

MANUFACTURING-RELATED PROGRAMS AND SERVICES

Community College: Chemeketa Community College (CCC)

General College Description: Chemeketa Community College offers a broad array of programs and services at its main campus in Salem, as well as several other campus locations across more than 2,300 square miles in Marion, Polk, most of Yamhill and parts of Linn counties. CCC views itself as the community's resource for quality education in a changing world, providing centers of excellence in technical training, workforce development, and business support. The college offers over 80 different programs of study, including 42 career-technical programs, 42 university transfer majors, and a host of other targeted programs such as Adult Basic Education, English for Speakers of other Languages (ESOL) and Small Business Management. See www.chemeketa.edu.

Manufacturing-Related Program Areas: Chemeketa offers a wide range of manufacturing-related programs that span several Departments within the college and enrolls approximately 4,500 students annually. All programs offer both Associate of Applied Science and certificate options. Click on the links below to learn more:

- Electronics Technology: <http://www.educationwithafuture.com/>
 - Computer Electronics Associate of Applied Science
 - Electronic Engineering Technician Associate of Applied Science
 - Industrial Electronics Associate of Applied Science

- Machining Technology: <http://www.chemeketa.edu/catalog/courses/cam.html>
 - Computer-Aided Manufacturing (CAM) Fundamentals Certificate
 - Computer-Numerically Controlled (CNC) Operations Certificate
 - Manual Machine Operator Certificate
 - Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM) Associate of Applied Science
 - Basic Manufacturing Technician certificate in CNC Mill or CNC Machine (statewide)

- Welding Technology: <http://www.chemeketa.edu/catalog/courses/wld.html>
 - Welding Certificate
 - Welding Fabrication Associate of Applied Science
 - Basic Manufacturing Technician certificate in Welding (statewide)

- Occupational Skills Training: <http://www.chemeketa.edu/programs/ost>. The Occupational Skills Training (OST) program offers students with a career goal the opportunity to earn

college credit for worksite-based training at approved training sites throughout the state. Students enrolled in this short-term program (up to 44 credits) receive hands-on training at a worksite based on a curriculum personalized for their chosen occupation as well as individual abilities, skills and interests. The program is offered on an open entry/open exit basis so students may start the program any time during the year.

The college also offers numerous industrial apprenticeship programs, including Industrial Mechanics and Maintenance, Mechanical Maintenance and Electrician. In addition, the college offers the Employment Skills Training (EST) certificate in manufacturing, which is an individualized learning plan that combines college courses with specific hands-on instruction at a local employer to improve employability. The EST guides the student in gaining more education and training which develops the student's career path,.

Special partnerships with high schools and four-year schools: Chemeketa has adopted a holistic, cluster-based approach to the adoption of Career Pathways, and views them as part of the larger college redesign efforts. As such, the college views partnerships with both area high schools and regional four-year institutions as critical to its overall mission. The Mid-Willamette Education Consortium (www.mwec.org), in which the college plays an active role, supports projects and partnerships with high schools through the development of high school advising tools and models, pre-requisite course alignment and Pathway mapping tools in support of Perkins Programs of Study. More information on high school programs is available at <http://www.mwec.org/instructors/career-pathways.php>.

Chemeketa is committed to developing partnerships and articulation agreements with area high schools and the Oregon Institute of Technology (OIT) to ensure seamless programs of study. High school Amatrol learning modules with college credit are available at several high schools, including West Salem, Yamhill/Carlton, and McMinnville.

Other education, workforce, and economic development partnerships include:

- Advanced College Credit: Several dual credit courses offered each term to area high schools include Drafting, Machining Fundamentals and Welding.
- CCC/OIT Articulation: include Manufacturing Engineering Technician and Mechanical Engineering.
- VESL (Vocational English as a Second Language) programs in partnership with Manufacturing department, including Manufacturing Foundations and the Basic Manufacturing Technican certificate.

- Industrial Maintenance Operator Mechanic (IMOMs) program, in partnership with SEDCOR and local manufacturing industry.

Faculty Expertise/Specialized Knowledge/Skills: The Manufacturing Technology and Electronics Departments employ instructors and instructional assistants who are subject matter experts in all specialized fields. Both regular and adjunct faculty members have significant industry experience in their specific fields and hold advanced industry certifications, and are supported in additional professional development opportunities. The college employs professionals in the areas of machining and computer numerical control, computer-aided manufacturing, industrial design, electrical and manufacturing engineering, industrial automation, health and safety, industrial maintenance, drafting, and computer-aided design. Additionally, faculty members are all highly experienced in the technical education of adults and possess a diverse knowledge of the manufacturing-related fields.

Specialized Facilities/Equipment: Chemeketa's manufacturing-related facilities include welding, CNC and conventional machine shops and industrial process simulators in the Electronics and Machining labs. Classrooms are equipped as computer labs that are always up to technical standards for high-end CAD/CAM software, and the college maintains software licenses to a host of industry-demand programs and specialized packages. Instructors use a variety of teaching methods and modalities, including online and hybrid (classroom/online mix), two-way interactive video that links multiple sites, and workplace-based training. In Fall 2008, the college received bond funding for a new Industrial Technology building; now in the planning stages, it will be in place by Fall 2011.

Contract Training Capabilities:

The Chemeketa Center for Business and Industry (CCBI) has established itself as an excellent workforce and business development resource. CCBI is the home of the Small Business Development Center (SBDC) and the Customized Training department. The Center can identify performance gaps, offer training programs and assist businesses in building a high performance organization. CCBI has provided numerous regional businesses with customized trainings to meet their specific workforce needs: Examples of customized trainings for manufacturers include Business Literacy, Welding, Pneumatics and Hydraulics, CAD software, Solar Manufacturing Industry Standards, Silicon Wafer manufacturing, Manufacturing Supervisory Skills, Machining, Safety, and Blue Print Reading. See: www.chemek.cc.or.us/aboutus/locations/ted/index.html

The Department also serves as a broker for facilitation and consulting services. The CCBI is a member of a statewide training network of community colleges called Business Industry Training System. This network provides facility and training resources to member community colleges and respective employer communities.