



Career Education

3D MECHANICAL DRAFTING

23-25 unit Certificate | Associate of Science Degree

3D mechanical drafting uses software to create three-dimensional models of mechanical parts and assemblies, allowing for detailed visualization, simulation, and communication of designs before manufacturing

Career Outlook:

*Labor market data from Onetonline.org for state of CA in Riverside-San Bernardino Counties.

Mechanical Drafter
Wage Range: \$21.98-\$37.29

Calibration Technicians
Wage Range: \$29.05-\$42.99

Job Openings in CA: 4,000
expected 2023-2033*

Job Openings in CA: 9,200
expected 2023-2033*

24/25 Course Catalog-NAS995/NAS995B/NAS995C/NCE995

For more information on Career Education programs, visit us: www.norcollege.edu/careereducation.
For program, course sequencing, or scheduling, contact the Norco College Counseling Department at 951-372-7101. You can also visit our website: norcollege.edu/counseling



3D MECHANICAL DRAFTING

23-25 unit certificate | 60+ unit Associate of Science Degree

Additional general education courses required to earn Associate Degree of Science in Engineering Technology : 3D Mechanical Drafting.
Please refer to the Norco College Catalog for general education requirements or visit Counseling Center. Visit: www.norcocollege.edu/catalog

DFT/ENE-21 Drafting (3 units)

Fundamentals of mechanical drawing including lettering, instruments and their uses, geometric construction, types of projection, free hand drawing.

DFT/ENE-27 Technical Communications (3 units)

Procedures for organizing and presenting technical data through informal and formal documents and presentations.

DFT/ENE-51 Print Reading (2 units)

Study of blueprints, interpretation, projection, symbols and abbreviations.

DFT/ENE-42 SolidWorks I (3 units)

Introduction to 3D parametric solid modeling with SolidWorks. Students will begin with basic parametric solid modeling techniques and advance into complex assemblies requiring animation.

DFT/ENE-30 Computer Aided Drafting (3 units)

Computer aided drafting is a 2D technical process in which engineering and design-related professionals use computer systems and software to draft architecture and objects.

DFT/ENE-42B SolidWorks II (3 units)

Prerequisite: ENE-42 or prior SolidWorks experience.

An advanced course in using the three-dimensional parametric solid-modeler SolidWorks. Topics include extruding, sweeping, lofting, shelling, assemblies, and animation.

ENE-52 Geometric Dimensioning & Tolerancing (3 units)

Prepares students to read, interpret, and use ANSI Y14.5M, the current standard for drafting.

Plus, an additional 3-5 units from elective courses:

MAT-36 Trigonometry (4 units)

MAN-56 CNC Machine Setup and Operation (4 units)

MAN-35 Computer Aided Manufacturing-Mastercam (5 units)

DFT-62 Basic Fusion 360 (3 units)

Students must complete all required courses (23-25 units) with a grade of C or better to earn certificate of achievement and can add general education courses with the certificate courses as described in Norco College course catalog to earn Associate's degree. See course catalog for graduation requirements.

The Riverside Community College District does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies or practices: District Compliance Officer, 3801 Market Street, Riverside, CA 92501, (951) 222-8039.