Machining & Manufacturing Technology Program Alignment – CIP: 48.0501

Effective: Fall 2024 Issued 12/16/22



Certificate A 16-29 Credit Hours	Machining & Mfg Technology Level 1 • Safety/OSHA 10 or 30 • Quality Control & Inspection • Metallurgy • Workplace Ethics • Print Reading
Certificate B 30-44 Credit Hours	Machining & Mfg Technology Level 2 Level 1 Requirements Bench Work CNC Operations Machining I or CNC Milling I
Certificate C 45-59 Credit Hours	Machining & Mfg Technology Level 3 Level 2 Requirements Machining II or CNC Lathe Machine Tool Processes
A.A.S. 60-68 Credit Hours	Machining & Mfg Technology Degree • Level 3 Requirements • Minimum of 15 Credit Hours of General Education

Required Courses within Program

Common Courses	13-14 credits:
Quality Control & Inspection	1 credit
Metallurgy	1 credit
Bench Work	1 credit
CNC Operations	3 credits
Machining I or CNC Milling I	3 credits
Machining II or CNC Lathe	3 credits
Machine Tool Processes	1-2 credits
Support Courses*	4-8 credits:
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Safety/OSHA 10 or 30	1-3 credits
Workplace Ethics	1-2 credits
Print Reading	2-3 credits

Course list sequence has no implication on course scheduling by colleges.

Institutions may add additional competencies based on local demand.

Competencies identified within the Common Courses and/or Support Courses represent opportunities for articulation with K-12.

*Institutions may utilize existing like course titles for Support Courses that adhere to the agreed upon course lengths.

Notes

Specifics pertaining to Machining & Manufacturing Technology programs:

1. Add courses as needed specific to local B&I needs to meet the minimum credit hours at each level.