the current fuel market price.

## AVP 172

## INSTRUMENT PILOT PRACTICAL

 STANDARDS IV4CR
Receive additional flight and ground training as required to meet pilot certification requirements.
Prerequisite(s): Instructor's permission only.

## AVP 175

## COMMERCIAL PILOT I

Acquire initial VFR cross-country flight training. Pilotage, dead-reckoning, and radio navigation will be covered.
Prerequisite(s): FAA Private Pilot
Certificate, Instrument-Airplane Rating. Instructor's permission only.

| AVP 175 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{*}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 8 | $\$ 976.00$ | $\$ 360.00$ |
| SOLO | 3 | $\$ 366.00$ |  |
| PRE/POST | 11 | $\$ 132.00$ |  |
| TOTAL |  | $\$ 1,474.00$ | $\$ 360.00$ |
| COMBINED TOTAL | $\$ \mathbf{1 , 8 3 4 . 0 0}$ |  |  |

*Aircraft costs vary with the current fuel market price.

## AVP 180

COMMERCIAL PILOT II
Receive additional VFR cross-country flight training. Additional flight training will encompass mountain flying techniques and local night flight operations.
Prerequisite(s): Successful completion of AVP 175 or equivalent. Instructor's permission only.

| AVP 180 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{\star}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 0 | $\$ 0.00$ | $\$ 0.00$ |
| SOLO | 10.5 | $\$ 1,281.00$ |  |
| PRE/POST | 10.5 | $\$ 126.00$ |  |
| TOTAL |  | $\$ 1,407.00$ | $\$ 0.00$ |
| COMBINED TOTAL |  | $\mathbf{y y}$ |  |

*Aircraft costs vary with the current fuel market price.

AVP 185
COMMERCIAL PILOT III
Receive final training in VFR cross-country flight and night operations. The cross-country flight hours required for Commercial Pilot Certification will be completed.
Prerequisite(s): Successful completion of AVP 180 or equivalent. Instructor's permission only.

| AVP 185 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{\star}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 0 | $\$ 0.00$ | $\$ 0.00$ |
| SOLO | 8.5 | $\$ 1,037.00$ |  |
| PRE/POST | 8.5 | $\$ 102.00$ |  |
| TOTAL |  | $\$ 1,139.00$ | $\$ 0.00$ |
| COMBINED TOTAL | $\$ 1,139.00$ |  |  |

*Aircraft costs vary with the current fuel market price.

## AVP 190

AIRLINE MULTI-ENGINE
CRM (CREW RESOURCE
MANAGEMENT) I
3CR
Update your knowledge and skills in multiengine and advanced avionics operations, systems, performance, instrument, and airline crew operations. Operate a multi-engine aircraft as a crew and log no less than 10 hours of multi-engine Pilot in Command time.

Prerequisite(s): Must be at least 18 years of age and be able to read, speak, write, and understand the English language. Must comply with FAA licensing standards and possess an FAA Commercial multi-engine Certificate. Second-class FAA medical certificate required prior to the first day of class. Please contact instructor for details. Must have instructor's permission.

## AVP 195

AIRLINE MULTI-ENGINE CRM
(CREW RESOURCE
MANAGEMENT) II
Update your knowledge and skills in multiengine and advanced avionics operations, systems, performance, instrument, and airline crew operations. Operate a multi-engine aircraft as a crew and log no less than 20 hours of multi-engine Pilot in Command time.

Prerequisite(s): Must be at least 18 years of age and be able to read, speak, write, and understand the English language. Must comply with FAA licensing standards and possess an FAA Commercial multi-engine Certificate. Second-class FAA medical certificate required prior to the first day of class. Please contact instructor for details. Must have instructor's permission.

## AVP 210

COMMERCIAL PILOT IV
4CR
Receive initial flight and ground training in high-performance Commercial Pilot Certification maneuvers. Flight maneuver training includes chandelles, lazy eights, steep power turns, and accuracy landings.
Prerequisite(s): Grade of "C" or better in AVP 185 or equivalent. Instructor's permission only.

| AVP 210 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{\star}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 0 | $\$ 0.00$ | $\$ 0.00$ |
| SOLO | 11 | $\$ 1,342.00$ |  |
| PRE/POST | 11 | $\$ 132.00$ |  |
| TOTAL |  | $\$ 1,474.00$ | $\$ 0.00$ |
| COMBINED TOTAL | $\$ 1,474.00$ |  |  |

*Aircraft costs vary with the current fuel market price.

## AVP 215

COMMERCIAL PILOT V 4CR
Gain additional aeronautical knowledge and flying skills necessary for advanced precision flight maneuvers.
Prerequisite(s): Successful completion of AVP 210 or equivalent. Instructor's permission only.

| AVP 215 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{*}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 3 | $\$ 366.00$ | $\$ 135.00$ |
| SOLO | 7 | $\$ 854.00$ |  |
| PRE/POST | 10 | $\$ 120.00$ |  |
| TOTAL |  | $\$ 1,340.00$ | $\$ 135.00$ |
| COMBINED TOTAL |  |  |  |

*Aircraft costs vary with the current fuel market prise.

AVP 218

## MULTI-ENGINE INSTRUCTOR

 CERTIFICATION MEIObtain and/or update knowledge and skills to meet Federal Aviation Administration multi-engine instructor requirements. Multi-engine operations, systems, performance, instrument, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision making, and instrument flight, will be studied.
Prerequisite(s): Must be at least 18 years of age and be able to read, speak, write, and understand the English language. Must comply with FAA licensing standards and possess an FAA private pilot certificate. Second-class FAA medical certificate required prior to the first day of class. Please contact instructor for details. The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training. Must have instructor's permission.

## AVP 220

COMMERCIAL PILOT VI 4CR
Receive advanced training in all the required Commercial Pilot Certification maneuvers. Flying proficiency in these maneuvers will meet the requirements set forth in the FAA Practical Test Standards.

Prerequisite(s): Successful completion of AVP 215 or equivalent.

| AVP 220 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{*}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 5 | $\$ 610.00$ | $\$ 225.00$ |
| SOLO | 4 | $\$ 488.00$ |  |
| PRE/POST | 9 | $\$ 108.00$ |  |
| TOTAL |  | $\$ 1,206.00$ | $\$ 225.00$ |
| COMBINED TOTAL |  | $\$ 1,431.00$ |  |

*Aircraft costs vary with the current fuel market price.

## AVP 223

COMMERCIAL PILOT PRACTICAL STANDARDS V
Receive additional flight and ground training as required to meet pilot certification requirements.
Prerequisite(s): Instructor's permission only.

## AVP 230

COMMERCIAL PILOT VII 4CR
Operate a high-performance aircraft with retractable landing gear and constant-speed propeller. Basic flight maneuvers and aircraft systems will be covered.
Prerequisite(s): Grade of "C" or better in AVP 220 or equivalent. Instructor's permission only.

| AVP 230 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{*}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 4.5 | $\$ 549.00$ | $\$ 202.50$ |
| SOLO | 5.0 | $\$ 610.00$ |  |
| PRE/POST | 9.5 | $\$ 114.00$ |  |
| TOTAL |  | $\$ 1,273.00$ | $\$ 202.50$ |
| $\$ \mathbf{1 , 4 7 5 . 5 0}$ |  |  |  |

*Aircraft costs vary with the current fuel market price.

## AVP 235

COMMERCIAL PILOT VIII
Operate a high-performance aircraft with retractable landing gear and constant-speed propeller. Advanced flight maneuvers, as well as emergency procedures, will be mastered.
Prerequisite(s): Successful completion of AVP 230 or equivalent. Instructor's permission only.

| AVP 235 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{\star}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 6.5 | $\$ 793.00$ | $\$ 292.50$ |
| SOLO | 4.0 | $\$ 488.00$ |  |
| PRE/POST | 10.5 | $\$ 126.00$ |  |
| TOTAL |  | $\$ 1,407.00$ | $\$ 292.50$ |
| COMBINED TOTAL | $\$ 1,699.50$ |  |  |

*Aircraft costs vary with the current fuel market price.

## AVP 240

COMMERCIAL PILOT IX
$4 C R$
Operate a high-performance aircraft with retractable landing gear and constant-speed propeller. Increase proficiency in advance flight maneuvers and emergency procedures. Obtain logbook endorsement for the operation of High Performance Airplanes.
Prerequisite(s): Successful completion of AVP 235 or equivalent. Instructor's permission only.

| AVP 240 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft $^{*}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 4 | $\$ 488.00$ | $\$ 180.00$ |
| SOLO | 6 | $\$ 732.00$ |  |
| PRE/POST | 10 | $\$ 120.00$ |  |
| TOTAL |  | $\$ 1,340.00$ | $\$ 180.00$ |
| COMBINED TOTAL | $\$ \mathbf{5 1 , 5 2 0 . 0 0}$ |  |  |

*Aircraft costs vary with the current fuel market price.

## AVP 245

COMMERCIAL PILOT X 4CR
Receive initial preparative training to increase aeronautical skills and experience to meet the requirements for the issuance of a Commercial Pilot Certificate.
Prerequisite(s): Grade of "C" or better in AVP 240 or equivalent. Instructor's permission only.

| AVP 245 | Flight Training $^{$$}$Flight Hours Aircraft $^{*}$ Dual <br> NON- <br> COMPLEX <br> AIRCRAFT 4 $\$ 488.00$ <br> SOLO 6 $\$ 180.00$ <br> PRE/POST 10 $\$ 120.00$ |  |  |
| :---: | :---: | :---: | :---: |
|  |  | $\$ 1,340.00$ | $\$ 180.00$ |
| COMBINED TOTAL | $\$ 1,520.00$ |  |  |

*Aircraft costs vary with the current fuel market price.

## AVP 250

COMMERCIAL PILOT XI 4CR
Receive additional preparative training to increase aeronautical skills and experience to meet the requirements for the issuance of a Commercial Pilot Certificate.
Prerequisite(s): Successful completion of AVP 245 or equivalent. Instructor's permission only.

| AVP 250 | FLIGHT TRAINING |  |  |
| :---: | :---: | :---: | :---: |
|  | FLIGHT HOURS | Aircraft $^{*}$ | DUAL |
| NON- <br> COMPLEX <br> AIRCRAFT | 2 | $\$ 244.00$ | $\$ 90.00$ |
| SOLO | 0 | $\$ 0.00$ |  |
| DUAL <br> COMPLEX <br> AIRCRAFT | 8 | $\$ 1,516.00$ | $\$ 360.00$ |
| PRE/POST | 10 | $\$ 120.00$ |  |
| TOTAL |  | $\$ 1,880.00$ | $\$ 450.00$ |
| $\mathbf{\text { COMBINED TOTAL }}$ |  |  |  |

*Aircraft costs vary with the current fuel market price.

## AVP $255^{\text {cap }}$

COMMERCIAL PILOT XII
4CR
Receive final advanced preparative training to increase aeronautical skills and experience to meet the requirements for the issuance of a Commercial Pilot Certificate.

Prerequisite(s): AVP 250 or equivalent. Instructor's permission only.

| AVP 255 | Flight Training |  |  |
| :---: | :---: | :---: | :---: |
|  | Flight Hours | Aircraft* $^{\star}$ | Dual |
| NON- <br> COMPLEX <br> AIRCRAFT | 0 | $\$ 0.00$ | $\$ 0.00$ |
| SOLO | 0 | $\$ 0.00$ |  |
| DUAL <br> COMPLEX <br> AIRCRAFT | 10 | $\$ 1,895.00$ | $\$ 450.00$ |
| PRE/POST | 10 | $\$ 120.00$ |  |
| TOTAL |  |  | $\mathbf{\$ 2 , 0 1 5 . 0 0}$ | $\mathbf{\$ 4 5 0 . 0 0} 9$

*Aircraft costs vary with the current fuel market price.

## AVP 257

COMMERCIAL PILOT PRACTICAL STANDARDS VI 4CR
Receive additional flight and ground training as required to meet pilot certification requirements.

Prerequisite(s): Instructor's permission only.

## AVP 260

CERTIFIED FLIGHT INSTRUCTOR I 4CR
Receive initial training in teaching and learning theory, as well as overall review of commercial pilot aeronautical knowledge subject areas. Student will be trained to fly the aircraft from the right seat to Commercial Pilot Practical Test Standards.

Prerequisite(s): FAA Commercial Pilot, Airplane Certificate and Instrument Airplane Rating. Instructor's permission only.

## AVP 265

CERTIFIED FLIGHT INSTRUCTOR II 4CR
Master proper teaching techniques from the right seat of the training aircraft. Develop proficiency in conducting aeronautical knowledge briefings. Successful completion will result when knowledge and proficiency meet and/or exceed FAA Practical Test Standards.
Prerequisite(s): Successful completion of AVP 260 or equivalent. Instructor's permission only.

## AVP 268

CERTIFIED INSTRUMENT
FLIGHT INSTRUCTOR
Acquire the aeronautical knowledge, skills, and experience necessary to obtain an FAA Instrument Flight Instructor Rating added to student's Certified Flight Instructor Certificate.

Prerequisite(s): FAA Commercial Pilot Airplane Certificate with Instrument Airplane Rating Certified Flight Instructor-Airplane Certificate. Instructor's permission only.

## AVP 271

MULTI-ENGINE CERTIFICATION 3CR
Obtain and/or update their knowledge and skills to meet Federal Aviation Administration multi-engine requirements. Multi-engine operations, systems, performance, instrument, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision making, and instrument flight, will be studied.

Prerequisite(s): Must be at least 18 years of age and be able to read, speak, write, and understand the English language. Must comply with FAA licensing standards and possess an FAA private pilot certificate and Instrument rating. Second-class FAA medical certificate required prior to the first day of class. Please contact instructor for details. The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. students must submit to a background and fingerprint check from the TSA prior to beginning training. Must have instructor's permission.

## PSYCHOLOGY

## PSY $112^{\text {DIV }}$ <br> PSYCHOLOGY OF THE WORKPLACE

Introduces general psychological principles and their application to the workplace, emphasizing critical thinking with regard to self-awareness, interpersonal relations, motivation, and teamwork.

Prerequisite(s): Successful completion of ENG 094 or equivalent.

## PSYC\& 100 ${ }^{\text {DV }}$

GENERAL PSYCHOLOGY
Surveys the knowledge and methods of the discipline of psychology. Presents a broad view of this subject and establishes the foundation for further study of the discipline. Emphasis will be placed on applying psychological knowledge to daily situations and on accessing and assessing information about behavior from a variety of sources. Skills in scientific reasoning and critical thinking will be developed.
Prerequisite(s): Successful completion of ENG 094 or equivalent.

## PSYC\& 200

LIFESPAN PSYCHOLOGY
Introduces the milestones of human development from conception to death. It describes the physical, cognitive, and social growth of people, with special attention to various cultural contexts of development and the rich diversity of individuals. The content is drawn from research and theories in developmental psychology. Students are expected to integrate their personal experiences, knowledge of psychology, and their observations of human development with the content of this course. Implications for parenting, education, and social policy making will be discussed, so that students may apply course information to meaningful problems.
Prerequisite(s): Successful completion of PSYC\& 100.

## PSYC\& 220

ABNORMAL PSYCHOLOGY 5CR
A study of the development and symptoms of mental health disorders. Topics covered include schizophrenia, mood disorders, anxiety disorders, personality disorders, psychosomatic disorders, sexual deviation, organic disorders, and the process of adjustment to stress. Attention is given to biosocial, cognitive, and cultural factors and their role in mental health.
Prerequisite(s): Successful completion of PSYC\& 100 or equivalent.

## RETAIL BUSINESS <br> MANAGEMENT

RBM 105
FUNDAMENTALS OF
ORGANIZATIONAL BEHAVIOR 3CR
Emphasizes the human factor in business, the job of the supervisor, human relations, the art of leadership and converting policy into action, job analysis and performance, how and when to discipline, and effective supervising techniques for a diverse workplace.

## RBM 107

MARKETING
Discover the methods and techniques of marketing research and the principles on which they are based. Includes the elements of the research process, evaluation, and effective presentation of findings.

## RBM 109

PRINCIPLES OF RETAILING
3CR
Provides an introduction to retail management operations and merchandising. Covers retail target markets, trading area analysis and site selection, retail organization, buying, handling financial management of merchandise, development of retail image, customer service, and control of retail operations.

## RBM 111 <br> ESSENTIALS OF BUSINESS <br> COMMUNICATION

Prepares students to communicate effectively in business settings by helping them develop superior written and oral communication skills. This course focuses on traditional and web-based forms of communication, as seen in business today, including email, letters, memos, reports, proposals, and presentations. Upon completion of Business
Communications, students will know how to plan, write, and revise communications for a variety of audiences, both in print and online.

RBM $113^{\text {cL }}$
BUSINESS TECHNOLOGY FOR RETAIL APPLICATIONS
Gain hands-on experience with the fundamentals of Microsoft Office, such as entering data, formatting, copying and pasting, basic formula construction, auto summing and more. This course will not only teach you the basics of Office but will also teach you the thinking and mechanics of how to apply it to your everyday retail problems.

RBM 115
HUMAN RESOURCE MANAGEMENT
Identify the role of human resource
management, including its scope and responsibilities. Students will examine the principles and methods used in the recruitment, selection, placement, and training of employees. Major laws, trends, and issues related to human resource administration will be discussed.

## RBM 117

PRINCIPLES OF MANAGEMENT
3CR
Learn essential skills for operating an effective business. Topics include employee productivity, project management, human resources and job design, forecasting, statistical process control, and supply chain management.

## RBM 119

FINANCIAL MANAGEMENT
Introduces students to key financial management topics that give insight into the issues and challenges facing retail managers on a daily basis. Topics include ordering inventory management, scheduling, and analyzing profit and loss statements. This course delivers the solid understanding of financial management that a business student needs for future success.

## RBM 123

CUSTOMER SERVICE
5CR
Introduces concepts of effective customer service, step-by-step suggestions for improving communication, and valuable references for delivering exceptional internal and external customer service skills.

RBM 129

## SPEAKING FOR SUCCESS

Theory and practice in composing and presenting oral business communications, both impromptu and prepared. Effective writing of business documents, methods of research, and presentation of oral class reports.

## RBM 133

EFFECTIVE SELLING
5CR
Nature and scope of selling and understanding buying motives, with strong emphasis on the selling process, prospecting, pre-approach, demonstration of products and services, and closing. While we use the traditional selling tenets as a foundation, this course adapts the concepts to the rapidly changing world of business in today's environment, including the use of Twitter, LinkedIn, Facebook, blogs, wikis, and other interactive ways of connecting with customers.

## RBM 159 <br> E-COMMERCE PRINCIPLES \& APPLICATIONS

4CR
This introduction to the world of electronic commerce provides the tools necessary to understand and capitalize on the explosion of Internet-based business in today's economy. Study the technologies used to create new opportunities for business-to-business and business-to-customer services.

## RBM 162

SOCIAL MEDIA MARKETING 5CR
Social Media Marketing will give you a practical approach to developing successful social media marketing plans. Students will learn how to analyze effective and ineffective ways to market various products to achieve desired marketing outcomes.

## RBM 164

MARKETING COMMUNICATIONS 5CR
Developed with real world examples to illustrate the concepts of promotion and give students a glimpse into industry and the challenges it faces. This course will introduce concepts on developing a target market, how to find your target market, and how to effectively build relationships through research and branding to the company's core customer.

## RBM 166 ${ }^{\text {CAP }}$

SUCCESSFUL CAREER
DEVELOPMENT
Participate in self-analysis, goal setting, career exploration, personal appearance and grooming; resume writing, application letter writing, and the employment interview; and communication of ideas, interviewing practice, and other techniques of successful career development.

## RBM 168

CONSUMER BEHAVIOR
Introduction to the core concepts and applications of contemporary consumer behavior as it is practiced today with the latest consumer behavior statistics, examples, and trends. This course emphasizes how the recent recession, green marketing, and natural disasters all impact contemporary consumer behavior.

## RBM 201 <br> INTRODUCTION TO BUSINESS ETIQUETTE

A professional class designed to give an understanding of business etiquette. Put your best professional foot forward with Introduction to Business Etiquette. This course covers all the important issues and concepts without confusing students with excess material. This class covers basic digital etiquette and provides information on how to create and maintain business relationships.

## SOCIOLOGY

## SOC\& 101 ${ }^{\text {DIV }}$

INTRODUCTION TO SOCIOLOGY 5CR
Focuses on understanding and applying the sociological perspective, which stresses the importance of the impact of social forces external to the individual in shaping people's lives and experiences. Topics studied will include socialization, social interaction, culture, groups, social structure, deviance, social inequality, social class, race, gender, institutions (political, economic, educational, and family), collective behavior, and social change. Students will be asked to learn the basic concepts, theories, and perspectives of sociology; to see how these operate in terms of social processes, structures, and events; and to apply this knowledge to better understand the social world.

Prerequisite(s): Successful completion of ENG 094 or equivalent.

## SURGICAL TECHNOLOGY

## SURG 110 <br> INTRODUCTION TO SURGICAL LAB

 $3 C R$Covers proper attire, hand hygiene, patient vitals, urinary catheterization, room set up, handling of sterile supplies, gowning and gloving, and introduction to surgical instrumentation.

Prerequisite(s): Successful completion of ENGL\& 101, CAH 102, BIOL\& 241, COLL 102.

## SURG 115 <br> INTRODUCTION TO THE SURGICAL ENVIRONMENT

Explores the basics of surgical
instrumentation, use of energy sources and guidelines to safe practices surrounding them, introduction to specimen handling, principals of aseptic technique, processes related to maintaining asepsis and hazards of the surgical environment.
Prerequisite(s): Successful completion of ENGL\& 101, CAH 102, BIOL\& 241, COLL 102.

## SURG 120

CARE OF THE SURGICAL PATIENT I2CR
Covers patient vitals and diagnostics; methods of patient identification, transfer, transport and positioning of surgical patients; theories of skin prep and draping; case planning and intraoperative routines.
Prerequisite(s): Successful completion of ENGL\& 101, CAH 102, BIOL\& 241, COLL 102.

SURG 128
PHARMACOLOGY \& ANESTHESIA 3CR
Introduces the student to basic surgically related pharmacologic and anesthetic principles, including drug classification, proper medication labeling and handling, aseptic medication preparation and usage, principles of anesthesia administration and monitoring, including complications and interventions.

Prerequisite(s): Successful completion of SURG 145, SURG 148, SURG 150, SURG 152, and MAT 108 or Higher (MAT\&).

## SURG 145

SURGICAL LAB I
Explores the operative environment, aseptic principles and practices, methodologies of opening sterile packages, preparation of the sterile field, positioning and prepping, scrub role, assistant circulator role, instruments, supplies, equipment, patient positions, incisions, draping, procedural steps and care of specimens, surgical counts, instrument handling, medication handling, suture handling, loading and unloading of blades, backtable and mayo setups, room disinfection, turnover and termination.

Prerequisite(s): Successful completion of SURG 110, SURG 115, SURG 120, BIOL\& 242, and CAH 105.

## SURG 148

OPERATING ROOM THEORY I
Explores the OR environment, instrumentation, equipment, supplies, patient positions, specimen care, postoperative considerations, abdominal incisions, surgical anatomy and procedures in general, laparoscopic, ob-gyn, ophthalmic, and genitourinary surgeries.
Prerequisite(s): Successful completion of SURG 110, SURG 115, SURG 120, BIOL\& 242, and CAH 105.

## SURG 150

SURGICAL ENVIRONMENT 2CR
Explore the history of surgical technology, career opportunities, communication skills, and the effects of teamwork, law, ethics, documentation, and the health care facility environment.

Prerequisite(s): Successful completion of SURG 110, SURG 115, SURG 120, BIOL\& 242, and CAH 105.

## SURG 152 <br> CARE OF THE SURGICAL PATIENT II

 2CRCovers the physical, and biophysicalogical needs of the patient and religious and cultural influences. Methods of handling death and dying, and the ethical issues surrounding death and dying. Explores the processes related to management and care of the surgical wound, including hemostasis, sutures, dressings, drains and application of various types of dressings.
Prerequisite(s): Successful completion of SURG 110, SURG 115, SURG 120, BIOL\& 242, and CAH 105.

## SURG 153

SURGICAL LAB II
5CR
Covers intermediate level skills for the OR environment, aseptic principles and practices, scrubbing, gowning, gloving, preparation of the sterile field, disinfection and sterilization, scrub role, assistant circulator role, instrumentation, supplies, equipment, patient positions, draping, incisions, procedural steps, and care of specimens as appropriate for the second quarter
Prerequisite(s): Successful completion of SURG 145, SURG 148, SURG 150, SURG 152, and MAT 108 or Higher (MAT\&).

## SURG 154

OPERATING ROOM THEORY II 5CR
Continued exploration of surgical specialties to include otorhinolaryngologic, oral/ maxillofacial, plastic/reconstructive, and orthopedic procedures along with surgical anatomy, instrumentation, equipment, supplies, patient positions, specimen care and postoperative considerations.
Prerequisite(s): Successful completion of SURG 145, SURG 148, SURG 150, SURG 152, and MAT 108 or Higher (MAT\&).

## SURG 160

CARE OF THE SURGICAL PATIENT III
Explores disaster readiness, sterility, disinfection, steps for reprocessing instruments, decontamination of surgical environment, and the use of technology within the surgical environment.
Prerequisite(s): Successful completion of SURG 145, SURG 148, SURG 150, SURG 152, and MAT 108 or Higher (MAT\&).

## SURG 201

OPERATING ROOM THEORY III 5CR
Assesses the anatomy, physiology, and path physiology of the surgical specialties. Classroom activities will analyze procedures and anatomy related to pediatric, thoracic/ pulmonary, cardiac, peripheral vascular neurosurgical and trauma procedures.
Prerequisite(s): Successful completion of SURG 128, SURG 153, SURG 154, SURG 160, and SOC\& 101.

## SURG 205

CLINICAL PREPARATION 2CR
Students will earn HIPAA and Blood Borne Pathogens certificates, and complete all paperwork related to attending clinical rotation.
Prerequisite(s): Successful completion of SURG 128, SURG 153, SURG 154, SURG 160, and SOC\& 101.

## SURG 208 <br> MICROBIOLOGY FOR SURGICAL TECHNOLOGY <br> 3CR

Explores the relationship of microbiology and surgical practice, types and identification process of various microbes, cell structure of microbes, and disease process of microbes

Prerequisite(s): Successful completion of SURG 128, SURG 153, SURG 154, SURG 160, and SOC\& 101.

## SURG 212

SURGICAL LAB III 5CR
Preclinical level lab for practice of aseptic principles and practices, scrubbing, gowning, gloving, and preparation of the sterile field. Will practice draping patient, placing multiple types of drains and patient positioning. Demonstrate critical thinking skills and prioritizing the situations and corrections of contaminations. The course will teach care of specimens, and learn the roles of assistant circulator.
Prerequisite(s): Successful completion of SURG 128, SURG 153, SURG 154, SURG 160, and SOC\& 101.

## SURG 215

CLINICAL APPLICATIONS I 5CR Provides the framework for students to receive experience in the operating room. Through one-on-one training in a perioperative setting, students will develop the professional attitude, behavior and skills to reinforce their role as a member of the perioperative team.
Prerequisite(s): Successful completion of SURG 201, SURG 205, SURG 208, and SURG 212.

## SURG 220

CLINICAL APPLICATIONS II
5CR
See Clinical Applications.
Prerequisite(s): Successful completion of SURG 201, SURG 205, SURG 208, and SURG 212.

SURG 225
CLINICAL APPLICATIONS III
5CR
See Clinical Applications.
Prerequisite(s): Successful completion of SURG 215, SURG 220, SURG 235, and SURG 237.

## SURG 230

CLINICAL APPLICATIONS IV 5CR
See Clinical Applications.
Prerequisite(s): Successful completion of SURG 215, SURG 220, SURG 235, and SURG 237.

SURG 235
SEMINAR I
$3 C R$
Classroom presentations on health and
wellness and death and dying. Classroom preparation for the NBSTSA Certification Exam.
Prerequisite(s): Successful completion of SURG 201, SURG 205, SURG 208, and SURG 212.

## SURG 237

CERTIFICATION TEST
PREPARATION I
2CR
Prepares students to take the NBSTSA
National Certification Test.
Prerequisite(s): Successful completion of SURG 201, SURG 205, SURG 208, and SURG 212.

## SURG 240CAP

SEMINAR II
3CR
Classroom presentations of employability skills, preoperative routines, and transportation. Classroom preparation for the NBSTSA Certification Exam.
Prerequisite(s): Successful completion of SURG 215, SURG 220, SURG 235, and SURG 237.

## SURG 242

## CERTIFICATION TEST

PREPARATION II
Prepares students to take the NBSTSA
National Certification Test. Students will participate in the National Certification Test.
Prerequisite(s): Successful completion of SURG 201, SURG 215, SURG 220, SURG 235, and SURG 237.

## UPHOLSTERY

## UPH 102

INTRODUCTION TO UPHOLSTERY I5CR
Introduces tools and materials commonly used in the upholstery trade. Provides hands-on experience in proper use of various hand and power tools and their maintenance and storage. Students will learn how to set up an efficient work station.

Prerequisite(s): Instructor's permission.

## UPH 104 <br> INTRODUCTION TO <br> UPHOLSTERY II

5CR
Introduces types of foam and fabrics along with their characteristics and uses in upholstery. Equips students with skills needed to design patterns, measure and calculate materials needed for an upholstery project.
Continuation of skills learned in Introduction to Upholstery I.

Prerequisite(s): Instructor's permission.

## UPH 106

BASIC SEWING I
5CR
Covers the setup and threading of commercial upholstery sewing machines. Provides a foundation for students to learn to sew on commercial machines with control and accuracy.

Prerequisite(s): Instructor's permission.

## UPH 108

BASIC SEWING II 5CR
Focuses on building a foundation of sewing skills. Provides instruction introduction to troubleshooting and maintenance of commercial sewing machines. Introduces students to various machine stitches and their uses. Continuation of skills learned in Basic Sewing I.
Prerequisite(s): Instructor's permission.

## UPH 110

INTERMEDIATE SEWING I 5CR
Develop sewing skills, speed and accuracy by constructing cushions, pillows and automotive inserts.

Prerequisite(s): Successful completion of UPH 102, UPH 104, UPH 106, and UPH 108, or instructor's permission.

## UPH 112

INTERMEDIATE SEWING II
Continuation of sewing skills learned in Intermediate Sewing I. Increase speed and accuracy by constructing cushions, pillows and automotive inserts.

UPH 114
ADVANCED SEWING I
Provides students the opportunity to develop advanced sewing skills by constructing complex seats and custom designs.

Prerequisite(s): Successful completion of UPH 102, UPH 104, UPH 106, and UPH 108, or instructor's permission.

## UPH 116

ADVANCED SEWING II 5CR
Continuation of Advanced Sewing I to develop students' advanced sewing skills. Provides practical application of sewing skills on a 2015 Corvette seat frame or similar. Students will design a pattern, cut, sew, and fit a new upholstery cover for a seat back.
Prerequisite(s): Successful completion of UPH 102, UPH 104, UPH 106, and UPH 108, or instructor's permission.

## UPH 118

DOORS AND QUARTER PANELS I 4CR Provides students the opportunity to apply practical design, sewing and upholstery skills to automotive doors and quarter panels.

Students will learn to remove existing panels, design replacement pieces and prepare automotive interior for upholstery.
Prerequisite(s): Successful completion of Upholstery Fundamentals Certificate or instructor's permission.

## UPH 120

DOORS AND QUARTER PANELS II 4CR
Continuation of development of skills learned in Doors and Quarter Panels I. Instruction also includes reinstallation of upholstered vehicle door and quarter panels.

Prerequisite(s): Successful completion of Upholstery Fundamentals Certificate or instructor's permission.

## UPH 122

BUCKET SEATS I
4CR
Covers the removal of an automotive bucket seat as well as pattern and fabrication of a replacement seat cover and headrest covers. Provides students with the opportunity to apply knowledge and skills learned in design, measurement and sewing.
Prerequisite(s): Successful completion of Upholstery Fundamentals Certificate or instructor's permission.

UPH 124
BUCKET SEATS II
Covers various sewing techniques for automotive bucket seat as well as preparation and fitting of upholstery covers for bucket seats and head rests. Students will also learn to reinstall automotive bucket seats and headrests after reupholstering. Continuation of skills learned in Bucket Seats I.

Prerequisite(s): Successful completion of Upholstery Fundamentals Certificate or instructor's permission.

## UPH 126

BENCH SEATS I 4CR
Covers the removal of an automotive bench seat as well as pattern and fabrication of a replacement seat cover and headrest covers. Provides students with the opportunity to apply knowledge and skills learned in design, measurement and sewing.

Prerequisite(s): Successful completion of UPH 118, UPH 120, UPH 122, and UPH 124, or instructor's permission.

## UPH 128

BENCH SEATS II
Covers various sewing techniques for automotive bench seats as well as preparation and fitting of upholstery covers for bench seats and head rests. Students will also learn how to reinstall automotive bench seats and headrests after reupholstering. Continuation of skills learned in Bench Seats I.

Prerequisite(s): Successful completion of UPH 118, UPH 120, UPH 122, and UPH 124, or instructor's permission.

## UPH 132

HEADLINERS
Introduces fabrication of bow headliners, upholstery of hard shell headliners and installation and creation of matching sun visors.

Prerequisite(s): Successful completion of UPH 118, UPH 120, UPH 122, and UPH 124, or instructor's permission.

## UPH 136

CARPETS
Covers removal of automotive carpet for replacement, preparation of the trunk and other interior areas, cutting and sewing new carpet and reinstallation of an automotive carpet.
Prerequisite(s): Successful completion of UPH 126, UPH 128, and UPH 132, or instructor's permission.

## UPH 140

CONVERTIBLE TOPS
Students will learn how to disassemble a convertible top, fabricate top pads, prepare care and bows for a new top, and install a new top.
Prerequisite(s): Successful completion of UPH 126, UPH 128, and UPH 132, or instructor's permission.

UPH 145
THE ART OF TYING SPRINGS 3CR
Students will learn how to install springs using eight-way tie and adjust to proper height.

Prerequisite(s): Successful completion of Upholstery Fundamentals Certificate or instructor's permission.

UPH 150
UPHOLSTERING A LOUIS-TYPE CHAIR I

4CR
Covers professional upholstery techniques and skills needed to upholster a Louis-type chair, overview of materials and tools of furniture upholstery and best practices.
Prerequisite(s): Successful completion of Upholstery Fundamentals Certificate or instructor's permission.

## UPH 155

UPHOLSTERING A LOUIS-TYPE CHAIR II 4CR Continuation of Upholstering a Louis-type Chair I, building on skills learned in UPH 150 , including instruction on designing and sewing sofa skirts and furniture arm covers.

Prerequisite(s): Successful completion of Upholstery Fundamentals Certificate or instructor's permission.

## UPH 160

UPHOLSTERING A WINGBACK CHAIR I 4CR
Introduces skills needed to upholster a wingback chair. Provides an overview of professional upholstery techniques, materials, tools, and best practices.
Prerequisite(s): Successful completion of Upholstery Fundamentals Certificate or instructor's permission.

## UPH 165

UPHOLSTERING A WINGBACK CHAIR II
Continues building on skills learned in Upholstering a Wingback Chair I course.
Prerequisite(s): Successful completion of UPH 145, UPH 150, UPH 155, and UPH 160, or instructor's permission.

## UPH 170

UPHOLSTERING A SOFA I 4CR
Covers professional upholstery techniques and skills needed to upholster a sofa, overview of materials and tools of furniture upholstery and best practices.
Prerequisite(s): Successful completion of UPH 145, UPH 150, UPH 155, and UPH 160, or instructor's permission.

## UPH 175

UPHOLSTERING A SOFA II 4CR
Continues building on skills learned in Upholstering a Sofa I course, includes instruction on designing and sewing sofa skirts and furniture arm covers.
Prerequisite(s): Successful completion of UPH 145, UPH 150, UPH 155, and UPH 160, or instructor's permission.

## UPH 180

DIAMOND TUFTING 4CR
Create a diamond tufted sample board or furniture piece.
Prerequisite(s): Successful completion of UPH 165, UPH 170, and UPH 175, or instructor's permission.

## UPH 185

PILLOW BACKS
Fabricate a pillow back using essential patterning and sewing skills.
Prerequisite(s): Successful completion of UPH 165, UPH 170, and UPH 175, or instructor's permission.

## UPH 190

DESIGN AND CONSTRUCTION OF A HEADBOARD
Build a headboard using essential skills, professional upholstery techniques, tools and materials and best practices.

Prerequisite(s): Successful completion of UPH 165, UPH 170, and UPH 175, or instructor's permission.

## UPH 200

SPECIAL PROJECTS
Students will develop skills in advanced and/ or specialized techniques. Students will have the opportunity to apply knowledge to projects of personal interest as assigned and/or job shadowing. Learning outcomes will be written by the instructor and student on a case-bycase basis.

Prerequisite(s): Successful completion of UPH 126, UPH 128, and UPH 132.

## WELDING

## WLD 106

WELDING THEORY 5CR
Introduces the tools and equipment used in welding. Includes safety considerations, electrical principles, welding quality, and technical orientation for select welding and cutting processes.
Co-requisite(s): WLD 110, WLD 112, WLD 117, and instructor's permission.

## WLD 110

THERMAL CUTTING \& GOUGING 3CR Develops the knowledge and skills for manual and machine-guided oxyfuel cutting, manual plasma arc cutting, and carbon arc gouging.
Co-requisite(s): WLD 106, WLD 112, WLD 117, and instructor's permission.

## WLD 112

OXYACETYLENE WELDING \& BRAZING 4CR
Develops the knowledge and skill for welding, brazing, and braze welding various joint designs using oxyacetylene equipment.

Co-requisite(s): WLD 106, WLD 110, WLD 117, and instructor's permission.

## WLD 117

SHIELDED METAL ARC WELDING I 7CR
Introduces the shielded metal arc welding (SMAW) process, with emphasis on skill development using deep-penetrating electrodes in the flat and horizontal positions, deep-penetrating electrodes by welding various joints in the vertical and overhead positions.
Co-requisite(s): WLD 106, WLD 110, WLD 112, and instructor's permission.

## WLD 123

SHIELDED METAL ARC WELDING II7CR Develops understanding of the applications and techniques for using low-hydrogen SMAW electrodes in the flat and horizontal positions, low-hydrogen electrodes by welding various joint designs in the vertical and overhead positions.
Prerequisite(s): Successful completion of WLD 110, WLD 112, WLD 117, and instructor's permission.

Co-requisite(s): WLD 152.
WLD 143
MATERIALS AND TESTING
5CR
Covers welding processes and electrode
selection, welder qualifications, and welding inspection.
Prerequisite(s): Successful completion of WLD 106 or WLD 144, and instructor's permission.

## WLD 144

PRINT READING FOR WELDERS 5CR Develops the ability to interpret prints used in welding and fabrication. Introduction to sketching, lines, views, visualization, dimensioning, applied math, and welding symbols.

WLD 152
GAS METAL ARC WELDING
Develops the ability to use the gas metal arc welding process to join carbon steels and aluminum with various joint designs in all positions.
Prerequisite(s): Successful completion of WLD 110, WLD 112, WLD 117, and instructor's permission.

Co-requisite(s): WLD 123.
WLD 157
METALLURGY
Examines metal identification and classification, mechanical properties, crystalline structures, heat treatments, and metallurgical effects of welding.

## WLD 168

FLUX CORED ARC WELDING I 7CR
Develops the ability to use gas-shielded flux cored arc welding electrodes to join carbon steels with various joint designs in all positions.
Prerequisite(s): Successful completion of WLD 123 and WLD 152 and instructor's permission.

## Co-requisite(s): WLD 210.

## WLD 210

GAS TUNGSTEN ARC WELDING 7CR Develops the ability to use the gas tungsten arc welding process to join carbon and stainless steels with various joint designs in all positions.
Prerequisite(s): Successful completion of WLD 123 and WLD 152 and instructor's permission.
Co-requisite(s): WLD 168.

## WLD 211

ADVANCED GAS TUNGSTEN
ARC WELDING I (GTAW)
7CR
GTAW welding on thin metal in all positions.
Prerequisite(s): Successful completion of WLD 210 or instructor's permission.

WLD 214
ADVANCED GAS TUNGSTEN ARC WELDING II 7CR
GTAW welding on thin (exotic as available) metal in all positions.

Prerequisite(s): Successful completion of or concurrent enrollment in WLD 211.

WLD 217CAP
SPECIAL PROJECTS
1-5CR
Concept, design, drawing to finished project.
Prerequisite(s): Advanced standing with instructor's permission.

WLD 219
SPECIAL PROJECTS II 1-5CR
More concept, design, drawing to finished project.
Prerequisite(s): Advanced standing with instructor's permission.

WLD 223
GTAW PIPE WELDING 7CR
Weld 6 " diameter pipe in the 5 G position with GTAW.
Prerequisite(s): Instructor's permission.
WLD 225
SHIELDED METAL ARC
WELDING PIPE
7CR
Weld 6" diameter pipe in the 5 G position with E6010 \& E7018.
Prerequisite(s): Instructor's permission.
WLD 227
ADVANCED PIPE WELDING 7CR
Learn to weld 6" diameter pipe with both GTAW \& SMAW.
Prerequisite(s): Instructor's permission.
WLD 229
METAL FORMING 7CR
Learn to use shop equipment to form metal parts.
Prerequisite(s): Successful completion of WLD 157 or instructor's permission.

WLD 233 ${ }^{\text {CAP }}$
LAYOUT AND FABRICATION 7CR
Learn to use layout tools to lay out projects and fabricate them.
Prerequisite(s): Instructor's permission.
WLD 235 ${ }^{\text {CAP }}$
WABO TEST PREP
7CR
Learn to SMAW, FCAW weld 3G\&4G to WABO standards.
Prerequisite(s): Instructor's permission.

## WLD 238

FCAW II (FLUX CORE ARC WELDING) 7CR Welding with FCAW-S in all positions.

66
Entering back into school, I was so frightened. I was thinking to myself, "I'm going to be the oldest person there." I was so happy to be welcomed into this group of people. There was nothing but friendly, happy faces everywhere I've gone on this campus.

- Christen Henry, Early Care \& Education Student


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## Academic Standards

Clover Park Technical College is committed to facilitating the academic success of students. The primary purpose of Academic Standards is to provide guidance in academic processes and procedures, which govern student progress through programs of study.

## STUDENT ACADEMIC RESPONSIBILITIES

Admission to Clover Park Technical College carries with it the understanding that students will conduct themselves as responsible members of the college community. This includes an expectation that students will obey appropriate laws, comply with the rules of the college and its departments, and maintain a high standard of integrity and honesty.

1. Dishonesty: Honest assessment of student performance is of crucial importance to all members of the college community. Acts of dishonesty are serious breaches of honor and shall be dealt with in the following manner:
a. It is the responsibility of the college administration and faculty to provide reasonable and prudent security measures designed to minimize opportunities for acts of dishonesty that occur at the college.
b. Any student who, for the purpose of fulfilling any assignment or task required by a staff member as part of the student's program of study, shall knowingly tender any work product that the student fraudulently represents to the staff member as the student's work product, shall be deemed to have committed an act of dishonesty. Acts of dishonesty shall be cause for disciplinary action and be subject to the processes described in the Code of Student Conduct WAC 494C-121-060.
c. Any student who aids or abets the accomplishment of an act of dishonesty, as described in sub-paragraph (b) above, shall be subject to disciplinary action.
d. This section shall not be construed as preventing an instructor from taking immediate disciplinary action when the instructor is required to act upon such breach of dishonesty in order to preserve order and prevent disruptive conduct in the classroom. This section shall also not be construed as preventing an instructor from adjusting the student's grade on a particular project, paper, test, or class grade for dishonesty.
2. Classroom Conduct: Faculty members and instructional administrators are authorized to take appropriate action to maintain order and proper conduct in the classroom and the cooperation of students in fulfilling course objectives. See Code of Student Conduct WAC 495c-121070.
3. Any student who substantially disrupts any college class by engaging in conduct that renders it difficult or impossible to maintain the decorum of the class shall be subject to disciplinary action as defined in the Code of Student Conduct WAC 495C-121-050-070.

## ATTENDANCE POLICY

The student is expected to attend all classes for which the
student is registered in order to gain the maximum benefit. The instructor may establish an attendance policy for the program. It is the responsibility of the student to know and comply with the policy. Programs having established attendance policies will include relevant information in course syllabi. Financial aid recipients are subject to the Student Progress Policy as stated in the Financial Aid section of this catalog.
A student who does not attend the first two class sessions and/or comply with the established attendance policy for the class or program may forfeit the right to continue and may be subject to administrative withdrawal.

## GRADES

The quality of a student's performance is measured by a grading system using grades "A" through "F." The grade for a course is calculated into a student's GPA as 4 to o grade points. Faculty may choose to utilize or not utilize the + or designation with grades.
Each individual program establishes criteria for achieving each grade based on percentage scores and specific assessment criteria as listed in the course syllabi.
The grade points allotted to each grade are as follows:

| A | 4.0 | C | 2.0 |
| :--- | :--- | :--- | :--- |
| A- | 3.7 | C- | 1.7 |
| B+ | 3.3 | D+ | 1.3 |
| B | 3.0 | D | 1.0 |
| B- | 2.7 | F | 0.0 |
| C+ | 2.3 |  |  |

Some programs require that the student complete each individual course at a certain minimum grade level in order to progress in the program. Programs with this requirement will have it noted in the program description section of the catalog and in the course syllabus. Financial aid recipients are subject to the Student Progress Policy as stated in the Financial Aid section of this catalog.

## OTHER GRADE INDICATORS

* Course not graded. No grade point assigned.

I Incomplete. An incomplete grade indicates that the student completed most of the course requirements at a passing level and intends to complete missing course work. Prior to the last day of the quarter, the instructor must complete a Clover Park Technical College Agreement for Incomplete Grades form indicating the work to be completed and the expected completion date, not to exceed one academic quarter from the date of issue. The form must be signed by both the instructor and the student. A grade of "I" reverts to an " $F$ " if work has not been satisfactorily completed by the end of the following quarter.
N Audit Course. No grade point assigned.
P Pass. No grade point assigned. A "P" grade indicates passing with a " C " (2.0) in courses designated as pass/fail. Courses graded with "P" may not meet program requirements for graduation.
R Repeated Courses. The " $R$ " will be placed next to the lowest grade, and only the highest grade received for the course will be used in GPA calculation.

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V Unofficial Withdrawal. No grade point assigned. Instructor-initiated, a "V" appears on the transcript when an instructor withdraws a student who has never attended (No Show) or has discontinued participation without initiating official withdrawal.
W Official Withdrawal. No grade point assigned. Studentinitiated, a "W" appears on the transcript when a student officially withdraws from a course in accordance with the college Drop/Withdrawal procedure.

## COURSE NUMBERING

Courses numbered below 100 are not considered college level and do not meet degree/certification requirements.

## CRITERION FOR GOOD STANDING

A student is in good academic standing when his or her quarterly grade point average remains at or above 2.0. Financial aid recipients are subject to the Student Progress Policy as stated in the Financial Aid section of this catalog.

## GRADE CHANGES

Students who believe that an error has been made in the grade received for a course should contact the instructor as soon as possible to discuss the issue. Requests for grade changes will be accepted no later than one quarter from the date the grade was issued. Appeals will be addressed through the Academic Appeal Process described in this catalog.

## ADDING A COURSE

Students may add courses online through the second day of the quarter without faculty permission. After that date, faculty permission is required. Add/Drop forms are available in the Enrollment Services Office.

## WITHDRAWING FROM A COURSE

Students dropping or withdrawing from any course or program must meet with their program adviser and complete the withdrawal paperwork. If an emergency occurs preventing the student from coming to the college, the student may contact their program adviser through email or telephone. Failure by the student to officially withdraw will affect grades and possible refunds. Financial Aid recipients are subject to the Satisfactory Academic Progress Policy and should contact the Student Aid \& Scholarships Office prior to withdrawing from a program or course.
Withdrawals through the fifth class day after the start of a course or program will be considered a drop and will not appear on the student transcript. Students receiving aid will be subject to the 10th day overpayment policy.
Withdrawals after the fifth class day and through the 35th class day of a quarter may receive a "W" grade. Students withdrawing after the end of the 35th class day of a quarter will receive the grade earned for the quarter at the time of withdrawal.
Students re-enrolling in a course or program for which a "W," "F," or "V" was assigned must begin the course or program in the first week of the quarter and in accordance with established prerequisites.

## ADMINISTRATIVE WITHDRAWAL

Clover Park Technical College reserves the right to administratively withdraw students under the following conditions:

1. Student has not attended the first two class sessions and/ or complied with the established attendance policy for the class or program
2. Student has not successfully fulfilled the prerequisites for the class or program. Student will be notified of the withdrawal and provided registration options.
3. If a student violates the Student Code of Conduct, an administrative withdrawal may be done. Student will be notified of this action.

## AUDITING A COURSE

A student may enroll to audit a course with permission of the program faculty. The auditing student is expected to pay tuition and fees but is not required to take examinations and will not receive credit for the course. A grade of " $N$ " will be listed on the student's transcript and will not be computed in their GPA.
Registration status changes from audit to credit or from credit to audit are not allowed after the start of the course.

## REPEATING A COURSE

Students may repeat a course in which they have not received a passing grade, unless prohibited by program policy. To repeat a course, a student must register for the course on a spaceavailable basis, complete a Course Repeat form at the time of registration, and pay all necessary fees.
A course may be repeated no more than twice (this is defined as two repeats in addition to the original enrollment). All courses and earned grades will remain on the student's transcript, with only the highest grade received for a repeated course used in the calculation of the GPA.
Financial aid recipients and veterans should check with the Student Aid \& Scholarships and Enrollment Services (Veteran's) Offices regarding funding for repeated courses.
Other colleges may not accept a grade earned in a repeated course.
GI Bill ${ }^{\circledR}$ is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at https://www.benefits.va.gov/gibill.

## GENERAL EDUCATION

All degree or certificate programs of 45 credits or longer require a minimum of five credits each in three college-level (100-level or above) General Education areas: communication, quantitative reasoning (math), and social sciences. Students are responsible for registering and completing these courses prior to graduation. Specific courses are identified in the program descriptions. General Education courses are offered at convenient hours throughout the day each quarter.
Students must earn a grade of "C" (2.0) in all pre-college course work in order to advance to the next level course or any 100-level course.

## CORE ABILITIES

Clover Park Technical College has identified four core abilities that all certificate- and degree-seeking students should possess upon completion of their program. These competencies represent workplace skills that will prepare graduates to be valued employees and will contribute to their success.
Communication: Students will receive and deliver written, spoken, and visual information clearly and accurately.
Critical Thinking/Problem Solving: Students will apply principles and strategies of purposeful, active, organized thinking.
Personal/Professional Responsibility: Students will apply effective work habits and attitudes within an organizational setting and work successfully with others as part of the total team, both inside and outside the workplace.

Information/Technological Literacy: Students will use modern electronic and industrial devices to accomplish tasks in today's workplace.

## COLLEGE SUCCESS COURSE

A course entitled "College 102 - College Success for All" is required for all students entering a certificate or degree program over 20 credits in length. The course must be completed during the first quarter of study at CPTC. Transfer credit may be awarded if applicable.

## ADDITIONAL DEGREE REQUIREMENTS

To receive an Associate of Applied Technology degree (AAT), an Associate in Applied Science - T (AAS-T) degree, or an Associate of Arts and Science Degree Direct Transfer Agreement/Major Related Program (DTA/MRP) at Clover Park Technical College, the following degree requirements must be met:

- Completion of a high school diploma or high school equivalency exam. Students who do not have a high school diploma or high school equivalency exam may request one at the time they apply for their degree.
- Completion of a capstone project course. Courses that satisfy the degree requirement for a capstone project are identified in the catalog with a CAP postscript following the course number.
- Completion of a diversity requirement. Courses that satisfy the diversity degree requirement are identified in the catalog with a "DIV" postscript following the course number.
- Completion of a computer literacy requirement. Computer literacy may be demonstrated by either passing a competency test or successfully completing a computer literacy course designated with a "CL" postscript following the course number.


## TRANSFER OF CREDIT TO CLOVER PARK TECHNICAL COLLEGE

Programs may have exceptions to the maximum credits accepted in transfer due to special articulations or consortium agreements. These exceptions will be noted in the program description section of this catalog.

## CREDIT FROM COLLEGES AND UNIVERSITIES

Clover Park Technical College curriculum is based on current industry standards. Transfer credit from an accredited institution may be accepted if the course work:

1. Was college level.
2. Was graded as "C" (2.0) or better. NOTE: Some programs may have a higher standard.
3. Technical Courses must meet the program's requirements as described in the Clover Park Technical College Catalog.
4. General Education Courses do not have a required time limitation, unless specified by an individual program. Requirements can be found in the program description of this catalog.
5. Transfer credit combined with all sources may constitute no more than 75 percent of the credits needed for program completion.
6. Transfer of credit for programs with license requirements are subject to current licensing laws.

## HIGH SCHOOL LEARNING EXPERIENCE/DUAL CREDIT

Credit/dual credit may be accepted for high school learning experience where formal articulation agreements are in place. Courses that have Dual Credit Articulation agreements are marked with an asterisk * in both program and course description. Please contact Enrollment Services at 253-5896003 for specific agreements.

## MILITARY EXPERIENCE

Credit may be accepted for military experience or education based on the Joint Services Transcript (JTS) and guidelines from the American Council on Education. Please request an evaluation of your JST from the Enrollment Services Office located in Bldg. 17, Rm. 130, at the Lakewood Campus.

## ACADEMIC CREDIT FOR PRIOR LEARNING (FORMERLY KNOWN AS PRIOR LEARNING ASSESSMENT (PLA) CREDIT OR PRIOR <br> EXPERIENTIAL LEARNING)

Four categories for academic credit for prior learning have been established: Prior Experiential Learning (Portfolio Review), Credit by Examination, Extra-Institutional Learning, and Course Challenge. All options are explained below.

## PRIOR EXPERIENTIAL LEARNING (PORTFOLIO REVIEW)

Instructors will evaluate the prior learning portfolio of a student in relation to the competencies of the program and may award credit for demonstrated learning outcomes appropriate to the subject, course, or program offered. Credit for prior learning portfolio may constitute no more than 25 percent of the credits needed for program completion.
Students who wish to receive credit for prior learning will complete the Request Form available from the Enrollment Services Office and pay the following fees for assessment services: $\$ 50$ evaluation fee and $\$ 20$ transcription fee for each course for which prior learning credit is requested.

CREDIT BY EXAMINATION/CLEP \& DSST CREDIT
The College-Level Examination Program (CLEP) is a way

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to earn credit for comprehensive knowledge you may have acquired through independent or prior study, cultural pursuits, work, or other life experiences. If you successfully pass the CLEP tests, you may receive credit for completing certain certificate or degree requirements.
Clover Park Technical College (CPTC) accepts the following subject tests when passed with the recommended American Council on Education (ACE) score: College Mathematics, College Algebra, Introductory Psychology, and English Composition. Information about CLEP tests and testing sites can be obtained on the College Board website at www. collegeboard.com.
DSST (formerly known as DANTES Subject Standardized Tests) is also accepted as a way to earn credit for prior knowledge or experience. The subject must be equivalent to CPTC courses and will be accepted according to the ACE recommendations for passing and credit value. Information about DSST tests and testing sites can be obtained online at www.dantes.doded.mil.

## ADVANCED PLACEMENT (AP)

Clover Park Technical College grants credits to students who have earned a score of three or more on the Advanced Placement Tests of the College Board in the subject areas listed on the Course Equivalency Guide (visit www.cptc.edu/transferto and scroll to "Advanced Placement"). For more information about AP study and testing, please see the AP counselor at your high school or go to www.collegeboard.com and search for Advanced Placement. When you take your test, be sure to indicate that the results should be sent to CPTC.

## INTERNATIONAL BACCALAUREATE (IB)

International Baccalaureate students who have earned successful IB higher-level test scores may request college credit for IB higher-level work that is the equivalent of CPTC degree and certificate course requirements. For more information, please contact the Credentials Evaluator at 253-589-6003 or email evaluator@cptc.edu.

## CREDIT BY EXTRA-INSTITUTIONAL LEARNING

Knowledge and skills acquired outside the institution and objectively verified through third-party certifications, industryrecognized testing/training, and crosswalks. Students who wish to receive credit for by extra-institutional learning will complete the Request Form available from the Enrollment Services Office.

## CREDIT BY COURSE CHALLENGE

Challenge examinations are sufficiently comprehensive to determine that the student has the same knowledge and skills as those students who enroll in, and successfully complete, the course. A student should have previous training, private study, work experience, or other bona fide qualifications indicating the student has knowledge or abilities equivalent to course completers. Students who wish to receive credit for course challenges will complete the Request Form available from the Enrollment Services Office and pay the following fees for assessment services: $\$ 50$ evaluation fee and $\$ 20$ transcription fee for each course for which a course challenge is requested. Should the course challenge be unsuccessful, the student will be required to take the course.

## ALTERNATIVE CREDIT OPTIONS

CPTC accepts many alternative credit options for completion of degrees and certificates; however, if your plans include transfer to another college or university, they may not provide the same credit, and you should check with their admissions office to determine your best options for meeting your educational goals.

## TRANSFERABILITY OF CLOVER PARK TECHNICAL COLLEGE CREDIT

Many Clover Park Technical College programs have individual agreements with other academic institutions that provide for the transfer of credits. Acceptance of credit taken at one educational institution is always at the discretion of the receiving institution. Students are advised to contact the registrar of the receiving institution to discuss its policies and procedures for transfer credit.

## TRANSFER RIGHTS AND RESPONSIBILITIES

## STUDENT RIGHTS AND RESPONSIBILITIES

1. Students have the right to clear, accurate, and current information about their transfer admission requirements, transfer admission deadlines, degree requirements, and transfer policies that include course equivalencies.
2. Transfer and freshman-entry students have the right to expect comparable standards for regular admission to programs and comparable program requirements.
3. Students have the right to seek clarification regarding their transfer evaluation and may request the reconsideration of any aspect of that evaluation. In response, the college will follow established practices and processes for reviewing its transfer credit decisions.
4. Students who encounter other transfer difficulties have the right to seek resolution. Each institution will have a defined process for resolution that is published and readily available to students.
5. Students have the responsibility to complete all materials required for admission and to submit the application on or before the published deadlines.
6. Students have the responsibility to plan their courses of study by referring to the specific published degree requirements of the college or academic program in which they intend to earn a bachelor's degree.
7. When a student changes a major or degree program, the student assumes full responsibility for meeting the new requirements.
8. Students who complete the general education requirements at any public four-year institution will have met the lower division general education requirements of the institution to which they transfer.

## COLLEGE AND UNIVERSITY RIGHTS AND RESPONSIBILITIES

1. Colleges and universities have the right and authority to determine program requirements and course offerings in accordance with their institutional missions.
2. Colleges and universities have the responsibility to communicate and publish their requirements and course offerings to students and the public, including information

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about student transfer rights and responsibilities.
3. Colleges and universities have the responsibility to communicate their admission and transfer-related decisions to students in writing (electronic or paper).

## CLOVER PARK TECHNICAL COLLEGE DEGREES

## The Bachelor of Applied Science in Operations

 Management (BAS-OPM) degree is awarded for completion of at least 90 credits of appropriate 300- and 400-level coursework. An applied associate degree (AAS or equivalent) with the required distribution of academic core coursework in written communication, quantitative reasoning, social science, and humanities is a prerequisite for program admission. Other program admission requirements can be found online.
## The Associate of Applied Technology (AAT) degree

 is awarded to students who satisfactorily complete the competencies and requirements in programs approved by the college's Curriculum Committee and by the State Board for Community and Technical Colleges. AAT degree options are available in programs 90 credits or more in length, containing a core of 15 college-level academic credits. College-level academic courses in communication, quantitative reasoning, and social sciences required for AAT degrees are designed to prepare students for work. While they meet program graduation requirements, they are not likely to transfer to other colleges or universities.The Associate in Applied Science - T (AAS-T) degree is awarded to students who satisfactorily complete the competencies and requirements in programs approved by the college's Curriculum Committee and by the State Board for Community and Technical Colleges. AAS-T degrees are workforce degrees with a core of General Education courses commonly accepted in transfer. The General Education component of the AAS-T degree is composed of not less than 20 credits of courses, including a minimum of 5 credits in communication; 5 credits in quantitative reasoning; and 10 credits in social science, humanities, or science. It is assumed that many AAS-T degrees will have significantly more than the minimum 20 credits of General Education courses.
The Associate in Pre-Nursing (DTA/MRP) is the degree awarded by Clover Park Technical College to students who have completed specified curriculum with the intent of transferring to one of Washington's four-year institutions. Direct Transfer Agreement/Major Related Program (DTA/MRP) degrees prepare students with general education requirements necessary to pursue further study. They do not alter the admission criteria established by the baccalaureate institution, nor do they guarantee admission to the institution. Students should contact an adviser at the potential transfer institution regarding their interests and specific course choices.
Degree options are indicated on individual program descriptions in this catalog.

## CLOVER PARK TECHNICAL COLLEGE TRANSFER AGREEMENTS

In general, Clover Park Technical College's Associate of Applied Technology (AAT) degrees are not designed with the intent for transfer to other colleges or universities. However, Clover Park

Technical College has established transfer agreements with specific baccalaureate programs. Graduates of our Associate in Applied Science - T (AAS-T) degrees and the Associate in Pre-Nursing (DTA/MRP) program may find opportunities to further their education at these institutions. Students desiring to transfer to a bachelor's program are encouraged to contact the desired colleges and universities early in their studies to ensure the best possibility of transfer upon completion of an AAS-T or DTA/MRP.

## Ashford University

Ashford University (AU) offers 50-plus degree programs (undergraduate and graduate) both on-site and online. Students can keep in touch with professors and classmates "on-the-go" with the Ashford mobile app. CPTC students earning an approved associate degree may qualify for a "block" of credits to transfer to Ashford University. Ashford is regionally accredited by the Western Association of Schools and Colleges (WASC). Contact AU at www.ashford.edu to learn more about transfer opportunities and requirements.

## Bellevue College

Bellevue College (BC) is an open-access, community-based public institution. BC offers a pathway for qualifying Clover Park Interior Design graduates (AAS-T) to pursue a Bachelor of Applied Arts in Interior Design (BAA). Bellevue College is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact BC at www.bellevuecollege.edu for details about transfer.

## Boston Architectural College

The Boston Architectural College (BAC) Bachelor and Master of Architecture programs, accredited by the National Architectural Accrediting Board, prepare students to become successful licensed architects through real-world practical experience, professional networks, and creative scholarly opportunities. The BAC's Bachelor of Science in Architecture is a pre-professional program that can lead to our 2-Year Master of Architecture program. An articulation agreement with BAC allows graduates of CPTC's Interior Design degree program to transfer into the Bachelor of Interior Architecture at the Boston Architectural College (BAC) upon meeting all requirements. Contact BAC at https://the-bac.edu/academics/school-ofarchitecture to learn more about transfer opportunities and requirements.

## Brandman University

Brandman University (BU) is a private, non-profit, accredited university in the Chapman University System that serves the unique needs of the working adult. Current CPTC students may apply for entrance to Brandman's Early Advantage Program (EAP), which is designed to maximize transfer success and minimize the time and costs involved in attaining a bachelor's degree in various disciplines. EAP students receive comprehensive advising and planning services and will be able to precisely map their transfer plan to BU while continuing to take transferrable coursework at CPTC. They may also qualify for a one-time scholarship. BU is accredited by the Western Association of Schools and Colleges (WASC). Contact BU at www.brandman.edu for more information about the Early Advantage Program.

## Capella University

Capella University (CU) is an accredited online university that
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combines foundational theory with real-world application to ensure students receive a high-quality education. If CPTC graduates of approved programs (including Computer Information Technology, Human Services, and Nursing) meet Capella's admissions requirements, they may apply for specific upper-division bachelor's degree programs at CU. Self-identifying students may be eligible to receive a tuition discount. CU offers additional benefits to U.S. Armed Forces learners. Capella University is accredited by the Higher Learning Commission (North Central Association). Contact www.capella.edu for details and admission requirements.

## Central Washington University

Central Washington University (CWU) provides a pathway to a baccalaureate degree for Clover Park students. Your applied associate degree provides you the skills to work in your chosen field. The Bachelor of Applied Science (BAS) degree in Information Technology and Administrative Management (ITAM) at CWU complements that degree with the management/leadership skills to help you become a leader in your knowledge area. Students with degrees in Accounting, Aviation Maintenance, Human Services, and Medical Laboratory Technology (to name a few) will benefit from a university degree that gives them the skills to manage people and projects. Many more career opportunities will be available with the BAS-ITAM degree. CWU is accredited by the Northwest Commission on Colleges and Universities (NWCCU). For information about CWU, visit the website at www.cwu.edu. For specific information about the BAS-ITAM program, please visit www.cwu.edu/it-management/basoverview.

## Chamberlain College of Nursing

As part of the DeVry Education Group, Chamberlain College of Nursing is committed to graduating compassionate, ethical, and knowledgeable nurse leaders who are empowered to transform healthcare. CPTC graduates earning an associate degree in nursing who are accepted into Chamberlain's Bachelor of Science in Nursing or Master of Science in Nursing may qualify to receive reduced tuition rates. Chamberlain is accredited by The Higher Learning Commission and is a member of the North Central Association of Colleges and Schools (NCACS). For more information on transfer requirements, contact Chamberlain at www.chamberlain.edu.

## City University of Seattle

City University of Seattle (CityU) is a private nonprofit university regionally accredited through the doctorate level. It is dedicated to serving working adults and transfer students looking to start, change, or grow their career. CityU welcomes students from Clover Park Technical College and invites them to explore CityU's 60-plus degree and certificate programs offered online and on-site. U.S. News \& World Report has ranked City University of Seattle as having one of the top 30 Best Online Bachelor Degree Programs in the U.S. and as being one of the top 20 online programs for veterans in the country. CityU is proud to be a top-ranked institution in the country and a top producer of teachers, counselors, and MBAs in Washington State. They offer a transfer scholarship of \$5,680 to Washington students. City University of Seattle is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Explore your opportunities at www.cityu.edu or stop by CityU's Tacoma campus at 1145 Broadway Plaza,

Tacoma, WA, 98402.

## Colorado Technical University

With a strong focus on technology and curriculum, Colorado Technical University (CTU) enables students to move upward while providing support from an experienced network of faculty and alumni. CPTC graduates completing a transfer program with a GPA of 2.0 or greater and meeting admission requirements will have the opportunity of admission into a baccalaureate degree program through CTU's Virtual Campus. CTU is accredited by the Higher Learning Commission and is a member of the North Central Association of Schools and Colleges. For full details, contact Colorado Technical University at www.coloradotech.edu

## Eastern Washington University

Eastern Washington University (EWU) is a regional, comprehensive public university located in Cheney, Washington, with programs also offered at various locations across the state. EWU is accredited through the Northwest Commission on Colleges and Universities (NWCCU). Contact EWU for more information about transfer.

## Embry-Riddle Aeronautical University

Embry-Riddle Aeronautical University (ERAU) is the world's preeminent university for aviation and aerospace education offering associate through doctorate-level degrees. Transfer eligibility is determined upon transcript evaluation by ERAU (with over 100 CPTC courses on the Common Course/ Equivalency List) and is based on the current catalog at the time of transfer. ERAU is accredited by the Southern Association of Colleges and Schools Commission on Colleges. To learn more about Embry-Riddle, go to www.erau.edu.

## The Evergreen State College

The Evergreen State College (TESC) is a progressive, public liberal arts and sciences college located in Olympia, Washington. TESC reviews eligible transfer candidates (19 programs) for admission into either a Direct Transfer Degree (7 CPTC degrees) or the Upside Down Degree Program (from list of approved AAS-T degrees). The "Upside Down" degree allows CPTC graduates from approved technical degree programs to earn a bachelor's degree from TESC by taking a broad array of general education coursework in their final two years. The Evergreen State College is accredited by the Northwest Commission on Colleges and Universities (NWCCU). To learn more about eligible direct transfer programs and Upside Down degree opportunities, contact TESC at www.evergreen.edu.

## Excelsior College

Excelsior College is a not-for-profit institution of higher education that provides educational opportunity to adult learners with an emphasis on those historically underrepresented in higher education whether wanting to finish a degree, earn a promotion at work, or change careers. Excelsior is chartered by the New York State Board of Regents and accredited by the Middle States Commission on Higher Education (CHE/MSA). Under an "umbrella" agreement, CPTC graduates meeting eligibility requirements will be considered for transfer. Contact Excelsior at www.excelsior.edu to obtain a transfer guide and more information about transfer opportunities.

## Fashion Institute of Design and Merchandising

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The Fashion Institute of Design and Merchandising (FIDM) educates students for professional careers in Fashion, Entertainment, and Digital Media. Transfer opportunities are available for approved Interior Design and General Studies courses toward FIDM core requirements. Additional courses may be considered on a case-by-case basis. FIDM is accredited by the Western Association of Schools and Colleges (WASC) and the National Association of Schools of Art and Design (NASAD). To learn more, contact the Fashion Institute at fidm.edu.

## Green River College

Green River College is a public college where students from all over the world come together to learn, grow, and enrich their lives. Green River's main campus is located in the Lea Hill neighborhood of Auburn, with branch campuses in downtown Auburn, Kent, and Enumclaw. Transfer opportunities are available for CPTC graduates completing specific Computer Networking \& Information Systems Security (CNISS) degrees to transfer to Green River's Bachelor in Applied Science in Network Administration and Security or Bachelor in Applied Science in Software Development. Go to www.greenriver.edu to learn more about these transfer opportunities.

## Northwest University

Northwest University (NWU) is a Christian coeducational institution awarding degrees through doctorate level. NWU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.* Northwest is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact NWU at www.northwestu.edu to find out more about BSN transfer.

* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.


## Pacific Lutheran University

Pacific Lutheran University (PLU), located in Tacoma, Washington, seeks to educate students for lives of thoughtful inquiry, service, leadership, and care for other people, for their communities, and for the earth. PLU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/ MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.* Pacific Lutheran University is accredited by the Northwest Commission on Colleges and Universities (NWCCU). For additional information about transfer, contact PLU at www.plu.edu.

* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.


## Saint Martin's University

Saint Martin's University (SMU) is a Catholic Benedictine institution of higher education located in Lacey, Washington. The transfer agreement with SMU has the goal of increasing the number of nurses with a baccalaureate education in nursing to meet the needs of an increasingly complex health care system. SMU offers qualified students graduating from CPTC's Nursing degree programs and passing the NCLEXRN exam the opportunity to seamlessly transition into their

Bachelor of Science in Nursing (RN-to-BSN) program (dual admission). SMU is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact SMU to find out which programs transfer and for specific requirements at www.stmartin.edu.

## Seattle Pacific University

Seattle Pacific University (SPU) is a Christian university fully committed to engaging the culture and changing the world by graduating people of competence and character, becoming people of wisdom, and modeling grace-filled community. SPU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.* SPU is accredited by the Northwest Commission on Colleges and Universities (NWCCU). For additional information about transfer, contact SPU at www.spu.edu.

* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.


## Seattle University

Seattle University (SU), a Jesuit Catholic university and law school located in Seattle's Capitol Hill neighborhood, is dedicated to educating the whole person, to professional formation, and to empowering leaders for a just and humane world. SU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.* SU is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Those interested in transferring to pursue a baccalaureate degree in Nursing should contact SU at www.seattleu.edu.

* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.


## South Seattle College

South Seattle College (SSC) is a constantly evolving educational community dedicated to providing quality learning experiences that prepare students to meet their goals for life and work. SSC offers transfer opportunities for qualified Accounting and Culinary Arts graduates (AAS-T) to pursue a Bachelor of Applied Science (BAS) in Hospitality Management. SSC is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact SSC at www.southseattle.edu to find out more about transfer.

## University of Phoenix

University of Phoenix (UP) offers online courses, as well as classes at more than 100 locations across the United States. UP will provide transcript evaluation for CPTC students interested in pursuing a Bachelor of Science in Management (BSM) degree. Qualifying students nearing completion (within 12 months of receiving degree) may pre-apply to a UP baccalaureate program. To find out more about the University of Phoenix, including accreditation and transfer opportunities, and to obtain a program transfer guide, go to www.phoenix.edu.

## University of Washington (Seattle)

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Founded in November 1861, the University of Washington (UW) is one of the oldest state-supported institutions of higher education on the Pacific coast with three campuses. The primary mission of the University of Washington is the preservation, advancement, and dissemination of knowledge. UW is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in PreNursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.* UW is accredited through the Northwest Commission on Colleges and Universities (NWCCU). Contact UW for more information about BSN transfer at www.washington.edu.

* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.


## University of Washington Tacoma

University of Washington Tacoma (UWT) serves a diverse student population creating a rich learning environment with many points of view where students will feel at home whether full-time or pursing a degree while juggling other responsibilities. CPTC graduates of the Environmental Sciences and Technology (AAS-T) program meeting transfer requirements will have the opportunity to apply to UWT's Bachelor of Arts in Interdisciplinary Arts and Sciences Environmental Studies Concentration degree program. UWT is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact UWT for more information at www.tacoma.uw.edu.

## Walla Walla University

Founded in 1892, Walla Walla University (WWU) is a private university affiliated with the Seventh-day Adventist Church that welcomes any student who desires an exceptional Christian education. WWU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.* Walla Walla is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact WWU at www.wallawalla.edu to find out more about BSN transfer.

* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.


## Washington State University

Washington State University (WSU) opened its doors in 1892 and is a nationally recognized research university enrolling more than 25,000 students worldwide. WSU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/ MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.* The Washington State University Intercollegiate College of Nursing (WSU-ICN), a consortium whose members include Eastern Washington University, Gonzaga University, and Whitworth University, admits associate degree transfers through WSU. WSU is accredited through the Northwest Commission on Colleges and Universities (NWCCU). Contact WSU for more information about BSN transfer at www.wsu.edu.

[^3]limited space in BSN programs, admission to all BSN programs is highly competitive.

## WGU Washington

Western Governors University (WGU) is an online university driven by a mission to expand access to higher education through online competency-based degree programs. WGU has flourished into a national university, serving more than 40,000 students from all 50 states. WGU offers several pathways for transfer. WGU Washington actively encourages students to complete their associate degree before transferring to WGU, understanding that students with associate degrees are more likely to attain a bachelor degree. WGU Washington and the Washington Community and Technical Colleges executed a formal articulation agreement in May 2011 to assist associate degree graduates to transition into WGU bachelor programs.
WGU Washington also recognizes that some college students will enroll in WGU Washington before completing an associate degree and, during the course of completing their bachelor credentials at WGU, will earn sufficient credits to complete an associate degree. In order to encourage degree completion among Washingtonians, WGU and the Community and Technical Colleges (CTC) have advanced their partnership by offering a reverse articulation agreement, whereby the CTCs will award an earned associate degree for students posttransfer. The agreement enables eligible students who transfer credits from a community or technical college to receive their associate degree (from a CTC) while enrolled at WGU, once they have satisfied the degree requirements of the Community or Technical College. WGU is accredited through the Northwest Commission on Colleges and Universities (NWCCU). To learn more about transferring to WGU Washington, visit washington.wgu.edu/community colleges or washington.wgu. edu/admissions/transferring.

## Western Washington University

Western Washington University (WWU), a public four-year institution in Bellingham, Washington, brings together individuals of diverse backgrounds and perspectives in an inclusive, student-centered university that develops the potential of learners and the well-being of communities. WWU is accredited through the Northwest Commission on Colleges and Universities (NWCCU). Contact WWU at www.wwu.edu for more information about transfer.

## HONORS

## COMPLETION HONORS

The CPTC purple honor cord is worn during the annual graduation ceremony to recognize students who finish their coursework with the honors designation. The honors designation on a student's final transcript is based on a cumulative GPA 3.75 or higher in all college-level courses for those students earning a degree or a certificate of 45 credits or more. To determine honor cord eligibility:

- For students completing their program of study in the current spring or summer quarters, the previous winter quarter college-level GPA is used.
- For students who completed their program the previous fall or winter quarters, the final college-level GPA is used.

Students who meet the requirements to wear the purple honor cord will be notified by letter and through their student email account by May 20 of each year. The graduation honors are

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different than the quarterly president's and vice president's lists.

## QUARTERLY DISTINCTION

Students who receive a quarterly grade point average (GPA) between 3.75-4.0 are eligible for one of the following lists of distinction:

President's List: Granted to students with a minimum quarterly enrollment of 12 college-level credits in courses receiving grades other than "V," "W," "N," or "I" and a minimum quarterly grade point average of 4.0.
Vice President's List: Granted to students with a minimum quarterly enrollment of 12 college-level credits in courses receiving grades other than "V," "W," "N," or "I" and a minimum quarterly grade point average of 3.75-3.99.

## HONOR SOCIETIES

Phi Theta Kappa is the largest honor society in American higher education. Clover Park Technical College's Beta Omicron Gamma chapter is one of 1,200 chapters. Phi Theta Kappa's focus is on scholarship, leadership, service, and fellowship. Students with a 3.50 GPA are eligible to join Phi Theta Kappa. A one-time induction fee is required. Please contact a Phi Theta Kappa adviser at 253-589-578o for more information.

## STUDENT PROGRESS POLICY

Clover Park Technical College is a state technical college. Tuition covers about 46 percent of the cost of a student's education. State tax dollars provide the rest. Washington State Law (SB 5135. RCW 28B.10.695) requires all state colleges to adopt policies that ensure students seeking degrees and certificates complete in a timely manner.
Clover Park Technical College is in a partnership with students to work towards an educational plan that will assist them in making consistent progress. The following Student Progress Policy and Degree/Certification Completion Procedures will assist students with their responsibilities to make progress towards their goals.

## DEGREE/CERTIFICATE COMPLETION PROCEDURES

The college requires that students complete their degree or certificate within 125 percent of the published length of the program. The college will take the following steps to ensure that students are completing programs within a timely manner:
Step 1 When a student has completed the credits of the published length of the program, registration will be restricted until the student has developed a completion plan in consultation with instructional faculty. The plan must show that the student will be able to complete within 125 percent of the normal timeframe. If the student has mitigating circumstances, such as a disability, they must be documented with the Disabilities Specialist, and an appropriate plan should be in place.
Step 2 At 150 percent of credits required for the degree/ certificate, the student will be blocked from further registration. The student may appeal to the appropriate dean for special circumstances.

## ACADEMIC PROGRESS

These policies are intended to support a successful learning experience at Clover Park Technical College.
At the conclusion of each quarter, the grades of all students enrolled in that quarter will be reviewed. A student whose quarterly grade point average is less than 2.0 and who is taking six or more credits that quarter will be notified of his/her standing. Through this process the student will be alerted to potential problems in a timely manner, so that the student may take effective corrective action. Any student whose quarterly GPA is under 2.0 will be encouraged to take advantage of the assistance provided by the college to help ensure student success.

The following guidelines have been established to ensure that academic standards are maintained:

Step 1 The first quarter in which the grade point average is less than 2.0 will cause the student to receive notification of the level of academic achievement. The student may not be allowed to continue to the next course in accordance with established program prerequisites.
Step 2 If the student experiences two consecutive quarters of work in which the GPA is less than 2.0 (each quarter), the student will be placed on academic probation for the following quarter of attendance.
Step 3 If a student experiences three consecutive quarters of work in which the GPA is less than 2.0 (each quarter), the student will be suspended from attendance at the college and may not register for the next academic quarter.
Students placed on academic probation or suspension must meet with their program adviser prior to future quarter registration. Financial Aid recipients are subject to the Student Progress Policy.
Reinstatement to the college, following one quarter of academic suspension, requires the student to meet with Advising \& Counseling staff to develop an educational plan. Upon reinstatement, the student will resume classes on academic probation.

## STUDENT CONCERNS

## GENERAL INFORMATION

It is the policy of Clover Park Technical College to provide students with an opportunity to resolve any alleged violation of college academic policy, procedure, or regulation, or to resolve any alleged case of inequitable treatment. The college encourages informal resolution of disputes whenever possible, and also maintains fair and equitable procedures for formally expressing and resolving concerns. Student rights are protected in the concern process, and the college must ensure that a student will not suffer repercussions because they choose to file a concern.

The following are guidelines for determining who can assist a student with a concern regarding:

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| Discrimination/ |  |
| :---: | :---: |
| Sexual Harassment. | Human Resources |
| Facilities/Bookstore | Business Office |
| Financial Aid | Financial Aid Office |
| Financial (College) | Business Office |

Federal and state laws, rules, and regulations, in addition to policies, regulations, and procedures adopted by the State Board for Community and Technical Colleges, shall not be grievable matters. Students shall use Chapter WAC 495C-300 and 495C-310 for grievances pertaining to sexual discrimination or equal opportunity discrimination based upon disability.

## ACADEMIC APPEAL PROCESS

The process outlined below is for Academic concerns or Grade Appeals. It is not to be used for filing an appeal based on the outcome of a summary or disciplinary proceeding, financial appeal, or discrimination/harassment complaint as described in other areas of the College Catalog or Student Handbook.

Note: Academic Appeal must be made within 15 instructional days following the issuance of the grade or decision.
Step 1 Before a student can file a written concern or appeal, they should try to resolve the problem informally. The college expects the student to address their concern by first meeting with and/or discussing the concern with the college employee(s) whose actions resulted in the concern, and documenting the discussion with notes. If not resolved, the student may proceed to the next step.
Step 2 If, within five instructional days following the informal resolution attempt, the student feels a satisfactory resolution has not been achieved, the student may file a formal written concern with the employee's immediate supervisor or department chair. The concern or appeal must be in writing, utilizing the appropriate form, and include the documentation from Step 1 as well as any supporting documentation as an attachment. A "Student Academic Concern Form" or "Grade Appeal Form" is available online, or from any instructor, division dean's office, or the Advising Center.
Step 3 Within five instructional days after receiving the concern or appeal in writing, the supervisor (or designee) will be responsible to investigate the concern. The supervisor (or designee) will provide the employee or instructor with a copy of the written concern or appeal; the employee or instructor will have five instructional days in which to provide a written response to their supervisor/dean.
Step 4 The supervisor (or designee) will convene a meeting of both parties in an attempt to resolve the issue, provided that the parties agree to meet for this purpose. In the event that one or both parties do not agree to meet, the supervisor (or designee) will investigate and render a decision based on the written statements and testimony of the parties. The supervisor (or designee) will impart this decision in writing to both parties within five instructional days. If the student feels a satisfactory resolution has not been achieved, the student may proceed to the next step.

Step 5 Within five instructional days after Step 4, the student will notify the appropriate vice president, in writing, to request a hearing before the Appeal Review Committee. The committee will be chaired by the Vice President for Instruction (or designee) and will also include the Vice President for Student Success (or designee), two student representatives appointed by the Student Council, and two faculty members appointed by the Faculty Union.
Step 6 Within 10 instructional days, the Appeal Review Committee will meet with the student, instructor or employee, and director, department chair, or supervisor, to hear the points at issue in the appeal. The committee will provide its written decision to all parties within five instructional days following the hearing. The decision is final and may not be reviewed.
The process above is used for filing a concern in which a resolution has been requested that is specific to the student filing. If a student wishes to file an official complaint that has no personal resolution, or wishes to remain anonymous, that complaint will not follow the above steps.

## ACADEMIC FORGIVENESS (FRESH START)

A student may petition the Director of Enrollment Services to have sub-standard Clover Park Technical College course work set aside.

- The student must be currently enrolled.
- The forgiveness date must be at least two years prior to the current quarter.
- All course work taken prior to the forgiveness will be set aside. The student may not elect to retain individual courses and set aside others.
- The academic forgiveness option may be exercised only once. Forgiven course work will remain on the transcript but will not be used in determining the cumulative grade point average or the calculation of honors. Forgiven course work may not be reinstated or used to satisfy prerequisites or degree/diploma requirements.
Students are advised that a decision to set aside course work may or may not be honored by other educational institutions, since each institution interprets transcripts according to its own policies.


## GRADUATION

Clover Park Technical College grants a Bachelor of Applied Science degree and three associate degrees: the Associate of Applied Technology degree, the Associate of Applied Science - T degree, and the Associate of Arts and Sciences (DTA/ MRP). These degrees are defined in this catalog, and the degree programs are listed in the Programs \& Courses section.
A certificate is awarded to students who satisfactorily complete the competencies and requirements for programs that are not defined as degree programs. General Education courses are required in certificate programs of 45 credits or more.
Courses numbered below 100 are not considered college level and do not meet degree/certificate requirements.

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## STANDARD FOR GRADUATION

To be eligible for graduation, a student must have:

- A cumulative grade point average of no less than 2.0;
- Met all of the program requirements;
- Completed 25 percent of the technical coursework at Clover Park Technical College; and
- Completed an Application for Degree or Certification.


## APPLICATION FOR DEGREE OR CERTIFICATION

To receive a bachelor's degree, associate degree, or certificate from Clover Park Technical College, a student must complete an Application for Degree or Certification form available from the Enrollment Services Office or online through MyCC. The application must be filed by the fourth week of the quarter in which the student expects to graduate. For a student completing a short certificate under 45 credits that does not apply for their certificate, the certificate will be automatically awarded.

## COMMENCEMENT

Annually, Clover Park Technical College will offer an all-campus graduation ceremony at a local venue. Any eligible student completing a degree, certificate, high school diploma, or High School Equivalency diploma granted through Clover Park Technical College at any time during the academic year may participate. Students must RSVP to participate in the graduation ceremony. Graduation deadlines will be announced in March.
The ceremony is held each June. Please check the college website at www.cptc.edu/graduation for the ceremony date and time and participation deadlines.

## TIME LIMITATION

Clover Park Technical College curriculum is based on current industry standards. Returning Clover Park Technical College students who left prior to completion of their program must meet the program's graduation requirements as described in the current Clover Park Technical College Catalog.
Clover Park Technical College students who have completed the technical requirements of their program but have not completed the General Education requirements for a degree or certificate will have one year from their date of withdrawal to complete the required General Education classes. If a longer period of time elapses before General Education courses are completed, the student will be required to meet the program's graduation requirements as described in the current Clover Park Technical College Catalog.

## Enrollment Services

## ANNUAL NOTIFICATION OF RIGHTS UNDER FERPA

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records:

1. The right to inspect and review the student's education records within 45 days of the day Clover Park Technical College receives a request for access.

Students should submit to the registrar a written request that identifies the record(s) they wish to inspect. The registrar will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the registrar, the student will be advised of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes are inaccurate or misleading.

Students may ask Clover Park Technical College to amend a record that they believe is inaccurate or misleading. They should write to the CPTC official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading.
If Clover Park Technical College decides not to amend the record as requested by the student, Clover Park Technical College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

One exception, which permits disclosure without consent, is disclosure to school officials with legitimate educational interests. A school official is a person employed by CPTC in an administrative, supervisory, academic, research, or support staff position (including law enforcement personnel and health staff); the federal Department of Defense; the federal Department of Veteran's Affairs; clinical sites; Clinical Placements Northwest; a person or company with whom CPTC has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; a volunteer or others performing institutional functions; a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.
Clover Park Technical College designates the following information as Directory Information: Student name, dates of attendance (quarter start and end dates only), full- or part-time enrollment status, certificates and degrees awarded, honors, eligibility for and participation in officially recognized activities and organizations.
Directory Information may be released by Clover Park Technical College without student consent, unless the student specifically requests that such information, or portions thereof, not be released. Clover Park Technical College will not release Directory Information for commercial purposes or other purposes not related to the school program or the conduct of official government business. Students currently attending Clover Park Technical College should complete a Request to Prevent

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Disclosure of Directory Information form in the Enrollment Services Office if they do not wish Directory Information released.
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Clover Park Technical College to comply with the requirements of FERPA. The name and address of the office that administers FERPA:
Family Policy Compliance Office
U.S. Department of Education

600 Independence Avenue SW
Washington DC 20202-4605

## TRANSCRIPTS

A transcript is a copy of a student's academic record and is released only with written permission of the student. All students are eligible to receive a transcript if they have met their financial obligation with the college.
A $\$ 7.25$ processing fee is charged for each transcript. Official transcripts may be requested on the Clover Park Technical College website at www.cptc.edu/transcript. Students may obtain an unofficial copy of their transcript at www.cptc.edu/ mycc by selecting "View Unofficial Transcript."

## CHANGE OF ADDRESS

Student information, admission letters, statements, and degrees/certificates are frequently mailed to students; therefore, it is important to maintain the student's current address.

Change of Address forms are available in the Enrollment Services Office in Building 17. Students may change their own address on the college website at www.cptc.edu/mycc.

## RESIDENCY REQUIREMENTS

Tuition for CPTC is calculated based on your residency status. CPTC follows state-regulated criteria for residency status and the documents needed to verify residency status. Please visit http://access.wa.gov/topics/living/becomeresident.html for official information on state residency requirements.

## Student Code of Conduct

## DEFINITIONS

The following definitions shall apply for the purposes of this student conduct code, chapter 495C-121 WAC:
(1) "College" means Clover Park Technical College, College District Twenty-nine.
(2) "College facilities" includes all campuses of the college, wherever located, and all land, buildings, vehicles, equipment, and other real and personal property which are owned, leased, used, or controlled by the college.
(3) "Committee" and "student conduct committee" means
the committee which is formed under WAC 495C-121-140 and which hears the matters specified in WAC 495C-121110.
(4) "Conduct review officer" is the vice-president of student services or other college administrator designated by the president to be responsible for receiving and then either reviewing or referring an appeal of student disciplinary action in accordance with WAC 495C-121110 and following sections of this chapter. The president may reassign any and all of the conduct review officer's responsibilities as set forth in this chapter as he/she deems appropriate.
(5) "Day" means a calendar day, except that when a "business day" is specified, business day means a weekday, excluding weekends and college holidays.
(6) "Disciplinary action" is the process by which the student conduct officer, or the committee upon a referral, imposes discipline against a student for violation of WAC 495C-121-050. Disciplinary action does not include instructional decisions and actions which are under the authority of faculty members and instructional administrators, such as determinations of academic credit and grading; any such determinations, and any review or appeal of these, are outside the scope of this chapter.
(7) "Disciplinary appeal" is the process by which an aggrieved student can appeal discipline, as provided in WAC 495C-121-110 through 495C-121-18o.
(8) "Family Educational Rights and Privacy Act" and "FERPA" mean the law and regulations known by those names (20 U.S.C. §1232g; 34 C.F.R. Part 99).
(9) "Filing" is delivery of a document to the college official who is designated under this chapter to receive it for the purpose of review of a disciplinary action. Unless otherwise provided, filing shall be accomplished by:
(a) Hand delivery of the document to that official or the official's assistant during regular office hours; or
(b) Sending the document both by first class mail postage prepaid to the official's office and by e-mail to his/her college e-mail address.
(10) "Includes" and "including" means contained as part of a larger described whole or grouping, but these terms are not a limitation and mean "but not limited to."
(11) "President" is the president of the college. The president may delegate any of his or her responsibilities under this chapter as he/she deems appropriate.
(12) "Respondent" is the student against whom disciplinary action is initiated.
(13) "Service" is the delivery of a document or copy of a document to a party. Unless otherwise provided, service upon a party shall be accomplished by:
(a) Hand delivery of the document to the party; or
(b) Sending the document both by first class and/or certified mail postage prepaid to the party's last known address and by e-mail to the e-mail address shown in the college's records. Service is deemed complete either upon hand delivery or when the

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document has been both deposited in the mail and e-mailed.
(14) "Student" includes all persons taking courses at or through the college, whether on a full-time or part-time basis, and whether such courses are credit courses, noncredit courses, online courses, or otherwise. Persons who withdraw after allegedly violating the code, who are not officially enrolled for a particular term but who have a continuing relationship with the college, or who have been notified of their acceptance for admission are considered "students."
(15) "Student conduct officer" is a college administrator designated by the president or vice-president of student services to be responsible for investigating allegations of student misconduct and taking disciplinary action as provided in WAC 495C-121-100. The president or vice-president of student services may reassign any of the student conduct officer's responsibilities under this chapter as he/she deems appropriate.
(16) "Vice-president of student services" is the position which reports directly to the president and which the president assigns overall operational responsibility for this chapter. The president may reassign, or the vice-president may delegate, any such responsibility as he/she deems appropriate.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-010, filed 5/19/14, effective 6/19/14.]

## AUTHORITY

The board of trustees, acting pursuant to RCW 28B.10.528 and 28B.50.140(14), delegates to the president the authority to administer student disciplinary actions and appeals. The president may delegate and/or further assign responsibilities related to student discipline to other college officials and positions.
[Statutory Authority: RCW 28B.50.140. WSR 16-06-026, § 495C-121-o20, filed $2 / 22 / 16$, effective $3 / 24 / 16$; WSR 14-11070, § 495C-121-O20, filed 5/19/14, effective 6/19/14.]

## JURISDICTION

(1) The student conduct code, chapter 495C-121 WAC, shall apply to student conduct that occurs:
(a) In or on college facilities;
(b) At or in connection with college-sponsored activities; or
(c) Off-campus when in the judgment of the college it adversely affects the college community or the pursuit of its objectives.
(2) This chapter applies to conduct which occurs at all locations where students are engaged in college activities, including foreign or domestic travel, activities funded or sponsored by the associated students, athletic or recreational events, training internships, cooperative and distance education, online education, practicums, supervised work experiences, or any other collegesanctioned activities.
(3) This chapter applies to conduct from the time of application for admission through the actual receipt of a degree, even though conduct may occur before classes
begin or after classes end, as well as during the academic year and during periods between terms of actual enrollment. This chapter shall apply to a student's conduct even if the student withdraws from college while a disciplinary matter is pending.
(4) The college has sole discretion, on a case-by-case basis, to determine whether this student conduct code will be applied to conduct that occurs off campus.
(5) In addition to initiating discipline proceedings for violation of the student conduct code, the college may refer any violations of federal, state, or local laws to civil and criminal authorities for disposition. The college may proceed with student disciplinary proceedings regardless of whether the underlying conduct is subject to civil proceedings or criminal prosecution.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-O30, filed 5/19/14, effective 6/19/14.]

## STUDENT RIGHTS

As members of the academic community, students are encouraged to develop the capacity for critical judgment and to engage in an independent search for truth. Freedom to teach and freedom to learn are inseparable facets of academic freedom. The freedom to learn depends upon appropriate opportunities and conditions in the classroom, on the campus, and in the larger community. Students should exercise their freedom with responsibility. The responsibility to secure and to respect general conditions conducive to the freedom to learn is shared by all members of the college community.
The following enumerated rights are guaranteed to each student within the limitations of statutory law and college policy which are deemed necessary to achieve the educational goals of the college:
(1) Academic freedom.
(a) Students are guaranteed the rights of free inquiry, expression, and assembly upon and within college facilities that are generally open and available to the public.
(b) Students are free to pursue appropriate educational objectives from among the college's curricula, programs, and services, subject to the limitations of RCW 28B.50.090 (3)(b).
(c) Students shall be protected from academic evaluation which is arbitrary, prejudiced, or capricious, but are responsible for meeting the standards of academic performance established by each of their instructors.
(d) Students have the right to a learning environment which is free from unlawful discrimination, inappropriate and disrespectful conduct, and any and all harassment, including sexual harassment.
(2) Due process.
(a) The rights of students to be secure in their persons, papers, and effects against unreasonable college searches and seizures are guaranteed.
(b) No disciplinary sanction may be imposed on any student without notice to the accused of the nature of the charges.
(c) A student accused of violating this code of conduct is entitled, upon request, to the procedural due process
set forth in this chapter.
[Statutory Authority: RCW 28B.50.140. WSR 16-06-026, § 495C-121-040, filed 2/22/16, effective 3/24/16; WSR 14-11070, § 495C-121-O40, filed 5/19/14, effective 6/19/14.]

## PROHIBITED STUDENT CONDUCT

The college may impose disciplinary sanctions against a student who commits, attempts to commit, or aids, abets, incites, encourages, or assists another person to commit any act of misconduct, which includes, but is not limited to, the following:
(1) Academic dishonesty. Any act of academic dishonesty, including cheating, plagiarism, and fabrication.
(a) Cheating includes any attempt to give or obtain unauthorized assistance relating to the completion of an academic assignment or requirement.
(b) Plagiarism includes taking and using as one's own, without proper attribution, the ideas, writings, or work of another person in completing an academic assignment or requirement.
(c) Fabrication includes falsifying data, information, or citations in completing an academic assignment or requirement, or providing false or deceptive information to an instructor concerning the completion of an assignment or requirement, including submitting for credit without authorization academic work also submitted for credit in another course.
(2) Other dishonesty. Any other act of dishonesty, including:
(a) Forgery, alteration, submission of falsified documents, or misuse of any college document, record, or instrument of identification;
(b) Tampering with an election conducted by or for college students; or
(c) Furnishing false information, or failing to furnish correct or complete information, in response to the request or requirement of a college official or employee.
(3) Conduct which significantly obstructs or disrupts any operation of the college, any college meeting, any college class or other activity, any activity authorized to occur at a college facility, or any college-sponsored activity, including obstructing the free flow of pedestrian or vehicular movement or blocking access to or from any college facility or college-sponsored event.
(4) Assault, physical abuse, verbal abuse, threat(s), intimidation, harassment, bullying, stalking, reckless conduct, or other conduct which harms, threatens, or is reasonably perceived as threatening the health or safety of another person or another person's property or which unreasonably disrupts the educational environment. For purposes of this subsection:
(a) Bullying is severe or pervasive physical or verbal abuse involving an apparent power imbalance between the aggressor and victim.
(b) Stalking is intentional and repeated following of another person, which places that person in reasonable fear that the perpetrator intends to injure, intimidate, or harass that person. Stalking also
includes instances where the perpetrator knows or reasonably should know that the person is frightened, intimidated, or harassed, even if the perpetrator lacks such an intent.
(c) Reckless conduct means acts performed with a heightened degree of carelessness or indifference so as to create a significant risk of physical, mental, or emotional harm to another person.
(5) Cyber misconduct. Cyberstalking, cyberbullying or online harassment. Use of electronic communications including, but not limited to, electronic mail, instant messaging, texting, electronic bulletin boards, and social media sites, to harass, abuse, bully, or engage in other conduct which harms, threatens, or is reasonably perceived as threatening the health, safety, or well-being of another person. Prohibited activities include, but are not limited to, unauthorized monitoring of another's electronic communications directly or through spyware, sending threatening messages, disrupting electronic communications, sending a computer virus or malware, sending false messages to third parties using another's identity, nonconsensual recording of sexual activity, or nonconsensual distribution of a recording of sexual activity.
(6) Property violation. Damage to, or theft or misuse of, real or personal property or money of:
(a) The college or state, including college facilities;
(b) Any college student, official, employee, or organization; or
(c) Any other member of the college community or a college organization. Property violation also includes possession of such property or money after it has been stolen.
(7) Failure to comply with directive. Failure to comply with the direction of a college official or employee who is acting in the legitimate performance of his or her duties, including failure to properly identify oneself to such a person when requested to do so.
(8) Weapons. Holding, wearing, transporting, storing, or otherwise possessing any firearm, dagger, sword, knife or other cutting or stabbing instrument, club, explosive device, or any other weapon or device which is apparently capable of producing bodily harm, on or in any college facility, subject to the following exceptions:
(a) Commissioned law enforcement personnel or legally authorized military personnel while in performance of their duties;
(b) College-owned knives, tools, etc., that are being used for a legitimate educational purpose as part of a college instructional program;
(c) A student with a valid concealed pistol license may store a pistol in his or her vehicle parked on campus in accordance with RCW 9.41.050 (2) or (3), provided the vehicle is locked and the pistol is concealed from view;
(d) The president may grant permission to bring such a weapon or device on or into a college facility when he/ she determines that it is reasonably related to a legitimate pedagogical purpose, provided that such permission shall be in writing and shall be subject to
all terms and conditions incorporated in that writing; and
(e) This policy does not apply to the possession and/or use of disabling chemical sprays when possessed and/ or used for self-defense.
(9) Hazing. Hazing includes, but is not limited to, any initiation into a student organization, or any pastime or amusement engaged in with respect to such an organization, that causes, or is likely to cause, bodily danger, physical harm, or serious mental or emotional harm to any student, regardless of whether the victim has consented.
(10) Alcohol, drug, and tobacco violations.
(a) Alcohol. Use, possession, delivery, sale, or being observably under the influence of any alcoholic beverage, except as permitted by law and applicable college policies.
(b) Marijuana. Use, possession, delivery, sale, or being observably under the influence of marijuana, the psychoactive compounds found in marijuana, or any product containing marijuana or such compounds that is intended for human consumption, regardless of form. While state law permits the recreational use of marijuana, federal law prohibits such use on college facilities or in connection with college activities.
(c) Drugs. The use, possession, delivery, sale, or being observably under the influence of any legend drug, including anabolic steroids, androgens, or human growth hormones as defined in chapter 69.41 RCW, or any other controlled substance under chapter 69.50 RCW, except as prescribed for a student's use by a licensed health care practitioner.
(d) Tobacco, electronic cigarettes, and related products. Use of tobacco, electronic cigarettes or smoking devices, and/or related products on or in any college facility is prohibited, except that such use in a designated smoking area or in a closed private vehicle is permitted when consistent with applicable law and rules. "Related products" include cigarettes, pipes, bidi, clove cigarettes, water pipes, hookahs, chewing tobacco, and snuff.
(11) Lewd conduct. Conduct which is lewd or obscene.
(12) Discriminatory conduct. Discriminatory conduct which harms or adversely affects any member of the college community because of her/his race; color; national origin; sensory, mental or physical disability; use of a service animal; gender, including pregnancy; marital status; age; religion; creed; genetic information; sexual orientation; gender identity; veteran's status; or any other legally protected classification.
(13) Sexual misconduct. Any act of sexual misconduct, including sexual harassment, sexual intimidation, and sexual violence.
(a) Sexual harassment means unwelcome conduct of a sexual nature, including unwelcome sexual advances, requests for sexual favors, and other verbal, nonverbal, or physical conduct of a sexual nature, that is sufficiently serious as to deny or limit, and that does deny or limit, based on sex, the ability of a student to participate in or benefit from the college's
educational program or that creates an intimidating, hostile, or offensive environment for campus community members.
(b) Sexual intimidation. The term "sexual intimidation" incorporates the definition of "sexual harassment" and means threatening or emotionally distressing conduct based on sex including, but not limited to, nonconsensual recording of sexual activity or distribution of such a recording.
(c) Sexual violence is a type of sexual discrimination and harassment. Nonconsensual sexual intercourse, nonconsensual sexual contact, domestic violence, dating violence, and stalking are all types of sexual violence.
(i) Nonconsensual sexual intercourse is any sexual intercourse (anal, oral, or vaginal), however slight, with any object, by a person upon another person, that is without consent and/or by force. Sexual intercourse includes anal or vaginal penetration by a penis, tongue, finger or object, or oral copulation by mouth to genital contact or genital to mouth contact.
(ii) Nonconsensual sexual contact is any intentional sexual touching, however slight, with any object, by a person upon another person that is without consent and/or by force. Sexual touching includes any bodily contact with the breasts, groin, mouth, or other bodily orifice of another individual or any other bodily contact in a sexual manner.
(iii) Domestic violence includes asserted violent misdemeanor and felony offenses committed by the victim's current or former spouse, current or former cohabitant, person similarly situated under domestic or family violence law, or anyone else protected under domestic or family violence law.
(iv) Dating violence means violence by a person who has been in a romantic or intimate relationship with the victim. Whether there was such relationship will be gauged by its length, type, and frequency of interaction.
(v) Stalking means intentional and repeated harassment or following of another person, which places that person in reasonable fear that the perpetrator intends to injure, intimidate, or harass that person. Stalking also includes instances where the perpetrator knows or reasonably should know that the person is frightened, intimidated, or harassed, even if the perpetrator lacks such intent.
(vi) Consent means knowing, voluntary and clear permission by word or action, to engage in mutually agreed upon sexual activity. Each party has the responsibility to make certain that the other has consented before engaging in the activity. For consent to be valid, there must be at the time of the act of sexual intercourse or sexual contact actual words or conduct indicating freely given agreement to have sexual intercourse or sexual contact.
A person cannot consent if he or she is unable to understand what is happening or is disoriented, helpless, asleep or unconscious for any reason,
including due to alcohol or other drugs. An individual who engages in sexual activity when the individual knows, or should know, that the other person is physically or mentally incapacitated has engaged in nonconsensual conduct.
Intoxication is not a defense against allegations that an individual has engaged in nonconsensual sexual conduct.
(14) Harassment. Unwelcome and offensive conduct, including verbal, nonverbal, or physical conduct, that is directed at a person because of such person's protected status and that is sufficiently serious as to deny or limit, and that does deny or limit, the ability of a student to participate in or benefit from the college's educational program or that creates an intimidating, hostile, or offensive environment for other campus community members. Protected status includes a person's race; color; national origin; sensory, mental or physical disability; use of a service animal; gender, including pregnancy; marital status; age; religion; creed; genetic information; sexual orientation; gender identity; veteran's status; or any other legally protected classification. See "Sexual misconduct" for the definition of "sexual harassment." Harassing conduct may include, but is not limited to, physical conduct, verbal, written, social media, and electronic.
(15) Retaliation. Taking adverse action against any individual for reporting, providing information, or otherwise participating in a process for addressing alleged violations of federal, state, or local law, or college policies, including allegations of discrimination or harassment.
(16) Misuse of electronic resources. Theft or other misuse of computer time or other electronic information resources of the college, which includes:
(a) Unauthorized use of such resources or opening of a file, message, or other item;
(b) Unauthorized duplication, transfer, or distribution of a computer program, file, message, or other item;
(c) Unauthorized use or distribution of someone else's password or other identification;
(d) Use of such time or resources to interfere with someone else's work;
(e) Use of such time or resources to send, display, or print an obscene or abusive message, text, or image;
(f) Use of such time or resources to interfere with normal operation of the college's computing system or other electronic information resources;
(g) Use of such time or resources in violation of applicable copyright or other law;
(h) Adding to or otherwise altering the infrastructure of the college's electronic information resources without authorization; or
(i) Failure to comply with the college's policies or procedures governing the use of such time or resources.
(17) Unauthorized access. Unauthorized possession, duplication, or other use of a key, keycard, or other
restricted means of access to college property, or unauthorized entry onto or into college property.
(18) Safety violations. Any nonaccidental conduct that violates, interferes with, or otherwise compromises any law, rule, policy, procedure, or equipment relating to the safety and security of college facilities or the college community, including tampering with fire safety equipment or triggering false alarms or other emergency response systems.
(19) Motor vehicle operation. Operation of any motor vehicle in an unsafe manner or contrary to posted signs or college procedures.
(20) Violation of laws or policies. Violation of any federal, state, or local law or regulation, or college rule, policy, or procedure, which regulates the behavior of the college's students, including a parking rule.
(21) Student procedures violations. Misuse of or failure to follow any of the procedures relating to student complaints or misconduct, including:
(a) Falsification or misrepresentation of information;
(b) Failure to obey a subpoena;
(c) Disruption or interference with the orderly conduct of a proceeding;
(d) Destroying or altering potential evidence, or attempting to intimidate or otherwise improperly pressure a witness or potential witness;
(e) Attempting to influence the impartiality of, or harassing or intimidating, a student conduct committee member or other disciplinary official; or
(f) Failure to comply with any disciplinary action, term, or condition imposed under this chapter.
(22) Ethical violation. Ethical violations include, but are not limited to, breach of a generally recognized and published code of ethics or standard of professional practice that governs the conduct of a particular profession, which the student has been specifically informed about and is required to adhere to as a condition of enrolling in a course or participating in an educational program.
In addition to initiating discipline proceedings for violation of the student conduct code, the college may refer any violations of federal, state or local laws to civil and criminal authorities for disposition. The college shall proceed with student disciplinary proceedings regardless of whether the underlying conduct is subject to civil or criminal prosecution.
[Statutory Authority: RCW 28B.50.140. WSR 16-06-026, § 495C-121-050, filed $2 / 22 / 16$, effective $3 / 24 / 16$; WSR 14-11070, § 495C-121-050, filed 5/19/14, effective 6/19/14.]

## DISCIPLINARY SANCTIONS AND CONDITIONS

(1) Disciplinary sanctions. The following disciplinary sanctions may be imposed upon students found to have violated the student conduct code:
(a) Disciplinary warning. An oral statement to a student that there is a violation and that any further violation may be cause for further disciplinary action. Although verbal, the student conduct officer should

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make a record of the warning. The respondent cannot appeal a disciplinary warning.
(b) Written disciplinary reprimand. A written notice informing a student that he/she has violated one or more terms of the code of conduct and that future misconduct involving the same or similar behavior may result in the imposition of a more severe disciplinary sanction.
(c) Disciplinary probation. A written notice placing specific term(s) and condition(s) upon the student's continued attendance at the college. Disciplinary probation may be for a limited period of time or for the duration of the student's attendance at the college.
(d) Disciplinary suspension. Temporary revocation of enrollment and termination of student status, for a stated period of time. The student may be prohibited from coming onto any college facility and may be subject to law enforcement action for criminal trespass for violating that prohibition. There will be no refund of tuition or fees for the quarter in which the action is taken.
(e) Dismissal. Revocation of enrollment and of all rights and privileges of membership in the college community, and exclusion from college facilities, without any time limitation. There will be no refund of tuition or fees for the quarter in which the action is taken. The student may be subject to law enforcement action for criminal trespass for violating that exclusion. A dismissal may be rescinded only by a written decision of the president, for documented good cause.
(2) Disciplinary conditions. Disciplinary conditions that may be imposed alone or in conjunction with the imposition of a disciplinary sanction under subsection (1) of this section include:
(a) Restitution. Reimbursement for
(i) damage to, or theft or misuse of, real or personal property or money, or
(ii) injury to persons. This reimbursement may take the form of money, appropriate service, or other compensation.
(b) Professional evaluation. Referral for drug, alcohol, psychological, or medical evaluation, at the student's expense, by an appropriately certified or licensed professional. The student may choose the professional within the scope of practice and with the professional credentials as specified by the college. The student must sign all necessary releases to allow the college access to any such evaluation. The student's return to college may be conditioned upon compliance with recommendations set forth in the evaluation. If the student has been suspended, the student may remain suspended until the most recent evaluation finds that the student is capable of reentering the college and complying with the college's expectations for conduct.
(c) Restrictions on activities. A student may be subjected to the following restrictions:
(i) Ineligible to hold any college office or position or any office in any student organization;
(ii) Ineligible to participate in any college activity(ies); and/or
(iii) Ineligible to represent the college outside the college community, including at any event or in any form of competition.
(d) Required activities. Assignment of appropriate tasks or responsibilities, or required attendance at an appropriate program, instructional course, or other educational activity, which may be at the student's expense.
(e) Protective or no contact order. An order directing a student to have limited or no contact with any specified student(s), college employee(s), member(s) of the college community, or college facility.
(f) Loss of state funding. A student found to have committed hazing shall forfeit any entitlement to state-funded grants, scholarships, or awards, pursuant to RCW 28B.10.902.
[Statutory Authority: RCW 28B.50.140. WSR 16-06-026, § 495C-121-060, filed 2/22/16, effective 3/24/16; WSR 14-11070, § 495C-121-060, filed 5/19/14, effective 6/19/14.]

## FACULTY/ADMINISTRATOR AUTHORITY REGARDING CLASSROOM DISRUPTION

(1) Faculty members and instructional administrators are authorized to take appropriate action to maintain order and proper conduct in the classroom and the cooperation of students in fulfilling course objectives.
(2) If a faculty member or instructional administrator determines that a student has created a disruption which makes it unreasonably difficult to maintain the learning and teaching environment or the decorum of a class or activity, he/she may suspend that student from the class or activity for up to a total of one day per day of disruption. The faculty member or administrator shall report this suspension to the student conduct officer, who shall have the option, depending on the severity, to treat the suspension as insufficient and also initiate further discipline under this chapter.
(3) The suspension of up to one day per day of disruption shall not be subject to any further appeal or review. However, any further discipline imposed by the student conduct officer shall be processed in accordance with this chapter.
(4) Any suspension initiated by a faculty member or instructional administrator under this section will not affect any student grading that is based directly on attendance.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-070, filed 5/19/14, effective 6/19/14.]

## DISCIPLINARY RECORDS

(1) Records of a disciplinary proceeding under this chapter are disciplinary records which must be maintained by the office of the vice-president of student services separately from student academic records and in accordance with applicable state records retention requirements.
(2) Disciplinary records are confidential to the extent required by applicable laws, including the Family

Educational Rights and Privacy Act. To the extent permitted by such laws, the respondent, or if a minor, the student's parent, may review his/her disciplinary records, obtain a copy of such records upon payment of any lawful charges for duplication, and/or authorize disclosure of such records.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-08o, filed 5/19/14, effective 6/19/14.]

## INITIATION OF DISCIPLINARY ACTION

(1) All disciplinary actions will be initiated by the student conduct officer. If that officer is the subject of a complaint initiated by the respondent, the president shall, upon request and when feasible, designate another person to fulfill any such disciplinary responsibilities relative to the complainant.
(2) The student conduct officer shall initiate possible disciplinary action by serving the respondent with written notice directing him or her to attend a disciplinary meeting. The notice shall briefly describe the factual allegations, the specific apparent misconduct under WAC 495C-121-050, and the range of possible disciplinary sanctions, and specify the time and location of the meeting. At the meeting, the student conduct officer will present the allegations to the respondent and the respondent shall be afforded an opportunity to explain what took place. If the respondent fails to attend the meeting after proper service of notice, the student conduct officer may impose disciplinary sanction(s) and conditions based upon the available information.
(3) Within ten days of the scheduled initial disciplinary meeting, and after considering the information obtained by investigation and any information presented by the respondent, the student conduct officer shall serve the respondent with a written decision setting forth the facts and conclusions supporting his or her decision, the specific student conduct code provisions found to have been violated, the discipline imposed, if any, the consequences if a student fails to satisfy any disciplinary condition(s) which are being imposed, and a notice of the respondent's appeal rights, if any, with an explanation of the consequences of failing to file a timely appeal.
(4) The student conduct officer may take any of the following actions:
(a) Terminate the proceeding, with any appropriate exoneration of the respondent or counseling or advice to the respondent. The respondent cannot appeal a termination of the proceedings;
(b) Specify misconduct under WAC 495 C -121-050 which he/she finds to have occurred and impose disciplinary sanction and/or condition(s), as described in WAC 495C-121-060; or
(c) Refer the matter directly to the student conduct committee for a hearing and imposition of such disciplinary sanction and/or condition(s) as the committee deems appropriate. Such referral shall be to the attention of the chair of the committee with a copy served on the respondent.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-100, filed 5/19/14, effective 6/19/14.]

## APPEALS AND REFERRALS-ROUTING

(1) The respondent may appeal a disciplinary action by filing a written notice of appeal with the conduct review officer within twenty-one days of service of the student conduct officer's decision. Failure to file a timely notice of appeal constitutes a waiver of the right to appeal, and the student conduct officer's decision shall be deemed final.
(2) The notice of appeal must include a brief statement explaining why the respondent is seeking review.
(3) Except as provided in WAC 495C-121-230 or elsewhere in these rules, the parties to an appeal shall be the respondent and the student conduct officer.
(4) On appeal, the student conduct officer bears the burden of establishing the factual elements of the alleged misconduct by a preponderance of the evidence, i.e., that it is more likely than not that the respondent engaged in the alleged misconduct.
(5) Imposition of a disciplinary sanction and conditions shall be stayed during an appeal, except for a summary suspension that has been imposed under WAC 495C-121190.
(6) The student conduct committee shall hear:
(a) Appeals from disciplinary suspensions in excess of ten instructional days, and any related disciplinary condition(s);
(b) Appeals from dismissals, and any related disciplinary condition(s); and
(c) Cases referred by the student conduct officer, the conduct review officer, or the president.
(7) Appeals from the following disciplinary sanctions and related disciplinary conditions shall be reviewed through a brief adjudicative proceeding:
(a) Written disciplinary reprimands, and any related disciplinary condition(s);
(b) Disciplinary probation, and any related disciplinary condition(s); and
(c) Disciplinary suspensions of ten instructional days or less, and any related disciplinary condition(s).
(8) Except as provided elsewhere in these rules, disciplinary warnings and terminations of proceedings are final actions and are not subject to appeal.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-110, filed 5/19/14, effective 6/19/14.]

## BRIEF ADJUDICATIVE PROCEEDINGS— INITIAL HEARING AND DECISION

(1) Brief adjudicative proceedings shall be conducted by a conduct review officer. The conduct review officer shall not participate in any case in which he/she is a witness, has direct or personal interest, prejudice, or bias, or has previously provided significant advice or direction to the student conduct officer.
(2) Before making a decision, the conduct review officer shall schedule an informal hearing to provide each party an opportunity (a) to be informed of the agency's view of the matter, and (b) to explain the party's view of the matter.

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(3) The conduct review officer shall serve an initial decision upon the parties within ten days of the scheduled hearing. The initial decision shall contain a brief written statement of the reasons for the decision and information about how to seek review under WAC 495C-121-130.
(4) If the conduct review officer, upon review, determines that the respondent's conduct may warrant imposition of a disciplinary suspension of more than ten instructional days or a dismissal, he/she shall refer the matter to the student conduct committee for a disciplinary hearing.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-120, filed $5 / 19 / 14$, effective 6/19/14.]

## BRIEF ADJUDICATIVE PROCEEDINGS— REVIEW OF INITIAL DECISION

(1) A party may obtain review of an initial decision by the president, by filing a written request for review with the conduct review officer within twenty-one days of service of the initial decision. That officer shall promptly forward the request to the president. If no timely request for review is filed, the initial decision shall become the final decision.
(2) The president shall not participate in any case in which he/she is a witness, has direct or personal interest, prejudice, or bias, or has previously provided significant advice or direction.
(3) During the review, the president shall give each party an opportunity to file a written statement explaining their view of the matter and shall make any inquiries to the parties which are necessary to ascertain whether the discipline should be modified or whether the proceedings should be referred to the student conduct committee for a hearing.
(4) The president shall serve a written decision on review on all parties within twenty days of the later of the filing of the request for review or any deadline for parties' explanatory statements. A request for review may be deemed to have been denied if the president does not serve a decision within those twenty days. The decision shall include a brief statement of its reasoning. The president's decision shall be the final college action in the matter, and shall include notice of any right to request reconsideration and of the right to seek judicial review under chapter 34.05 RCW.
(5) If the president, upon review, determines that the respondent's conduct may warrant imposition of a dismissal or a disciplinary suspension of more than ten instructional days, he/she shall refer the matter to the student conduct committee for a disciplinary hearing.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-130, filed 5/19/14, effective 6/19/14.]

## STUDENT CONDUCT

COMMITTEE-FORMATION
(1) Proceedings of the student conduct committee shall be governed by the Administrative Procedure Act, chapter 34.05 RCW, and by the Model Rules of Procedure, chapter 10-08 WAC. To the extent there is a conflict between this chapter and chapter 10-08 WAC, this
chapter shall control.
(2) The student conduct committee shall consist of five members:
(a) Two full-time students appointed by the student government to terms of up to one academic year;
(b) Two faculty members appointed by the president to terms of up to two academic years, beginning in alternating years;
(c) One faculty member or administrator, other than an administrator serving as a student conduct or conduct review officer, appointed as chair by the president for a term of up to two academic years.
Members may be reappointed for subsequent terms. Any member may be replaced by the appointing authority for the remainder of the term for good cause shown.
(3) The faculty member or administrator appointed as chair may take action on preliminary hearing matters prior to convening the committee. The chair shall receive annual training on protecting victims and promoting accountability in cases involving allegations of sexual misconduct.
(4) A member of the student conduct committee shall not participate in any case in which he/she is a party, complainant, or witness, has direct or personal interest, prejudice, or bias, or has previously provided significant advice or direction. Any party may petition for disqualification of a committee member pursuant to RCW 34.05.425(4).
(5) Hearings may be heard by a quorum of three members of the committee, so long as one faculty member and one student are included on the hearing panel. Committee action may be taken upon a majority vote of all committee members attending the hearing.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-140, filed 5/19/14, effective 6/19/14.]

## STUDENT CONDUCT COMMITTEE— PREHEARING PROCEEDINGS

(1) The student conduct committee chair shall serve all parties with written notice of the hearing not less than seven days in advance of the hearing date, as further specified in RCW 34.05.434 and WAC 10-08-040 and 10-08-045. The chair may shorten this notice period if both parties agree, and also may continue the hearing to a later time for good cause shown.
(2) The chair may conduct prehearing conferences and/or make prehearing decisions concerning the simplification of issues, the extent and form of any discovery, issuance of protective orders, and similar procedural matters.
(3) Discovery will be available as determined by the chair and in accordance with RCW 34.05.446. Upon request, the chair shall provide reasonable assistance to a party in obtaining relevant and admissible evidence that is within the college's control.
(4) The chair may provide to the committee members in advance of the hearing copies of (a) the conduct officer's notification of imposition of discipline or referral to the
committee, and (b) the notice of appeal. If doing so, however, the chair should remind the members that these documents are not evidence of any facts they may allege.
(5) Upon request filed at least five business days before the hearing by any party, or at the direction of the committee chair, the parties shall exchange, no later than the third business day prior to the hearing, lists of potential witnesses and copies of potential exhibits that they reasonably expect to present to the committee. Failure to participate in good faith in such a requested exchange may be cause for exclusion from the hearing of any witness or exhibit not disclosed, absent a showing of good cause for such failure.
(6) The parties may agree before the hearing to designate specific exhibits as admissible without objection and, if they do so, whether the chair may provide copies of these admissible exhibits to the committee members before the hearing.
(7) Communications between a committee member and any other nonmember hearing participant regarding any issue in the proceeding, other than communications necessary to procedural aspects of maintaining an orderly process, are generally prohibited without notice and opportunity for all parties to participate. Any improper "ex parte" communication shall be placed on the record, as further provided in RCW 34.05.455.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-150, filed 5/19/14, effective 6/19/14.]

## STUDENT CONDUCT COMMITTEE-HEARINGS

(1) Upon the failure of any party to attend or participate in a hearing, the chair may either:
(a) Proceed with the hearing; or
(b) Serve a default order in accordance with RCW 34.05.440.
(2) The committee will ordinarily be advised by an assistant attorney general.
(3) Each party may be accompanied at the hearing by a nonattorney assistant of his/her choice. A party other than the student conduct officer may elect to be represented by an attorney at his or her own cost, but will be deemed to have waived that right unless, at least four business days before the hearing, written notice of the attorney's identity and participation is filed with the chair, with a copy to the student conduct officer. If such a party is represented by an attorney, the student conduct officer may also be represented by a second, appropriately screened, assistant attorney general.
(4) The chair shall preside at the hearing and decide procedural questions that arise during the hearing, except as overridden by majority vote of the committee. Evidence shall be admitted or excluded in accordance with RCW 34.05.452. All testimony shall be given under oath or affirmation.
(5) The hearing will ordinarily be closed to the public, in light of the Family Educational Rights and Privacy Act. However, if all parties agree on the record to open some
or all of the proceedings, the chair shall determine any extent to which the hearing will be open. If any person disrupts the proceedings, the chair may exclude that person from the hearing room.
(6) The chair shall afford opportunity to all parties to present their cases, and shall cause the hearing to be recorded by a method that he/she selects, in accordance with RCW 34.05.449. That recording, or a copy, shall be made available to any party upon request. Other recording shall also be permitted, in accordance with WAC 10-08-190.
(7) The chair shall assure maintenance of the record of the proceeding which is required by RCW 34.05.476. This record shall be available upon request by any party for inspection and copying, except as limited by FERPA.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-160, filed 5/19/14, effective 6/19/14.]

## STUDENT CONDUCT

## COMMITTEE-INITIAL DECISION

(1) At the conclusion of the hearing, the committee shall permit the parties to make closing arguments in whatever form it wishes to receive them. The committee also may permit each party to propose findings, conclusions, and/or a proposed decision for its consideration. Only evidence presented at the hearing will be considered by the committee.
(2) Within twenty days following the later of the conclusion of the hearing or the committee's receipt of closing arguments, the committee shall issue an initial decision in accordance with RCW 34.05.461 and WAC 10-08-210. The initial order shall include:
(a) Findings on all material issues of fact and conclusions on all material issues of law, including which, if any, provisions of WAC 495C-121-050 were violated. Any findings based substantially on the credibility of evidence or the demeanor of witnesses shall be so identified.
(b) A determination on appropriate disciplinary sanction and/or disciplinary conditions, if any. The committee may affirm, reverse, modify, or supplement any disciplinary sanction and/or disciplinary condition(s) imposed by the student conduct officer.
(c) A statement that the initial order will become final unless a party seeks review of that decision in accordance with WAC $495 \mathrm{C}-121-180$.
(3) The chair shall cause copies of the initial decision to be served on the parties, including any legal counsel of record. The committee chair shall also promptly transmit the record of the committee's proceedings and a copy of its decision to the president.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-170, filed 5/19/14, effective 6/19/14.]

## STUDENT CONDUCT COMMITTEE-REVIEW OF INITIAL DECISION

(1) A party who is aggrieved by the committee's initial decision may obtain review of that decision by filing a notice of appeal with the president within twenty-one days after it was served on that party. If no timely notice

## (CONTINUED FROM PREVIOUS PAGE)

of appeal is filed, the initial decision shall become the final decision.
(2) The notice of appeal must identify the specific findings of fact and/or conclusions of law in the initial decision that are challenged, and must contain an argument why the appeal should be granted.
(3) The president may ask for additional argument from the parties on the issues raised in the notice of appeal. The president's review will ordinarily be limited to those issues, and shall be restricted to the committee hearing record. The president shall not engage in ex parte communication with any of the parties regarding the appeal.
(4) The president shall serve a written decision on review on all parties within forty-five days after receipt of the notice of appeal. The decision shall include appropriate findings and conclusions. Unless it remands the case to the committee for further proceedings or gives a right to request reconsideration, the president's decision shall be the final college action in the matter and shall include notice of the right to seek judicial review under chapter 34.05 RCW.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-18o, filed 5/19/14, effective 6/19/14.]

## SUMMARY SUSPENSION

(1) Summary suspension is a temporary exclusion from specified college facilities and denial of access to all activities or privileges for which a respondent might otherwise be eligible, while an investigation, disciplinary procedures, and/or an appeal are pending.
(2) The student conduct officer may impose a summary suspension if there is probable cause to believe, i.e., there are reasonable grounds for believing, that the respondent has committed misconduct under WAC 495C-121-050 and that either:
(a) The situation involves an immediate danger to the public health, safety, or welfare which requires immediate college action; or
(b) The student's behavior poses an ongoing threat of substantial disruption of, or interference with, the operations of the college.
(3) A summary suspension shall be effective when the respondent receives written or oral notice of that suspension. If oral notice is given, a written notification must be served on the respondent within two business days of the oral notice. The written notification shall be entitled "Notice of Summary Suspension" and shall include:
(a) The reasons for imposing the summary suspension, including a description of the misconduct and specification of the provisions of WAC 495C-121-050 allegedly violated;
(b) The date, time, and location when the respondent must appear before the conduct review officer for a hearing on the summary suspension; and
(c) The conditions, if any, under which the respondent may physically access college facilities or communicate with members of the college
community. If the respondent is prohibited from entering college facilities, he/she may be given a notice against trespass which warns that his/her privilege to enter college facilities has been withdrawn, subject to any specified exceptions such as an invitation to meet with the student conduct officer or conduct review officer or to attend a scheduled disciplinary hearing, and that he/she shall be considered to be trespassing and subject to arrest for criminal trespass for any violation.
(4) The hearing before the conduct review officer shall be scheduled as soon as practicable after service of the notice of summary suspension. If the respondent fails to appear at the scheduled time, the conduct review officer may order that the summary suspension remain in place. During the summary suspension hearing, the issues shall be:
(a) Whether the requirements under subsection (2) of this section are satisfied; and
(b) Whether the summary suspension should be continued pending the conclusion of disciplinary proceedings and/or should be less restrictive in scope.
(5) As soon as practicable following the hearing, the conduct review officer shall issue, and serve on the respondent and student conduct officer, a written decision which addresses the issues at the hearing. The conduct review officer shall also provide information about the decision, to the extent legally permissible under FERPA, to all persons and offices who may be bound or protected by it.
(6) The respondent may request a de novo review of the summary suspension hearing decision by the student conduct committee. The review will be scheduled promptly. Either party may request the review to be consolidated with any other disciplinary proceeding arising from the same matter.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-190, filed 5/19/14, effective 6/19/14.]

## SUPPLEMENTAL DEFINITIONS

The following supplemental definitions apply in student disciplinary matters involving allegations of sexual misconduct by a student:
(1) A "complainant" is an alleged victim of sexual misconduct.
(2) "Sexual misconduct" has the meaning ascribed to this term in WAC 495C-121-050.
(3) "Title IX compliance officer" is the college position designated by the president as having the primary direct responsibilities related to Title IX, 20 U.S.C. §§ 1681-88.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, §
495C-121-200, filed 5/19/14, effective 6/19/14.]

## SUPPLEMENTAL SEXUAL MISCONDUCT PROCEDURES

In student discipline matters involving allegations of sexual misconduct by a student:
(1) Both the respondent and the complainant shall be
provided the same, or substantially equivalent, procedural rights to participate. For the complainant, this includes the rights to meet with the student conduct officer during the initial disciplinary process under WAC 495C-121-100 and to appeal as provided in WAC 495C-121-230.
(2) These rules shall supplement the foregoing student disciplinary rules in WAC 495C-121-010 through 495C-121-190. In the event of conflict between these supplemental sexual misconduct rules and the foregoing rules, these supplemental rules shall prevail.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, §
495C-121-210, filed 5/19/14, effective 6/19/14.]

## SUPPLEMENTAL COMPLAINT PROCESS

With respect to complaints or other reports of alleged sexual misconduct by a student:
(1) The college's Title IX compliance officer shall investigate, or assure investigation of, complaints or other reports of alleged sexual misconduct by a student. The investigation will be completed in a timely manner and the results of the investigation shall be referred to the student conduct officer for possible disciplinary action.
(2) Informal dispute resolution shall not be used to resolve sexual misconduct complaints without written permission from both the complainant and the respondent. If the parties elect to mediate a dispute, either party shall be free to discontinue the mediation at any time. Mediation shall not be used to resolve complaints involving allegations of sexual violence.
(3) College personnel will honor requests to keep sexual misconduct complaints confidential to the extent this can be done without unreasonably risking the health, safety, and welfare of the complainant or other members of the college community or compromising the college's duty to investigate and process such complaints.
(4) The student conduct officer, prior to serving a disciplinary decision under WAC 495C-121-100, will make a reasonable effort to contact the complainant to discuss the results of the investigation and possible disciplinary sanctions and/or disciplinary conditions that may be imposed.
(5) The student conduct officer, on the same date that a disciplinary decision is served on the respondent under WAC 495C-121-100, will serve a written notice, in compliance with FERPA, informing the complainant whether the allegations of sexual misconduct were found to have merit and describing any disciplinary sanctions and/or conditions which are being imposed upon the respondent for the complainant's protection. The notice will also inform the complainant of her/his rights to appeal as stated in WAC 495C-121-230. If protective disciplinary sanctions and/or conditions are imposed, the student conduct officer shall also make a reasonable effort to have the notice served upon the complainant prior to service upon the respondent.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-220, filed 5/19/14, effective 6/19/14.]

In student discipline matters involving allegations of sexual misconduct by a student:
(1) The following actions by the student conduct officer may be appealed by the complainant:
(a) The dismissal of a sexual misconduct complaint; or
(b) Any disciplinary sanction(s) and conditions imposed against a respondent for a sexual misconduct violation, including a disciplinary warning.
(2) A complainant may appeal a disciplinary decision by filing a notice of appeal with the conduct review officer within twenty-one days of service of the notice of the discipline decision provided for in WAC 495C-121220(5). The notice of appeal may include a written statement setting forth the grounds of appeal. Failure to file a timely notice of appeal constitutes a waiver of this right and the disciplinary decision shall be deemed final.
(3) If the respondent timely appeals a decision imposing discipline for a sexual misconduct violation, the college shall notify the complainant of the appeal and provide the complainant an opportunity to intervene as a party to the appeal.
(4) Except as otherwise specified in this supplemental procedure, a complainant who timely appeals a disciplinary decision or who intervenes as a party to the respondent's appeal of a disciplinary decision shall be afforded the same procedural rights as are afforded the respondent.
(5) An appeal by a complainant from the following disciplinary actions involving allegations of sexual misconduct against a student shall be handled as a brief adjudicative proceeding:
(a) Termination of the proceedings;
(b) A disciplinary warning;
(c) A written disciplinary reprimand;
(d) Disciplinary probation;
(e) Suspensions of ten instructional days or less; and/or
(f) Any conditions or terms imposed in conjunction with one of the foregoing disciplinary actions.
(6) An appeal by a complainant from disciplinary action imposing a suspension in excess of ten instructional days or an expulsion shall be reviewed by the student conduct committee.
(7) In proceedings before the student conduct committee, respondent and complainant shall have the right to be accompanied by a nonattorney assistant of their choosing during the appeal process. Complainant may choose to be represented at the hearing by an attorney at his or her own expense, but will be deemed to have waived that right unless, at least four business days before the hearing, he or she files a written notice of the attorney's identity and participation with the committee chair, and with copies to the respondent and the student conduct officer.
(8) The complainant and respondent shall not directly question or cross-examine one another in either brief

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adjudicative proceedings or proceedings before the committee. In proceedings before the committee, all questions shall be directed to the chair, who will act as an intermediary and pose questions on the party's behalf.
(9) Student conduct hearings involving sexual misconduct allegations shall be closed to the public, unless respondent and complainant both waive this requirement in writing and request that the hearing be open to the public. Complainant, respondent and their respective nonattorney assistants and/or attorneys may attend portions of the hearing where argument, testimony, and/or evidence are presented to the student conduct committee.
(10) On the same date as the initial decision is served on the respondent under WAC 495C-121-120 or 495C-121-170, the conduct review officer or committee chair, as appropriate, will serve complainant with a written notice consistent with FERPA which states whether the allegations of sexual misconduct were found in the initial decision to have merit and describing any disciplinary sanction(s) and/or disciplinary condition(s) imposed upon the respondent for the complainant's protection. The notice will also inform the complainant of his/her appeal rights.
(11) Complainant, as a party, may appeal the initial decision to the president, under either WAC 495C-121-130, after a brief adjudicative proceeding, or WAC 495C-121-180, after a committee proceeding.
(12) On the same date that the president serves his/her decision on review on the other parties, under WAC $495 \mathrm{C}-121-130$ or $495 \mathrm{C}-121-180$, he/she shall serve complainant either with that decision, if allowed under FERPA, or with a written notice consistent with FERPA which both states whether the allegations of sexual misconduct were found to have merit and describes any disciplinary sanction(s) and/or disciplinary condition(s) imposed upon the respondent for the complainant's protection. This notice shall communicate the final college action in the matter and shall include notice of the right to seek judicial review under chapter 34.05 RCW.
[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-230, filed 5/19/14, effective 6/19/14.]

## Campus Policies

## CAMPUS SPEAKERS

1. Student organizations officially recognized by the college may invite speakers to the campus to address their own membership and other interested students and staff, if suitable space is available and there is no interference with the regularly scheduled program of the college. Although properly allowed by the college, the appearance of such speakers on the campus implies neither approval nor disapproval of them or their viewpoints. In the case of speakers who are candidates for political office, equal
opportunities shall be available to opposing candidates if desired by them. Speakers are subject to the normal considerations for law and order and to the specific limitations imposed by the state constitution, which prohibits religious worship, exercise, or instruction on state property.
2. In order to ensure an atmosphere of open exchange and to ensure that the educational objectives of the college are not obscured, the president or designee, in a case attended by strong emotional feeling, may prescribe conditions for the conduct of the meeting, such as requiring a designated member of the staff as moderator, or requiring permission for comments and questions from the floor. Likewise, the president or designee may encourage the appearance of one or more additional speakers at any meeting or at a subsequent meeting, so that other points of view may be expressed. The president or designee may designate representatives to recommend conditions such as time, manner, and place for the conduct of particular meetings.

## CATALOG POLICY

The Clover Park Technical College Catalog provides an overview of the college's courses, programs, services, and policies. We make every effort to convey accurate information; however, the college's classes, programs, and other activities are subject to change at any time without notice. The catalog is not intended to create a contractual obligation.

## CIVIL DISTURBANCES

In accordance with provisions contained in RCW 28B.10.571 and 28B.10.572:

1. It shall be unlawful for any person, singly or in concert with others, to interfere by force or violence with any employee or student of the college who is in the peaceful discharge or conduct of his/her duties or studies.
2. It shall be unlawful for any person, singly or in concert with others, to intimidate by threat of force or violence any employee or student of the college who is in the peaceful discharge of his/her duties or studies.
3. The crimes described in RCW 28B.10.571 and 28B.10.572 shall not apply to any employee who is engaged in the reasonable exercise of their disciplinary authority.
4. Any person or persons who violate the provisions of subparagraphs 1) and 2) above will be subject to disciplinary action and referred to the authorities for prosecution.

## COMMERCIAL ACTIVITIES

1. College facilities will not be used for commercial solicitation, advertising, or promotional activities except when such activities clearly serve educational objectives, including but not limited to display of books of interest to the staff or the display or demonstration of technical or research equipment, and when such commercial activities
relate to educational objectives and are conducted under the sponsorship or at the request of the college.
2. For the purpose of this regulation, the term commercial activities does not include handbills, leaflets, newspapers, or similarly related materials as regulated in WAC 495C-120-100.

CRIME STATISTICS

| Offense | On Campus |  |  | Non-Campus |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{\prime} 14$ | '15 | '16 | '14 | '15 | '16 |
| MURDER/NON-NEGLIGENT MANSLAUGHTER | 0 | 0 | 0 | 0 | 0 | 0 |
| NEGLIGENT MANSLAUGHTER | 0 | 0 | 0 | 0 | 0 | 0 |
| SEX OFFENSES - FORCIBLE | 1 | 0 | 1 | 0 | 0 | 0 |
| SEX OFFENSES - NON-FORCIBLE | 0 | 0 | 0 | 0 | 0 | 0 |
| INCEST | 0 | 0 | 0 | 0 | 0 | 0 |
| STATUTORY RAPE | 0 | 0 | 0 | 0 | 0 | 0 |
| ROBBERY | 0 | 0 | 0 | 0 | 0 | 0 |
| AGGRAVATED ASSAULT | 1 | 0 | 1 | 0 | 0 | 0 |
| BURGLARY | 2 | 0 | 0 | 0 | 0 | 0 |
| MOTOR VEHICLE THEFT (DOES NOT INCLUDE THEFT FROM A MOTOR VEHICLE) | 3 | 2 | 1 | 0 | 0 | 0 |
| ARSON | 0 | 0 | 0 | 0 | 0 | 0 |
| ARRESTS \& REFERRALS FOR DISCIPLINARY ACTION |  |  |  |  |  |  |
| ILLEGAL WEAPONS POSSESSION | 0 | 0 | 0 | 0 | 0 | 0 |
| DRUG LAW VIOLATIONS | 0 | 0 | 0 | 0 | 0 | 0 |
| LIQUOR LAW VIolations | 2 | 1 | 0 | 0 | 0 | 0 |
| HATE CRIMES (ETHNICITY/ NATIONAL ORGIN) | 0 | 0 | 0 | 0 | 0 | 0 |
| DOMESTIC VIOLENCE | 3 | 0 | 1 | 0 | 0 | 0 |
| DAting violence | 0 | 1 | 0 | 0 | 0 | 0 |
| STALKING | 1 | 1 | 0 | 0 | 0 | 0 |

*Statistics provided are based on reported incidents to the Lakewood Police Department, Pierce County Sheriff's Department and CPTC Security.

## DISTRIBUTION OF INFORMATION

1. Handbills, leaflets, newspapers, and similar materials may be sold or distributed free of charge by any student or students, or by members of recognized student organizations, or by college employees on or in college facilities at locations specifically designated by the president or designee; provided such distribution or sale does not interfere with the ingress or egress of persons or interfere with the free flow of vehicular or pedestrian traffic.
2. Such handbills, leaflets, newspapers, and related matter must bear identification as to the publishing agency and distributing organization or individual.
3. All non-students shall register with the president or designee prior to the distribution of any handbill, leaflet,
newspaper, or related matter. Such distribution or sale must not interfere with the free flow of vehicular or pedestrian traffic.
4. Any person or persons who violate the provisions of subparagraphs 1) and 2) above will be subject to disciplinary action.

## DRUG FREE ENVIRONMENT

Clover Park Technical College aims for a Drug-Free Environment. A program has been developed to prevent the illicit use of drugs and the abuse of alcohol by students and employees on college property or as any part of the college's activities. Possession and/or use of illicit drugs and alcohol is a violation of the Student Code of Conduct and subject to disciplinary action.

## FREE MOVEMENT ON CAMPUS

The president or designee is authorized in the instance of any event that they deem impedes the movement of persons or vehicles, or which they deem to disrupt the ingress or egress of persons from the college facilities, to prohibit the entry of, or withdraw the license of, or privileges of a person or persons or any group of persons to enter onto or remain upon any portion of the college facilities.

## SUSPENDED OPERATIONS

www.cptc.edu/risk/safety/emergency-management
CPTC will post inclement weather closures or delays to www. flashalert.net. This closure information is shared with news media for broadcast. Additionally, interested parties can subscribe to this site and receive notifications through email, text, or Facebook. The college website at www.cptc.edu will announce closures or delays using banners on the main page, and the CPTC Warn notification system will push messages to subscribers as well. No announcement means normal operation. Announcements are for one day only.

## NON-DISCRIMINATION POLICY

Clover Park Technical College provides equal opportunity and access in education and employment and does not discriminate on the basis of race; ethnicity; creed; color; sex; gender; gender identity; citizenship status; national origin; age; marital status; religious preference; the presence of any sensory, mental, or physical disability; reliance on public assistance; sexual orientation; veteran status; political opinions or affiliations; or genetic information in any of its programs, activities, and services.
CPTC offers more than 40 career and technical education programs in seven areas of study: aerospace and aviation; science, technology, engineering, and design; automotive and trades; advanced manufacturing; nursing; health and human development; and business and personal services. CPTC will take steps to ensure that the lack of English language skills will not be a barrier to admission and participation in all educational and vocational education programs
The following individual has been designated to handle
inquiries regarding the non-discrimination policy:
Tawny Dotson
Title IX Coordinator \& Vice President of Strategic Development 4500 Steilacoom Blvd SW
Lakewood, WA 98499-4004
253-589-6048

## REGISTERED SEXUAL OFFENDER POLICY

The full policy and regulations for enrollment of registered sexual offenders is available in the College Policy and Procedures Handbook. When the college is notified by a law enforcement agency that a sexual offender is planning on attending or is attending the college, appropriate notification of the offender's presence will be made to faculty, staff, and students depending on the offender's classification level. For details, contact the office of the vice president for student success.

## SAFETY AND HAZARDOUS MATERIALS

Safety procedures are posted next to the first aid kits located in offices and classrooms of the college. Accidents should be immediately reported to a college staff member or security at 253-589-5682 and an Accident/Injury Report completed. Some program areas utilize materials which are classified as hazardous chemicals. The Occupational Safety Health Act (OSHA) Communication Standard 1910.120, and the State of Washington Right to Know Statutes require that chemicals be appropriately labeled and that the college has on file a Materials Safety Data Sheet (MSDS) for each of the hazardous chemical products being packaged, handled, or transferred. The MSDS provides a description of how the identified chemical is to be handled and is readily available in case of an emergency, or upon request. Questions or concerns regarding hazardous chemicals should be referred to the faculty for further information.

## SMOKING POLICY

Smoking or the use of any tobacco product is permitted only in closed private vehicles and designated smoking shelters. Smoking or the use of any tobacco product will not be permitted in any state-owned building or vehicle. This includes e-cigarettes and similar devices.

## STUDENT RIGHT TO KNOW

In compliance with the federal Student Right-to-Know (SR2K) and Campus Security Act of 1990 (Public Law 101-542), Clover Park Technical College makes available information about program completions on the college website, www.cptc.edu/ right-to-know. A printed copy of this information may be obtained by calling 253-589-5570.

## LIMITATION OF LIABILITY

The college's total liability for claims arising from a contractual relationship with the student in any way related to classes or programs shall be limited to the tuition and expenses paid by the student to the college for those classes or programs. In no event shall the college be liable for any special, indirect, incidental, or consequential damages, including, but not limited to, loss of earning or profits.

## PUBLICATION DISCLAIMER

Clover Park Technical College has made reasonable efforts to ensure the accuracy of the information throughout this catalog. However, the college reserves the right to make appropriate changes in procedures, policies, calendars, requirements, programs, courses, and fees. When feasible, changes will be announced prior to their effective dates, but the college assumes no responsibility for giving particular notice of any such changes. Changes may apply not only to prospective students, but also to those who are currently enrolled. Nothing contained in this catalog shall be construed to create any offer to contract or any contractual rights. We encourage readers to contact the college or appropriate office to obtain current information.

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> I feel like I'll look back on this as the beginning of the rest of my life, the real changing moment that sets everything else into motion. I am excited for the future. This program, it changed my life.


## 2018-2019 Calendar

## JULY 2018

Summer Quarter Start ................................................................................ 2
Independence Day (College Closed)......................................................... 4
Program Information Session (Classrooms@3 p.m.)..........................................lll 11
Program Information Session (Classrooms@3 p.m.)......................................... 25

## AUGUST 2018

Program Information Session (Classrooms@3 p.m.).............................................. 8
Financial Aid Deadline for Fall 2018............................................................. 17
Program Information Session (Classiooms@3 p.m.) .............................................. 22
Summer Quarter Ends................................................................................ 31

## SEPTEMBER 2018

Labor Day (College Closed).................................................................. 3
Summer Break.............................................................................. 41
Fall Quarter Fees Due...............................................................................77
New Student Orientation.......................................................................... 20
Professional Service Day....................................................................... 21
Fall Quarter Start...................................................................................... 24
Program Information Session (Classrooms@3 p.m.).......................................ept 26

## OCTOBER 2018

Fall Program Expo (Building 23@3-7 p.m.) .................................................. Oct 10
Program Information Session (Classrooms@3 p.m.)........................................Oct 24

## NOVEMBER 2018

Faculty In-Service .................................................................................... 2
Winter Quarter Registration
Priority Registration (Running Start, High School, Veterans)................................... 5
Continuing Student Registration...............................................................Nov 5-9
Veterans Day Ceremony ........................................................................... 7
New Student Registration................................................................................Nov 13
Open Registration.................................................................. Nov 14 - Jan 3
Veterans Day Observed (College Closed)..................................................Nov 12
Program Information Session (Classrooms@3 p.m.) )........................................ 14
Thanksgiving (College Closed)..........................................................Nov 22-23
Financial Aid Deadline for Winter 2019 ............................................................ 30

## DECEMBER 2018

Program Information Session (Classrooms@3 p.m.).......................................... 12
Last Day of Fall Quarter ........................................................................... 12
Professional Service Day....................................................................... 13
Winter Quarter Fees Due ....................................................................... 14
New Student Orientation......................................................................... Dec 20

Christmas (College Closed) .................................................................... 25

## JANUARY 2019

New Year's Day (College Closed)..................................................................................................... 1
Winter Quarter Start......................................................................................................................... 2
Program Information Session (Classrooms@3 p.m.)................................................................ 9
Martin Luther King Day (College Closed).............................................................................. 21


For some programs, calendar dates vary, depending on training schedules.
FEBRUARY 2019
Spring Quarter Registration
Priority Registration (Running Start, High School, Veterans). ..... Feb 4
Continuing Student Registration. ..... Feb 4 - 8
New Student Registration ..... Feb 11
Open Registration ..... Feb 12 - Apr 2
Program Information Session (Classrooms@3 p.m.). ..... Feb 13
Faculty/Staff In-Service ..... Feb 15
Financial Aid Deadline for Spring 2019. ..... Feb 15
President's Day (College Closed) ..... Feb 18
Program Information Session (Classrooms@3 p.m.). ..... Feb 27
MARCH 2019
Program Information Session (Classrooms@3 p.m.). ..... Mar 13
Spring Quarter Fees Due. ..... Mar 15
Last day of Winter Quarter ..... Mar 21
Professional Service Day ..... Mar 22
Spring Break. ..... Mar 22 - 29
New Student Orientation. ..... Mar 22
APRIL 2019
Spring Quarter Start. ..... Apr 1
Spring Program Expo (Building 23@3-7 p.m.) ..... Apr 10
Faculty In-Service ..... Apr 19
Program Information Session (Classrooms@3 p.m.) ..... Apr 24
MAY 2019
Program Information Session (Classrooms@3 p.m.). ..... May 8
Career Conference ..... May 9
Summer/Fall Quarter Registration
Priority Registration (Running Start, High School, Veterans). ..... May 6
Continuing Student Registration. ..... May 6 - 10
New Student Registration ..... May 13
Open Registration for Fall 2019 ..... May 14 - Jul 1
Faculty In-Service ..... May 17
Financial Aid Deadline for Summer 2019 ..... May 17
Program Information Session (Classrooms@3 p.m.) ..... May 22
Memorial Day (College Closed). ..... May 27
JUNE 2019
Program Information Session (Classrooms@3 p.m.). ..... Jun 12
Summer Quarter Fees Due ..... Jun 14
Graduation Ceremony ..... Jun 18
Last day of Spring Quarter. ..... Jun 18
Quarter Break ..... Jun 19-28
Professional Service Day. ..... Jun 19
New Student Orientation. ..... TBD

# PROGRAM INFORMATION SESSIONS <br> <br> 2nd \& 4th Wednesdays at 3 p.m. 

 <br> <br> 2nd \& 4th Wednesdays at 3 p.m.}

- Ask questions and get information on wages, job outlook, tools, and supply lists
- Mandatory for: Cosmetology, Human Services, Electrician Low Voltage Fire/Security, Esthetics, and Professional Pilot

| 2018-2019 DATES |  |  |  |
| :---: | :---: | :---: | :---: |
| July 11 | Oct. 24 | Jan. 23 | May 8 |
| July 25 | Nov. 14 | Feb. 13 | May 22 |
| Aug. 8 | Nov. 28 | Feb. 27 | June 12 |
| Aug. 22 | Dec. 12 | March 13 |  |
| Sept. 26 | Jan. 9 | April 24 |  |

See campus map on for specific program locations or go to www. cptc.edu/info-sessions.

## PROGRAM EXPOS

Clover Park Technical College holds Program Expos in the fall and spring, on Oct. 10 and April 10, with all programs on display in one location in Building 23 on the Lakewood Campus. This allows visitors to visit multiple programs and learn more about each all in one convenient spot. For more information, visit www.cptc.edu/expo.



# Full-Time Faculy \& Administration 

AUTRY, TRISHA<br>Pharmacy Technician Instructor<br>Licensed Pharmacy Technician<br>BARTON, RICHARD<br>HVAC Instructor<br>AAT, Clover Park Technical College EPA Universal Certification 06A Electrical Training

## BEACH, LISA

Director of Compliance BA, Washington State University

BOWMAN, MICHAEL
Interior Design Instructor
Parson's School of Design
ASID Certification
NCIDQ Certification

BRIGGS, MARLA
Health Unit Coordinator Instructor Health Unit Coordinator Certification

## BROWN, DAVE

Automotive Technology Instructor
AAT, Automotive Technician, Clover Park
Technical College
ASE Certified Master Automobile Technician Automotive Technician, Denver Automotive and Diesel College
WA State Journey Level Machinist / Jig \&
Fixture Toolmaker, the Boeing Company

## BUSHNELL, POPPY

Architectural Engineering Instructor
BA, University of Puget Sound
AAT, Clover Park Technical College

CARVER, ROBERT
Nursing Instructor
BA, Cal State Fullerton
ADN, Pierce College
Licensed Registered Nurse

## CHASE-DEITRICH, DEBI

Early Care \& Education Instructor
MA, Chapman University
BS, Southern Illinois University

CHIARO, LOREE
Cosmetology Instructor
Licensed WA State Cosmetology Instructor/ Operator

CLARK, KEZIA

Surgical Technology Instructor
AAS, Spokane Community College

CLARK, LARRY
Vice President for Finance and Administration
MBA, University of Puget Sound
BA, Business, WA State University
BA, Accounting, University of Puget Sound

COLLINS, MARSHALL<br>Professional Pilot Instructor<br>Avionics Diploma, Clover Park Technical College

COLOMBINI-HYKE, LISA
Early Care and Education Instructor
ME, Lesley College
BA, Gonzaga University

COOKE, SUZANNE
Accounting Instructor
BA, Texas A\&M University
AAS-T, Clover Park Technical College

## COOPER, DUSTIN

Avionics Instructor
AAS, College of the Air Force
AMT, Community College of the Air Force

COPELAND, DANNY B.
C2E Grant Manager
MPH, University of Washington School of Public Health
MSW, Portland State University School of Social Work
BS, Washington State University School of Psychology

## COPELAND, KRISTIN

Communications/English Instructor
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BS, Pensacola Christian College

## COVINGTON, GARY

Automotive Technician Instructor
WA State Journey Level Automotive Technician Associate Level Certified Electronic Technician ASE Certification
BTI Consumer Electronics
Automotive Technician Certificate, Clover Park Technical College

## COYNER, BILL

Professional Pilot Instructor
BS, Southern Illinois University
AAS, Fort Steilacoom Community College
Airline Transport Pilot Certification
Flight Engineer-Turbojet
Certified Flight Instructor
Certified Instrument Instructor-Flight, Federal Aviation Administration

## CROUCHET, CRISTEEN

Director of Workforce Development
MPA, Anna Maria College
BA, University of WA - Tacoma

## DAM, KEN

Manufacturing Technologies Instructor
Machinist Certificate, Clover Park Vocational Technical Institute

## DANA, SAMANTHA

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## DAVIS, LOREN

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MEd, City University
BA, Columbian Christian College

## DELEON, CARINE

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## DORUM, LUCY

Accounting Instructor
BS, Western Washington University

## DOTSON, TAWNY

Vice President for Strategic Development
EdD, Oregon State University
MA, University of Missouri
BA, Washington State University
Accreditation in Public Relations

## DOYON, GREG

Aviation Maintenance Technician Instructor Airframe \& Powerplant Mechanic Certification Inspection Authorization-Aircraft Certification Federal Aviation Administration ASE Master Technician Certification
ASE L1 Advanced Engine Diagnosis Certification Aviation Maintenance, Airframe Powerplant License

EDMONDS, MABEL
Vice President for Instruction
MA, University of Missouri
BA, Harris Teachers College

## ERWIN-SVOBODA, CAL

Director of Student Life
MA, Western Washington University
BA, Gonzaga University

## EDMONDSON, REBECCA

Early Care \& Education Instructor
CDAi MEd, Lesley University
BA, Pacific Lutheran University

## FAHERTY, DIONNA

English Instructor
MA, Oregon State University
BA, Seattle University

## FAUST, DEREK

Environmental Sciences \& Technology Instructor
PhD, Mississippi State University
MS, Texas Tech University
BS, Elizabethtown College

## FELCH, LINDA

Early Care \& Education Instructor
MEd, Lesley University
BA University of Puget Sound
AA, Spokane Falls Community College

## FOLLET, DIANE

English Language Acquisition Instructor MEd in TESOL, Seattle University
BA, The Evergreen State College

## FREDERICK, SANDY

Cosmetology Instructor
Licensed WA State Cosmetology Instructor/ Operator

## FREEMAN, KURT

Automotive Collision Technician Instructor
ASE Certification-Nonstructural Analysis and Damage Repair
Structural Analysis and Damage Repair Automotive Structural Repair Certificate Shark Electronic Measuring System Certificate Mobile Air Conditioning Society Worldwide Certificate
Journey Level

## FRINK, BARBARA

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Licensed WA State Cosmetology Instructor/ Operator

GILMORE, MICHAEL
Non Destructive Testing Instructor
BA, Brandman University
AAT, Central Texas College
Certified Level 2 Ultrasonic Technician

## GORDON, JIM

Electronic/Fire Security Technician Instructor
United States Marine Corps Air Wing Avionics ADT Security Systems, BA, FA, CA, CCTV
Washington State Journeyman Electrician
Northern Computers Card Access Authorization Fire-Lite Mass Evacuation Certification; NICET
Fire Codes Certification Level II
Seattle Fire Department Certificate FA-1

## GRIFFIN, MYRA

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ASN, Bellevue Community College
WA State RN License

## HILLESLAND, MICHELLE

Dean of Instruction, Health, Client and Business \& Human Services
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BA, University of Puget Sound
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## HOLLOWELL, KELLY

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BS, Capella University
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## JOHNSON, ANGELA

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Certified Medical Assistant

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BA, University of Phoenix

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Private Pilot's License
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LANPHIER, JAY
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CompTIA Certified Security
CompTIA Certified Server
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Vice President for Student Success
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MA, University of Washington
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MS, University of Iowa
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ServSafe Certification
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## SHIELDS, MAUREEN

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Licensed Esthetician

## SIEDLICKI, MELISSA

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Microsoft Certification, MCP
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## SWEERUS, NEIL

Mathematics Instructor
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MS, University of Massachusetts
MS, Brown University
BA, ME, Stevens Institute of Technology
AAS, Computer Programming
AAS, Web Development
AAS, Anthropology
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VAN BEEK, CAROLYN
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MA, Chapman University
BS, Central Washington University

## VICK, PHIL

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BS, Pacific Lutheran University
Licensed Marriage and Family Therapist and
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## WHEELER, MIKE <br> Psychology Instructor

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BS, Washington State University
Licensed WA State Mental Health Counselor

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Esthetics Instructor
Licensed Esthetician

WIRTH, ROBERTA
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MA, Liberty University
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Certificate

## WOLCOTT, LISA

Director of Budget and Finance
BS, Washington State University
AA, Highline Community College

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## LAKEWOOD CAMPUS

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## SOUTH HILL CAMPUS \& AVIATION CENTER

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# 66 I realized that I had finally found a place where being an artist was okay, where everything that I do for fun is going to earn me credits and a career. It seems like a natural fit for me. 



\author{

- Annika Maxwell, Interior Design Student
}

NOTES


66 Being in the military, everything is very structured and very rigorous. However, here in the kitchen you have the flexibility to be creative in that space. If you have the will and the drive, you can learn, because there are definitely mentors and definitely people there who are willing to put the work in if you are.

- Richarnda Barrett, Pastry Arts Student



## WWW.cpic.edu 253-589-5800


[^0]:    - 5 credits in communication: ENGL\& 101
    - 5 credits in quantitative reasoning: MATH\& 107, MATH\& 141, MATH\& 142 , MATH\& 146 or MATH\& 151

[^1]:    *Aircraft costs vary with the current fuel market price

[^2]:    *Aircraft costs vary with the current fuel market price.

[^3]:    * The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and

[^4]:    Academic/Instructional Division Dean/Instruction
    Accommodations Division of Student Success
    Disciplinary/
    Student Code of Conduct Division of Student Success

