

## Conventional Machine Operator Manufacturing Technology • 10 unit certificate

Within our apprenticeship program, students can earn the Conventional Machine Operator certificate. This certificate is designed to prepare students with basic entry level machine operator skills, safety knowledge, theory, and quality control skills in manufacturing processes.

### Required Course:

### APP-450 Apprenticeship Work Experience plus

### Additional 10 units of Required Courses:

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.

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.

ENE-42 SolidWorks I (3 units)

Advisory: PC computer experience recommended CIS-1A  
This course is designed to introduce the student to three-dimensional parametric solid modeling with SolidWorks. Students will begin with basic parametric solid modeling techniques advancing into complex assemblies requiring animation.

Professional development courses recommended in the beginning of your program to help students get ready for their career:

\*PDS-818 The Successful Job Search

\*GUI-47 Career Exploration and Life Planning

### Program Learning Outcomes:

- **Demonstrate aptitude in safely setting and operating the lathe, mill, drill press, saw, and grinder.**
- **Demonstrate use of gages (gage blocks and pins), calculate angles for work setup, utilize the proper precision measuring tools when machining.**
- **Create parts specified by the National Institute of Metalworking Skills using conventional machining.**
- **Establish a systematic approach to recognize the essential information given on a blueprint.**

# Apprenticeship Program



## Conventional Machine Operator

### Tuition-FREE

The Apprenticeship program is an Industry-led state certified program, which includes on-the-job training combined with directed education to earn a Certificate in Conventional Machine Operator, will be awarded upon completion of the required courses (10 units).

## Job & Wage Information

Work in the industry while going to school and upon completion of this program, students may be qualified for gainful employment in the following careers:

- Machine Operator
- Production Technician
- Industrial Engineering Technician
- Manufacturing Engineering Technician
- Tool Setter

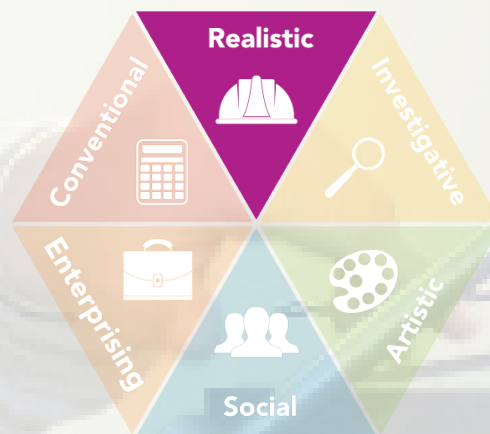
For current wage and labor data, visit O\*NET at :

<https://www.onetonline.org>

- Conventional Machinist  
Wage Range\*: \$15.13-27.93  
4% increase expected in CA 2020-2030 3,770 openings annually  
More information: <http://bit.ly/MachinistNC>

\*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?

NORCO COLLEGE  
SCHOOL OF  
Science, Technology,  
Engineering & Mathematics

Visit [www.norcocollege.edu/sd/apprenticeship](http://www.norcocollege.edu/sd/apprenticeship) for more information about this program.