



**SUGGESTED HIGH SCHOOL COURSES**

9th	Graduation Requirements Workforce/College Prep	English 1, Algebra I, Earth Science, World Cultures, Phys Ed1,	<b>Recommended CTE Cluster Foundation Course(s):</b> Industrial Tech, Welding I, Welding and Machining II, Welding and Machining III
	<i>CTE and/or Electives</i>	Industrial Technology, Construction I; Drafting I	
10th	Graduation Requirements Workforce/College Prep	English 2, Geometry, Biology, PE/Health, Fine Art Elective	<b>Recommended CTE Pathway Courses:</b> Construction 1-3; Industrial Tech, Welding I, Welding and Machining II, Welding and Machining III (Milling Operations)
	<i>CTE and/or Electives</i>	Welding I, Carpentry/Cabinet Making II	
11th	Graduation Requirements Workforce/College Prep	English 3, <b>M111T Technical Math (DC)</b> , Chemistry, US History	<b>Other Recommended CTE Courses:</b> Computer Tech Skills Drafting I, Drafting II –Mechanical, CAD, Carpentry, Automotive, Accounting I (DC)
	<i>CTE and/or Electives</i>	Welding and Machining II; Carpentry III; Drafting II	
12th	Graduation Requirements Workforce/College Prep	English 4 and <b>WRIT101 College Writing (DC)</b> , or <b>WRIT 121T Technical Writing</b> , US Government	<b>Career &amp; Technical Student Organization(s):</b>  <b>SkillsUSA</b>
	<i>CTE and/or Electives</i>	Welding and Machining III - <b>Certification Available – AWS 3G and 4G 3/8 Plate Test minimum; WLDG 112 Cutting Processes; MCH234 Milling Operations Level 1</b>	

**ADVANCED LEARNING OPPORTUNITIES**

High School to College/Career Linkages

**Dual Enrollment courses:** **M111T Technical Mathematics; M12 College Algebra; WRIT121T Technical Writing, WRIT101 College Writing; WLDG 112 Cutting Processes; CSTN 100 Fundamentals of Construction Technology (thru NCOTI exam)**

**Online courses:** **Montana Digital Academy - [HR 110T Human Relations](#)**

**Other:** Work-based Learning: Business Work Coop, Job Shadow, and Student Shadow at Helena College

**POSTSECONDARY PROGRAM OF STUDY**

	Math	English	Major	Other
Semester 1	<b>M111T Technical Mathematics (3)</b>		WLDG 107 Industrial Safety (2); <b>WLDG 112, Cutting Processes (3)</b> ; WLDG 135 GMAW Theory and Practical Application (5); WLDG 181 Shielded Metal Arc Welding (SMAW) Theory and Practical Application (5)	
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);	
Semester 3		<b>WRIT 121T Introduction to Technical Writing (3)</b>	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)	
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)	<b>HR 100T Human Relations (2)</b>