

Mechanical Drafting - Certificate of Specialization

+If you have completed coursework at another college and/or are starting in a semester other than a Fall term, please follow up with the Counseling Department to determine if this sequence is appropriate for your academic and career goals.

Program Description:

The drafting program is designed to prepare students for careers in industry as drafters or related occupations. Engineers require drafting skills, as do architects and designers. Drafting technicians are in short supply, affording many employment opportunities for qualified individuals. The techniques of drafting are used in many types of industries such as automotive, electronics, building construction, aeronautical/aerospace, machine design, advertising, illustrating, and engineering. The program provides students with entry-level skills and knowledge in the fields of computer mechanical, and architectural drafting. Competencies include knowledge of orthographic projection and isometric sketching, AutoCAD generated drawings, current practices in architectural drafting and construction technology, 2D and 3D drawings, drafting techniques such as clarity, line weight expression and accuracy to name a few. Upon completion of the program, students will be prepared for drafting positions in the following fields: civil, electrical, electronic, or mechanical.

Program Student Learning Outcome:

Demonstrate proficiency in the core skills and knowledge required for a drafting position in the civil, electrical, electronic or mechanical engineering fields.

Important Information: For students interested in earning an Associate's degree and/or transfer, please follow up with the Counseling Office for additional information @ <https://www.canyons.edu/counseling> or (661)362-3288/(661)362-3811.

Major courses are sequenced and **BOLDED** based on recommendations by the [Engineering Department](#).

First Semester (0-6 units minimum) FA = Fall; WI = Winter; SP = Spring; SU = Summer

Course	Title	Units	Major Courses
ENGR 110	Introduction to AutoCAD (FA, SP) <i>Note: Pre-requisite: Math 102 or 102X - Trigonometry</i>	3	Major
ENGR 114	Solids Modeling for Mechanical Drafting (FA, SP)	3	Major
MFGT 121 OR MFGT 131	CNC 1: Operation & Manual Programming (FA, SP) OR CAD/CAM I (FA, SP) Next offering will be Fall 2023.	3	Major
	Term Totals:	9	

Total Units: 9

Counseling Resources

Department Website: <https://www.canyons.edu/academics/manufacturing/>

Counseling Department: <https://www.canyons.edu/student-services/counseling/index.php>

Petition for Certificate of Specialization: Petitions are due in the fall/spring/summer term you will complete the requirements and may be submitted before your last term or up until the final day of the term. Petitions must be reviewed with a counselor and may be downloaded here: <https://www.canyons.edu/student-services/admissions/records/forms.php>

Career Resources

California Career Zone: www.cacareerzone.org

O*Net Online: www.onetonline.org

Bureau of Labor and Statistics: www.bls.gov

Occupational Outlook Handbook: <https://bls.gov/ooh>