Automated Machining - 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:

This certificate provides students training in CAD/CAM using MASTERCAM and CNC Programming specifically used in the automotive, aerospace, and manufacturing industries. Upon completion of the certificate, students will be able to work in the automotive, aerospace, and manufacturing industries as a CAD/CAM design engineer, machinist, CNC operator, or CNC programmer.

Program Student Learning Outcome:

Students will be able to accurately perform a variety of CAD/CAM and CNC application and calculations using appropriate equipment.

<u>Important Information:</u> 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 Manufacturing Technology Department.

First Semester (3-12 units minimum)

FA = Fall; WI = Winter; SP = Spring; SU = Summer

Course	Title	Units	Major Courses
First 8 Weeks of Term			
MFGT 121	CNC 1: Operation & Manual Programming (FA, SP) <i>Planned for Fall 2023</i>	3	Major
MFGT 131	CAD/CAM I (FA, SP) - Planned for Fall 2023	3	Major
Second 8 Weeks of Term			
MFGT 122	CNC 2: Concepts & Programming (FA, SP) Planned Fall 2023 NOTE: MFGT 121 is a pre-requisite	3	Major
MFGT 132	CAD/CAM II (FA, SP) Planned for Fall 2023 NOTE: MFGT 131 is a pre-requisite	3	Major
	Term Totals:	6	

Total Units: 12

Counseling Resources

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

Counseling Department: https://www.canyons.edu/studentservices/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/studentservices/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