

Academic Pathways Map

Metals Technology

A.A.S.

Industry and Trades

Start Here

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 18

SEMESTER 2		CREDITS	MILESTONE	✓
COMX106	Communicating in a Dynamic Workplace	3		
WLDG137	Blueprint Reading, Layout, and Beginning Fabrication	7		
WLDG141	GTAW Theory and Practical Application	4		
WLDG151	Shop Practices	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 15

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 16

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.

-Metals technology students are required to purchase the tools required for both the welding and the machining programs. Please refer to the Helena College Catalog for a list of required tools. Refer to the machining list if you are enrolled in machining classes and the welding list if you are enrolled in welding classes.

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.