

COMPUTER NUMERICAL CONTROL (CNC) MACHINE TOOL OPERATOR – ASSOCIATE IN SCIENCE DEGREE, CERTIFICATE OF ACHIEVEMENT

- CSU Breadth (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/#csubreadthtext>)
- IGETC (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/#igetctext>)

Top Code:

0956.30

The curriculum prepares students for basic to advanced training in conventional machining, computer numerical programming and operation, advanced operations. The program qualifies students with the central skills necessary for employment in the machining industry. The curriculum includes; programming, setup, operation, code verification, tooling and toolholders, work offsets and tool offsets.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes

- Explain the fundamentals of Machine Shop theory.
- Utilize material for proper function and machine tool methods as it relates to those materials.
- Program CNC Mill and CNC Lathes for precision manufacturing.

Requirements for the Certificate of Achievement

Code	Title	Units
MACH 101	BEGINNING METALWORKING SKILLS	3
MACH 110	BLUEPRINT READING	1
MACH 120	COMPUTER-AIDED MANUFACTURING (CAM)	3
MACH 121	COMPUTER-AIDED MANUFACTURING (CAD) ADVANCED	3
MACH 130	CNC MILL MACHINING	3
MACH 131	CNC MILL MACHINING ADVANCED	3
MACH 135	CNC LATHE MACHINING	3
MACH 136	CNC LATHE MACHINING ADVANCED	3
Total Units		22

General Education Requirements for the Associate in Science Degree

- General Information (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/>)
- PCC Local Gen Ed (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/#pcclocaltext>)