Introduction

Drafters are the architects of the technical world, translating ideas into reality through detailed working drawings used in the development of products, buildings, and subdivisions. Chemeketa’s drafting technology program prepares you for these roles by providing training in the latest CAD software, including AutoCAD, which is essential for obtaining a CAD certificate.

The U.S. Bureau of Labor Statistics projects a 9% growth in drafting jobs due to increased construction and the demand for improved infrastructure. This growth particularly benefits those with comprehensive CAD training, such as AutoCAD certification.

Course Objectives

By the end of this CAD course, participants will be able to:

- Create accurate 2D and 3D drawings using CAD software.
- Produce architectural drawing sets for planning division approval.
- Develop structural drawing sets to meet industry standards.
- Collaborate effectively as a team to research data and create drawings.
- Generate civil drawings for planning division approval, including streets, lots, and subdivision utilities.
- Create mechanical drawing sets, including detailed and assembly drawings of parts.

Targeted Competencies

Upon completion of this CAD course, participants will possess competencies in:

- Mechanical Drafting
- Print Production
- CADD Designing
- Tool and Die Designing
- Urban Planning
- Construction Management

Understanding CAD Drafting, Drawing, and Planning Training

Certified CAD drafting, drawing, and planning training equips individuals with vital computer-aided design (CAD) skills for the architecture,

engineering, and construction sectors. This course covers CAD fundamentals, technical drawing, and project planning using industry-standard software.

By mastering CAD, participants will develop proficiency in creating precise drawings, understanding design principles, and executing projects efficiently. Upon completion, participants will earn a certification validating their CAD expertise, enhancing their career opportunities in these fields.

Course Content

Unit 1: The Fundamentals of CAD Drafting and Drawing

- The role of the drawing and drafting function.
- Effective planning management for the CAD drawing office.
- Key topics and problem areas in CAD drafting.

Unit 2: Enhancing CAD Planning and Drawing Skills

- Contractual issues in CAD drawing.
- Industrial designs, patents, and copyrights.
- Addressing productivity challenges.
- Using drafting tools, including CAD software, and checking drawings for accuracy and standards.

Unit 3: Standardization and Customization in CAD Drafting

- Standardization issues in CAD drafting.
- The importance of customization for productivity and accuracy.
- Future needs: intelligent drawings.

Unit 4: Quality Assurance in CAD Technical Drawing

- Drawing drafting technology and its role in the design development cycle.
- Implementing quality assurance measures in drafting.
- Managing contractual issues with drawings on projects.
- Using AutoCAD 2000 for efficient drafting.
- Implementing error prevention and standardization.

Unit 5: Implementation and Application

- **Class Workshop**: Developing program recommendations based on course topics.
- **Class Workshop**: Developing a personalized action plan for immediate implementation.
- Preparing job-specific documents, including objectives, procedures, forms, checklists, and feedback mechanisms.

Conclusion

This CAD Technical Drawing, Drafting, and Planning Skills Course offers a comprehensive curriculum designed to equip students with essential CAD drafting and planning skills. Upon completion, participants will earn a CAD certificate validating their proficiency in CAD drafting.

This certification is key for professionals seeking to enhance their careers with specialized AutoCAD training. Start your journey towards a rewarding career with our industry-leading CAD drafting certification program.