

Academic Pathways Map

Metals Technology

Industry and Trades

Start Here

SEMESTER 2

Communicating in a Dynamic Workplace

GTAW Theory and Practical Application

Shop Practices

COMX106

WLDG137

WLDG141

WLDG151

| SEMESTER 1 | | CREDITS | MILESTONE | ✓ |
|------------|---------------------------------------|---------|-----------|---|
| M111 | Technical Mathematics | 3 | * | |
| WLDG107 | Industrial Safety for Welding | 2 | * | |
| WLDG112 | Cutting Processes | 3 | | |
| WLDG135 | GMAW Theory and Practical Application | 5 | | |
| WLDG181 | SMAW Theory and Practical Application | 5 | | |

TOTAL CREDITS

CREDITS MILESTONE 3 7 Blueprint Reading, Layout, and Beginning Fabrication 4

4

TOTAL CREDITS 18

| SEMESTER 3 | | CREDITS | MILESTONE | ✓ |
|------------|-------------------------------|---------|-----------|---|
| MCH130 | Machine Shop | 3 | * | |
| MCH132 | Introduction to Engine Lathes | 5 | * | |
| MCH134 | Introduction to Mills | 5 | * | |
| MCH240 | Metallurgy | 2 | | |

TOTAL CREDITS

| SEMESTER 4 | | CREDITS | MILESTONE | ✓ |
|------------|-----------------------|---------|-----------|---|
| MCH136 | Advanced Lathes | 5 | | |
| MCH137 | Advanced Mills | 5 | | |
| MCH139 | Grinding Applications | 2 | | |
| MCH245 | Shop Practices | 2 | | |
| DDSN132 | Mastercam Solids | 2 | | |

TOTAL CREDITS

You are finished!

Pathway Advising Notes: -This program includes the first year of welding and the first year of machining. Students can begin with welding or machining courses in semester 1.

-Whether students begin in welding or machining, they must take M111 in the fall semester and COMX106 in the spring semester of their first year in order to advance through the program.



- -Program requires full-time enrollment.
- -Earning a Commercial Driver's License (CDL) is highly recommended to increase your marketability for employment. Helena College offers this training as a 4-credit class every semester, including summer: HEO 100. This class requires significant classroom hours and drive time, and it is not recommended for your first semester of college.

Course Advising Notes: M111: This is the math class recommended for students in skilled trades programs, but other higher math classes may be substituted. Your advisor can help determine placement.

WLDG107: If students are unable to pass the safety portion of the class and obtain an OSHA card they cannot continue in the program.