



Automated Machining Certificate - 16 credits

Program Area: Integrated Manufacturing Machine Tool (Fall 2022)

*****REMEMBER TO REGISTER EARLY*****

Program Description

This 16 credit certificate provides advanced training for people already working as machinists. It gives them a chance to improve their skills with the latest fully-automated machine tools available today. The CNC machines will be set up and programmed keeping lights out machining in mind. CAM will also be used to create programs for these machines.

Required Courses

Number	Name	Credits	Term
MTCC 2600	CNC Automation Programming	1	
MTCC 2602	Swiss Automation	3	
MTCC 2604	CNC Mill/Turn Application	4	
MTCC 2606	CNC 4 Axis Horizontal Automation	4	
Elective Credits	Choose 4 elective credits from any MTCC course.	4	

Total Credits

16

Program Outcomes

- Manufacture mating parts and assemblies
- Perform set ups and use milling fixtures to manufacture parts
- Setup and machine compound angles using various processes
- Build jigs and fixtures to complete manufacturing processes
- Manufacture and inspect quality products

Pre-program Requirements

Completion of an AAS or Diploma degree in the Machine Technology program and/or instructor's consent.

Successful entry into this program requires a specific level of skill in the areas of English, reading, and mathematics. Program entry will depend, in part, on meeting the prerequisites listed below:

English/Reading:

- Eligible for ENGL 1106 - College Composition I, or
- Completion of ENGL/READ 0950/0955 (or equivalent or higher). ENGL/READ 0950/0955 may be taken concurrently with Semester I coursework.

Mathematics:

- A score of 250 or higher on the Arithmetic portion of the Accuplacer.

There are other ways to qualify. Visit [Course Placement](http://lsc.edu/course-placement) (lsc.edu/course-placement) to find out more.

For interpretation of test results and selection of appropriate coursework; or general information about the program, admissions, financial aid, and getting started at LSC, contact the [professional advising team](mailto:advising@lsc.edu) (advising@lsc.edu) or 218-733-7601



Automated Machining Certificate - 16 credits

Program Area: Integrated Manufacturing Machine Tool (Fall 2022)

*****REMEMBER TO REGISTER EARLY*****

For more information about the Automated Machining Certificate including course descriptions, course prerequisites, and program report, see the [program website](https://degrees.lsc.edu/cnc-machine/) (https://degrees.lsc.edu/cnc-machine/)

or

Contact Faculty Advisor [Max Udovich](mailto:max.udovich@lsc.edu) (max.udovich@lsc.edu) at 218-733-7732



MINNESOTA STATE

CIP Code: 48.0510
Minnesota State Program ID: 7578
LSC Major ID: 5119

Created: 04/03/07
AASC Approval: 3/4/15
Updated: 2/1/22

All courses in diploma and/or certificate programs are acceptable for credit toward Lake Superior College degree programs as indicated on individual program planners. This is not a contract; Lake Superior College reserves the right to change the planner as necessary. This document is available in alternative formats upon request, by contacting [Disability Services](#) or (218) 733-7650 or MRS/TTY (800) 627-3529.