

Welding Diploma - 65 credits

Program Area: Integrated Manufacturing Welding (Fall 2019)

REMEMBER TO REGISTER EARLY

Program Description

The Welding Diploma is a two-year program designed to provide an advanced career pathway in manufacturing, specific to the field of Welding. This 65-credit diploma is designed to prepare the student for employment as an intermediate to advanced welder or fabricator. This program allows students to gain the information and to develop skills used in the welding industry. This program covers GMAW, GTAW, FCAW, SMAW. Instruction includes classroom lectures and demonstrations, as well as hands-on projects in a lab setting.

Program Outcomes

- Demonstrate an understanding of welding equipment and proper safety
- Demonstrate an understanding of blueprints and blueprint reading
- Demonstrate an understanding of proper welding processes
- Demonstrate an understanding of cutting processes
- Demonstrate an understanding of different weld transfers
- Select metals based upon weldability
- Demonstrate an understanding of TIG welding and setup
- Demonstrate an understanding of MIG welding and setup
- Understand MIG wire selection
- Demonstrate an understanding of proper layout
- Understand weld symbols
- Prepare student for welding certification

Required Courses

Number	Name	Credits	Term
CADE 1468	Solidworks I	3	
INMG 1400	Intro to Manufacturing	4	
	Technology	4	
INMG 1410	Mechanical Blueprint	3	
	Reading	0	
INMG 1420	Design Application	3	
	Concepts I		
WLDG 1560	Gas Metal Arc Welding I	3	
INMG 1422*	Design Application	3	
	Concepts II	3	
WLDG 1500	Blueprint Reading for	3	
	Welders		
WLDG 1520	Gas Tungsten Arc Welding I	3	
WLDG 1540	Shielded Metal Arc Welding	3	
	I		
WLDG 1570*	Flux Cored Arc Welding I	3	
WLDG 1522*	Gas Tungsten Arc Welding	3	
	II	J	
WLDG 1542*	Shielded Metal Arc Welding	3	
	II		
WLDG 1562*	Gas Metal Arc Welding II	3	
WLDG 1564*	Gas Metal Arc Welding III	3	
WLDG 1572*	Flux Cored Arc Welding II	3	
WLDG 1580*	GMAW Fabrication Methods	3	
COMM 1601	Interviewing Procedure and	1	
	Practice	ı	
WLDG 1524*	Gas Tungsten Arc Welding	3	
	III	J	
WLDG 1544*	Shielded Metal Arc Welding	3	
	III	J	
WLDG 1550*	CNC Plasma and Cutting	3	
	Processes		
WLDG 1582*	GTAW Fabrication Methods	3	
WLDG 1590*	Introduction to Robotic	2	
	Training		
WLDG 2502	Weld Qualification	1	

Total Credits

65

Pre-program Requirements

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

^{*}Requires a prerequisite or a concurrent course



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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). MATH 0520 may be taken concurrently with Semester I coursework

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 team at Professional Advising Team (pat@lsc.edu) or 218-733-7601

For more information about the Welding Diploma including course descriptions, course prerequisites, the gainful employment disclosure, and potential career opportunities, see Program Website (https://degrees.lsc.edu/welding-diploma/)

- or -

Contact Faculty Advisors: <u>Jay Vittone</u> (j.vittone@lsc.edu) or 218-733-7705 or <u>Matthew Farchmim</u> (matthew.farchmin@lsc.edu) or 218-733-6907

MINNESOTA STATE

CIP Code: 48.0508 Minnesota State Program ID: 7811

LSC Major ID: 6109

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