



## Welding Certificate - 24 credits

Program Area: Integrated Manufacturing Welding (Fall 2021)

**\*\*\*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.

*This 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. This certificate is not intended to take the place of either the two-year AAS degree or the two-year diplomas from any of the Integrated Manufacturing Programs.*

### Required Courses

Number	Name	Credits	Term
CADE 1468	Solidworks I	3	
INMG 1400	Introduction to Manufacturing Technology	4	
INMG 1410	Mechanical Blueprint 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



## Welding Certificate - 24 credits

Program Area: Integrated Manufacturing Welding (Fall 2021)

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

---

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 Advisors [Jay Vittone](mailto:jay.vittone@lsc.edu) (jay.vittone@lsc.edu) at 218-733-7705 or [Matthew Farchmin](mailto:matthew.farchmin@lsc.edu) (matthew.farchmin@lsc.edu) at 218-733-6907



MINNESOTA STATE

CIP Code: 48.0508  
Minnesota State Program ID: 13-013-0510  
LSC Major ID: 6110

Created: 3/4/15  
AASC Approval: 3/4/15  
Updated: 2/1/21

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.