



South Central College
Program Design

CERT 3518/2449 Machine Tool Technology Right Skills Now

Program Information

Instructional Level Certificate

Career Cluster Engineering, Manufacturing & Technology

Description

This is an entry-level certificate, providing a pathway to the longer MTT diploma and A.A.S. degree. It provides an introduction to multiple elements of CNC production, including working with engineering drawings, CNC programming, lathe turning, vertical milling, and grinding. During this certificate, learners will have the opportunity to receive national credentials from the National Institute for Metalworking Skills (NIMS).

Program Admission Dates (Fall and/or Spring)

Fall

Program Location (North Mankato and/or Faribault)

North Mankato and Faribault

Program Student Learning Outcomes

- 1 Operate industry-specific computer software
- 2 Demonstrate computer machining skills
- 3 Demonstrate safe machining practices
- 4 Produce quality machined parts
- 5 Evaluate the quality of machined parts against industry standards

Program Configurations

Full Time Schedule

Credits

Technical Course 17

Total Credits 17

Semester 1 Fall/Spring

Course #	Course Title	Credits	Function
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MTT 1110	CNC Milling Level I	5	Technical Course
MTT 1120	CNC Turning Level I	5	Technical Course
MTT 1130	Job Planning, Benchwork and Layout Level I	3	Technical Course
MTT 1140	Measurement, Materials and Safety Level I	3	Technical Course
MTT 1150	Machining Computations	1	Technical Course

Part Time Schedule

Semester 1

Course #	Course Title	Credits	Function
MTT 1130	Job Planning, Benchwork and Layout Level I	3	
MTT 1140	Measurement, Materials and Safety Level I	3	
MTT 1150	Machining Computations	1	

Semester 2

Course #	Course Title	Credits	Function
MTT 1110	CNC Milling Level I	5	
MTT 1120	CNC Turning Level I	5	

Program Course List

Number	Title	Credits	Pre/Corequisites
MTT 1110	CNC Milling Level I	5	Declare MTT as a major.
MTT 1120	CNC Turning Level I	5	Declare MTT as a major.
MTT 1130	Job Planning, Benchwork and Layout Level I	3	Declare MTT as a major.
MTT 1140	Measurement, Materials and Safety Level I	3	Declare MTT as a major.
MTT 1150	Machining Computations	1	Declare MTT as a major.