



Machine Production Technologist Diploma - 34 credits

Program Area: Integrated Manufacturing Machine Tool (Fall 2019)

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

Program Description

The Machine Production Technologist Diploma is a one-year program designed to provide an entry level career pathway in advanced manufacturing, specific to the field of Machine Tool Technology. This diploma prepares the student for employment as a manual and Computer Numerical Controlled (CNC) machine operator or technologist. Skill development includes basic shop operations and part manufacturing. The program introduces CNC basic programming and operation of common CNC machine tools. Basic inspection of parts in conjunction with quality systems is included in the program.

The Machine Production Technologist Diploma transfers seamlessly into LSC's Advanced Machine Production Technologist AAS Degree. Most of the courses in this program are offered on-site in a lab setting with some of the courses offered online.

Required Courses

Number	Name	Credits	Term
CADE 1468	Solidworks I	3	
CMAE 1514	Safety Awareness	2	
CMAE 1518	Manufacturing Processes and Production	2	
CMAE 1522	Quality Practices	2	
CMAE 1526	Maintenance Awareness	2	
INMG 1400	Intro to Manufacturing Technology	4	
INMG 1410	Mechanical Blueprint Reading	3	
MTCC 1432	Quality Methods	2	
MTCC 1505*	Surface Grinding	2	
MTCC 1603*	Turning	2	
MTCC 1604*	Milling	2	
MTCC 1620	CNC Basic Programming	2	
MTCC 2504*	CAD/CAM	3	
WLDG 1560	Gas Metal Arc Welding I	3	

Total Credits **34**

*Requires a prerequisite or a concurrent course

Program Outcomes

- Interpret engineering drawings and prints
- Perform basic setup and operate manual metal working machines
- Write basic programs and operate CNC machine tools
- Perform mathematical calculation of shop problems
- Use basic CAD and CAM programs to support machine operations

Pre-program Requirements

To begin your career in Machine Production Technology, you need to be at a specific skill level in English/reading and mathematics.

English/Reading:

- A score of 78 or higher on the reading comprehension portion of the Accuplacer, or
- Completion of ENGL/READ 0950 or 0955 (or equivalent course or higher). ENGL/READ 0955 may be taken concurrently with Semester I coursework.

Mathematics:

- A score of 33 or higher on the Elementary Algebra Skills portion of the Accuplacer, or
- Completion of MATH 0520 (or equivalent course or higher), and with a grade of "C" or better. MATH 0520 may be taken concurrently with Semester I coursework.



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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:pat@lsc.edu) (pat@lsc.edu) or 218-733-7601

For specific information about the Machine Production Technologist Diploma, including course descriptions, course prerequisites, the gainful employment disclosure, and potential career opportunities, see the [program website](#)

- OR -

Contact Faculty Advisor, [Max Udovich](#) or 218-733-7732



MINNESOTA STATE

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