

Computer Numerical Control (CNC) Operator

17 unit certificate

Computer control programmers and operators use computer numerically controlled (CNC) machines to produce a wide variety of products, from automobile engines to computer keyboards.

Required Courses

ENE-42 SolidWorks I (3 units)*

This course is designed to introduce the student to three-dimensional parametric solid modeling with SolidWorks.

ENE-51 Blueprint Reading (2 units)*

Beginning course in the study of blueprints and their interpretation, types of projection, symbols and abbreviations.

MAN-36 General Machine Shop and Theory of Machining (4 units)

An introduction to the basic setup and operating of the lathe, mill, saw, drill press, and grinder. Safety, blueprint reading, measurement, shop math, tool grinding, bench work and layout, cutting concepts, and speed and feed calculations are also included. Emphasis will be on the fundamentals of bench work and layout related to the National Institute of Metalworking Skills (NIMS) standards.

MAN/ELE-55 Occupational Safety & Health Administration (OSHA) Standards for General Industry (1 unit)

Covers OSHA policies, procedures and standards as well as safety for general industry and health principles.

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

Fundamental skills related to setup and operation of CNC (Computer Numerically Controlled) machine tools.

MAN-57 CNC Program Writing (3 units)

Intro to the manual CNC program writing. This course includes the Cartesian coordinate system, absolute/incremental programming, circular interpolation, cutter radius compensation, canned cycles, and other programming techniques related to CNC machine tools. Students will gain hands-on experience with CNC machine tools.

*This class transfers toward one or more CSUSB or CalPoly majors. Visit www.assist.org or the Counseling office for details.

Computer Numerical Control (CNC) Operator

Tuition \$46/unit • Duration of Study: 8 months

A Certificate in CNC Operator will be awarded upon completion of the required courses (17 units). Please refer to the Norco College Catalog or visit the Counseling Center.

Job & Wage Information

- CNC Machine or Lathe Operator
Wage Range*: \$14.95-22.68
2% increase expected in CA 2019-2029; 950 openings annually
More information: <http://bit.ly/MfgTechNC>
- Maintenance Machinery Worker
Wage Range*: \$19.68-31.31
7% increase expected in CA 2019-2029; 870 openings annually
More information: <http://bit.ly/MachMaintNC>

*2020, Riverside/Ontario/San Bernardino Metro Area

What type of interests might be a good fit for this career choice?



Realistic

People who have athletic or mechanical ability and prefer to work with objects, machines and tools. Preference for working with things over people.

For more information on careers that fit this category of interests, visit the Career Center in the Center for Student Success.

What's Your School?

 SCHOOL OF
**Science, Technology,
Engineering & Mathematics**

Visit www.norcollege.edu/STEM
for more information about this program.