



## Advanced Machine Production Technologist AAS Degree - 60 credits

Program Area: Integrated Manufacturing Machine Tool (Fall 2017)

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

### Program Description

The Advanced Machine Production Technologist AAS Degree is a two-year program designed to provide a career pathway in advanced manufacturing, specific to the field of Machine Tool Technology. This 60 credit AAS is designed to prepare the student for employment as an advanced 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.

*Many of the courses in the INMG Advanced Machine Production technologist AAS Degree are offered on-site in a lab setting with some of the courses offered online.*

### Program Outcomes

- Operate various metal working machines
- Write programs and operate CNC machine tools
- Perform mathematical shop calculations
- Use CAD and CAM programs
- Interpret advanced engineering drawings and blueprints

### 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	
INMG 1412*	Advanced 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	
MTCC 1530	Water Jet Cutting Processes	2	
MTCC 2502*	CNC Turning	3	
MTCC 2564*	CNC Horizontal 4 Axis Machining	3	
WLDG 1560	Gas Metal Arc Welding I	3	
General Education Electives	Choose from at least 3 goals areas of the Minnesota Transfer Curriculum Goal Areas 1-10	15	

**Total Credits 60**

\*Requires a prerequisite or a concurrent course

### Pre-program Requirements

To begin your career in Advanced 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 MATH0520 (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 at: [pat@lsc.edu](mailto:pat@lsc.edu) or 218-733-7601

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For specific information about the Advanced Machine Production Technologist AAS Degree, including  
course descriptions, course prerequisites, the gainful employment disclosure, and potential career  
opportunities, see program website: <https://degrees.lsc.edu>

**- OR -**

Contact Faculty Advisors, Max Udovich: [m.udovich@lsc.edu](mailto:m.udovich@lsc.edu) or 218-733-7732 or  
Randy Antonich: [randy.antonich@lsc.edu](mailto:randy.antonich@lsc.edu) or 218-733-7641



MINNESOTA STATE

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