

MANUFACTURING TECHNOLOGY, BASIC Certificate

Minimum Credits: 24.0
Contact Hours: 34.0

INTRODUCTION: This certificate program develops student skills in the operation of lathes, milling machines, and surface grinders. The student will also become proficient in applied mathematics and blueprint reading and will understand the theory of machine shop practices. There will also be an introduction to the operation of computer numerical control (CNC) equipment. Completion of this certificate will qualify the student for entry-level employment in basic machining and manufacturing operations.

FIRST SEMESTER (FALL)

COURSE	TITLE	CREDITS	CONTACT HOURS
MFG 101	Machining Processes I ^A	4.0	6.0
MFG 120	Print Interpretation & Processes ^A	3.0	4.0
MTH 110	Technical Math I	3.0	4.0
MET 200	Material Science	<u>3.0</u>	<u>4.0</u>
COURSE CREDITS/CONTACT HOURS:		13.0	18.0

SECOND SEMESTER (SPRING)

COURSE	TITLE	CREDITS	CONTACT HOURS
MFG 102	Machining Processes II ^A	6.0	10.0
MTH 112	Technical Math II	3.0	4.0
	Technical Elective ^A	<u>3.0</u>	<u>4.0</u>
COURSE CREDITS/CONTACT HOURS:		<u>12.0</u>	<u>18.0</u>
TOTAL MINIMUM PROGRAM CREDITS/CONTACT HOURS:		25.0	36.0

NOTES:

^AIncluded in occupational specialty – GPA of 2.0 or higher must be maintained in the area of occupational specialty.

Technical electives will consist of manufacturing-related courses such as, but not limited to: AutoCAD and Welding Manufacturing Process, Summer Co-op. See your program advisor to determine an applicable course.

An Associate in Applied Science Degree (AAS) in CNC Manufacturing Technology can be earned by completing the above program and the Advanced CAD/CAM certificate program and the following courses:

COURSE	Credit/Contact Hours
ENG 120 or ENG 111 Applied Communication or English Composition I	3.0 / 3.0
ENG 123 or ENG 112 Technical Communications or English Composition II	3.0 / 3.0
PHY 111 Applied Physics	3.0 / 4.0
PLS 221 American Government & Politics	<u>3.0 / 3.0</u>
TOTAL	12.0 / 13.0