

# MANUAL LATHE AND MILLING MACHINE OPERATOR CERTIFICATE OF ACHIEVEMENT

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This certificate is designed to prepare students for entry-level employment in manufacturing using machine tools such as lathes and milling machines to produce precision metal parts.

Code	Title	Units
<b>Required Courses:</b>		
MACH 021	Machine Shop	3
MACH 022	Machine Shop II	4
MACH 075	Computer Aided Design/Computer Aided Manufacturing Software	3
TECALC 087	Technical Calculations	4
MACH 090	Mechanical Print Reading	3
MACH 098	Machinist Technology Work Experience	1-4
<b>Total Units</b>		<b>18-21</b>

*Students working for certificates must have a basic knowledge of arithmetic, reading and writing in order to learn and work in the occupations they select.*

***This is a Gainful Employment Program***

## **Program Learning Outcomes**

**At the completion of this program, students will be able to:**

- a. Articulate the operation and maintenance procedures used for machine tools.
- b. Duplicate current industrial computer aided-drawing practices.
- c. Illustrate the procedures for the set-up and operation of manual machining centers.