



## Welding Certificate - 24 credits

Program Area: Integrated Manufacturing Welding (Fall 2024)

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

### Program Description

The certificate is designed to provide a basic working knowledge of Integrated Manufacturing, and/or enhance the education of a student who may come in contact with Welding, Machine Tool, and Engineering CAD Technology through another related technical field of study.

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### Required Courses

Number	Name	Credits	Term
CADE 1468*	Solidworks I	3	
INMG 1400	Introduction to Manufacturing Technology	4	
INMG 1410*	Mechanical Print Reading	3	
MTCC 1600	Engineering Materials	1	
WLDG 1560	Gas Metal Arc Welding	3	
WLDG 1520	Gas Tungsten Arc Welding I	3	
WLDG 1540	Shielded Metal Arc Welding	3	
MTCC 1603*	Turning	2	
MTCC 2500*	CNC Mill Conversational	2	

**Total Credits** **24**

\*Requires a prerequisite or a concurrent course

### Program Outcomes

- Demonstrate the proper use of various saws
- Use basic safety skills
- Calculate and set RPMs
- Use four-jaw chuck, turn between centers, and cut tapers
- Drill and bore holes
- Use edge finder
- Square work piece
- Cut pipe threads
- Cut acme threads
- Program using conversational language
- Set up and run parts

### Pre-program Requirements

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

#### English/Reading:

- Eligible for ENGL/READ 0955 – Read/Write College Prep: Advanced, or
- Completion of ENGL/READ 0950 or 0955 (or equivalent course or higher). ENGL/READ 0950 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/Accuplacer) (lsc.edu/Accuplacer) 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



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For more information about the Welding Certificate including course descriptions, course prerequisites, the program report, and potential career opportunities, see the [program website](https://degrees.lsc.edu/welding-certificate/) (<https://degrees.lsc.edu/welding-certificate/>)

or

Contact Faculty Advisor [Matthew Farchmin](mailto:matthew.farchmin@lsc.edu) (matthew.farchmin@lsc.edu) at 218-733-6907



MINNESOTA STATE

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