



## Advanced Welding Technologist AAS Degree - 60 credits

Program Area: Integrated Manufacturing Welding (Fall 2017)

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

### Program Description

The Advanced Welding Technologist AAS Degree is a two-year program designed to provide an advanced career pathway in manufacturing, specific to the field of Welding Technology. This 60 credit AAS is designed to prepare the student for employment as an intermediate to advanced welding or fabrication technologist. This program allows students to gain the information and to develop skills used in the welding industry. This program covers GMAW, GTAW, FCAW, SMAW and OXY/Fuel process. Instruction includes classroom lectures and demonstrations, as well as hands-on projects in a lab setting.

*Most of the courses in the INMG Advanced Welding Technologist AAS Degree are offered on-site in a lab setting with some of the courses offered online.*

### Program Outcomes

- Demonstrate proper welder use and safety
- Interpret welding blueprints and drawings
- Interpret weld symbols
- Demonstrate proper welding processes
- Demonstrate cutting process
- Demonstrate various weld transfers
- Select base metals with weld-ability
- Demonstrate weld and setup using GTAW
- Demonstrate weld and setup using GMAW
- Demonstrate proper GMAW wire selection
- Demonstrate proper fabrication layout
- Prepare student for welding certification

### 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	
WLDG 1500	Blueprint Reading for Welders	3	
WLDG 1520	Gas Tungsten Arc Welding I	3	
WLDG 1540	Shielded Metal Arc Welding I	3	
WLDG 1560	Gas Metal Arc Welding I	3	
WLDG 1570*	Flux Cored Arc Welding I	3	
WLDG 1590* or- MTCC 1530	Introduction to Robotic Welding or Water Jet Cutting Processes	2	
MTCC 1600	Engineering Materials	1	
WLDG 1522*	Gas Tungsten Arc Welding II	3	
WLDG 1542*	Shielded Metal Arc Welding II	3	
WLDG 1562*	Gas Metal Arc Welding II	3	
WLDG 1572*	Flux Cored Arc Welding II	3	
General Education Electives	<i>Choose from at least 3 goals areas of the Minnesota Transfer Curriculum Goal Areas 1-10</i>	15	

**Total Credits** **60**

\*Requires a prerequisite or a concurrent course



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### Pre-program Requirements

To begin your career in Advanced Welding 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 Welding 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 Advisor, Jay Vittone: [j.vittone@lsc.edu](mailto:j.vittone@lsc.edu) or 218-733-7705



MINNESOTA STATE

CIP Code: 48.0508  
MnSCU Program ID: 13-547-5552  
LSC Major ID: 6112

Created: 2/4/16  
AASC Approval: 3/2/16  
Updated: 3/1/17

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