

Helena High School to Helena College degree program:
AAS Industrial Welding & Metal Fabrication

BIG SKY PATHWAY



Recommended pathway from Helena High School to Helena College with dual credit opportunities highlighted

SUGGESTED HIGH SCHOOL COURSES

9th	Graduation Requirements Workforce & College Prep	English I, Algebra I, Earth Science, World Cultures, Human Performance	Recommended CTE Cluster Foundation Course(s): Industrial Tech, Basic Computer Skills
	<i>CTE and/or Electives</i>	<i>Welding I, Industrial Technology</i>	
10th	Graduation Requirements Workforce & College Prep	English II, Geometry, Biology I, HP (.5), Fine Art Elective	Recommended CTE Pathway Courses: Welding I, Welding II, Welding III, Welding IV, or Manufacturing Co-op
	<i>CTE and/or Electives</i>	<i>Welding II (2), Computer Skills (.5)</i>	
11th	Graduation Requirements Workforce & College Prep	English III, Algebra II or Technical Math (M11T), Chemistry, US History	Other Recommended CTE Courses: Drafting I, Drafting II: CAD, Carpentry, Auto Tech, Accounting, Marketing
	<i>CTE and/or Electives</i>	<i>Welding III (2), Fundamental Drafting</i>	
12th	Graduation Requirements Workforce & College Prep	English IV, American Government	Career & Technical Student Organization(s): SkillsUSA, Helena High School American Welding Society Club.
	<i>CTE and/or Electives</i>	<i>WLDG 112, Cutting Processes for Welding IV (2) or Welding and Machining Co-op, Mechanical Drafting, Carpentry I (2)</i>	

ADVANCED LEARNING OPPORTUNITIES

High School to College/Career Linkages

Dual Enrollment courses: M111T Technical Mathematics; WRIT121T Technical Writing; WRIT 101 College Writing; M121 College Algebra; WLDG 112 Cutting Processes (As Welding II, III, and IV)

Online courses: MT Digital Academy: HR 100T Human Relations

Other: Job Shadowing; Student Shadowing at HC; Industry-recognized cards/certifications (such as OSHA)

POSTSECONDARY PROGRAM OF STUDY

	Math	English	Major	Other
13 th Semester 1	M111T Technical Mathematics (3)		WLDG 107 Industrial Safety (2); WLDG 112, Cutting Processes (3); WLDG 135 GMAW Theory and Practical Application (5); WLDG 181 Shielded Metal Arc Welding (SMAW) Theory and Practical Application (5)	
13 th Semester 2			WLDG 117 Blueprint Reading and Weld Symbols (3); WLDG 131 Layout, Metal Forming & and Fabrication (6), WLDG 140 Intro Gas Tungsten ARC Welding (GTAW) - Integrated Lab (3); WLDG 151 Shop Practices (4);	
14 th Semester 3		WRIT 121T Introduction to Technical Writing (3)	WLDG 217 Advanced Blueprint (2); WLDG 225 Structural Fabrication (2); WLDG 230 Field Welding and Processes (2), WLDG 243 Advanced Metal Fabrication I (6); WLDG 255 CNC Burn Table Programming and Operation (3)	
14 th Semester 4			WLDG 213 Pipe Welding Lab I (5); WLDG 244 Advanced Metal Fabrication II (4); WLDG 245 Metal Fabrication Design and Construction (5); WLDG 265 MSHA Safety Training (1)	HR 100T Human Relations (2)