

## Academic Pathways Map

### CNC Machining

A.A.S.

Industry and Trades

#### Start Here

SEMESTER 1		CREDITS	MILESTONE	✓
M111	Technical Mathematics	3		
MCH130	Machine Shop	3	*	
MCH132	Introduction to Engine Lathes	5	*	
MCH134	Introduction to Mills	5	*	
MCH240	Metallurgy	2		

TOTAL CREDITS 18

SEMESTER 2		CREDITS	MILESTONE	✓
COMX106	Communicating in a Dynamic Workplace	3		
MCH136	Advanced Lathes	5		
MCH137	Advanced Mills	5		
MCH139	Grinding Applications	2		
MCH245	Shop Practices	2		
DDSN132	Mastercam Solids	2		

TOTAL CREDITS 19

SEMESTER 3		CREDITS	MILESTONE	✓
MCH230	Tooling and Fixtures In CNC	2	*	
MCH231	CNC Turning Operations Level 1	4	*	
MCH232	CNC Turning Programming Operations 2	3		
MCH234	CNC Milling Operations Level 1	4	*	
MCH235	CNC Milling Programming Operations 2	3		

TOTAL CREDITS 16

SEMESTER 4		CREDITS	MILESTONE	✓
MCH233	CNC Turning Programming Operations 3	3		
MCH236	CNC Milling Programming Operations 3	3		
MCH237	CAD/CAM CNC Turning Center	5		
MCH238	CAD/CAM CNC Machining Center	5		

TOTAL CREDITS 16

**You are finished!**



**Pathway Advising Notes:** -Classes must be taken in the order outlined on this pathway map, beginning in the fall semester. This includes M111 and COMX106.

-Program requires full-time enrollment (unless granted permission by the instructor).

-In order to advance, all previous semester classes must be passed with a C- or better.

-Machining students must purchase tools, but it is best to wait until orientation or the first day of class to get specific recommendations from your instructor. Please refer to the Helena College Catalog for a list of required tools.

**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.