

# Intermediate Manufacturing Welding: GMAW, SMAW, FCAW, and Robotics Diploma Courses

<b>Award</b>	Diploma
<b>Credits</b>	36
<b>Program Start</b>	Fall
<b>Time to Complete</b>	9 months
<b>Course Format</b>	Face-to-Face

## 2023–2024 Suggested Sequence of Study



**The following suggested sequence of study is for new full-time students starting the program Fall 2023.** Part-time students should visit with a program advisor for a modified sequence of study.



**When registering for classes refer to Self-Service > Student Planning to view your specific program requirements, your progress, and ensure proper registration.**



Courses are subject to change.

- ◆ General education course.
- ▣ Non-transfer general education course.
- ▶ Course has a prerequisite and/or corequisite.
- 8WK1** Course meets the first 8 weeks of the term.
- 8WK2** Course meets the second 8 weeks of the term.

**Term 1 — Fall**

WEL-228	Introduction to Welding, Safety, and Health of Welders: SENSE1	8WK1	1
WEL-233	Print Reading and Welding Symbol Interpretation: SENSE1	8WK1	3
WEL-274	Shielded Metal Arc Welding I: SENSE1 ▶	8WK1	3
WEL-374	SMAW Developmental I ▶	8WK1	2
WEL-245	Gas Metal Arc Welding Spray Transfer: SENSE1 ▶	8WK2	2
WEL-262	Thermal Cutting Processes I - Manual and Mechanized OxyFuel Cutting: SENSE1 ▶	8WK2	2
WEL-263	Thermal Cutting Processes II - Plasma and Carbon Steel Arc: SENSE1 ▶	8WK2	2
WEL-346	GMAW Developmental I ▶	8WK2	2
MAT-772	Applied Math -OR- Math Elective		3 3
<b>Total Credits</b>			<b>20</b>

**Term 2 — Spring**

WEL-244	Gas Metal Arc Welding Short Circuit Transfer: SENSE1 ▶	8WK1	2
WEL-280	Flux Cored Arc Welding (Self-Shielded): SENSE1 ▶	8WK1	2
WEL-281	Flux Cored Arc Welding (Gas-Shielded): SENSE1 ▶	8WK1	2
WEL-347	GMAW Developmental II ▶	8WK1	2
WEL-275	Shielded Metal Arc Welding II: SENSE1 ▶	8WK2	3
WEL-375	SMAW Developmental II ▶	8WK2	2
WEL-701	Robotic Welding		3
<b>Total Credits</b>			<b>16</b>

## Math Electives

MAT-102 Intermediate Algebra	4
MAT-110 Math for Liberal Arts ▶	3
MAT-121 College Algebra ▶	4
MAT-128 Precalculus ▶	4
MAT-134 Trigonometry and Analytic Geometry ▶	3
MAT-156 Statistics ▶	3
MAT-210 Calculus I ▶	4
MAT-216 Calculus II ▶	4
MAT-219 Calculus III ▶	4