



# Machine Tool Technology

curriculum code: 2027 | HEGIS code: 5315

minimum credit hours required: 26

This certificate program provides foundation skills necessary for workforce personnel whose jobs require knowledge of machine tools. It will provide a credential that indicates to employers that the student has completed fundamental coursework in machine tools. Students will become proficient in the operation of basic machine tools such as lathes, milling machines, grinders, drill presses, and precision measurement equipment. Basic courses are designed to build and strengthen knowledge of machine tool theory. Courses in solid modeling and CNC programming are included to provide an introduction to two specific areas that are important for an overall understanding of the field. Students will also develop skills in basic mathematics and writing appropriate to a machinist position.

CERTIFICATE REQUIREMENTS	CREDITS
MCT 1240: Engineering Drawing with AutoCAD	4
MCT 1270: Machine Theory and Operations	3
MCT 1280: CNC Manual Programming of Machine Tools	3
MCT 1300: Machine Tool Technology II	3
MCT 1310: Industrial Safety & Quality Practices	2
MCT 1320: Production Processes & Maintenance Awareness	2
MCT 1340: Manufacturing Drawing and GD&T	4
MCT 1380: Introduction to Solid Modeling	3
MCT 2340: Dimensional Metrology	2
<b>TOTAL CREDITS</b>	<b>26</b>