


<b>HIGH SCHOOL:</b> Helena High School		<b>BIG SKY PATHWAY PROPOSAL</b> 
<b>COLLEGE:</b> Helena College University of Montana		
<b>COLLEGE DEGREE PROGRAM:</b> Automotive Technology AAS		
<b>Cluster Overview:</b> Jobs in the Transportation, Distribution, and Logistics career cluster involve the planning, management, and movement of people, materials, and goods by road, air, rail, and water, as well as related professional and technical support services such as transportation infrastructure planning and management; logistics services; and mobile equipment and facility maintenance.	<b>Pathway Options:</b> <ul style="list-style-type: none"> <li>• Transportation Operations</li> <li>• Logistics Planning and Management Services</li> <li>• Warehousing &amp; Distribution Center Operations</li> <li>• Facility and Mobile Equipment Maintenance</li> <li>• Transportation Systems/Infrastructure Planning, Management and Regulation</li> <li>• Health, Safety and Environmental Management</li> </ul>	<b>Occupation Examples:</b> Dispatchers, Aircraft Mechanic, Airline Pilots, Air Traffic Controllers, Bus Drivers, Diesel Mechanics, Truck Drivers, Locomotive Engineers, Cargo and Freight Agents, Mass Transit Transportation Managers, Shipping and Receiving Clerks  For a complete listing, go to: <a href="http://online.onetcenter.org/find/career?c=16&amp;q=Go">http://online.onetcenter.org/find/career?c=16&amp;q=Go</a>

### SUGGESTED HIGH SCHOOL COURSES

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<b>9th</b>	Graduation Requirements Workforce/2-Year College Prep	Pre Algebra, Algebra 1, English 1, Physical Education, Social Studies, Earth Science	<b>Recommended CTE Cluster Foundation Course(s):</b> Industrial Technology, Welding, Marketing Ed, Basic Computer Skills, Tech Skills for Life
	4-Year MT College/Univ Prep (Rigorous Core)	Foreign Languages	
	<b>CTE and/or Electives</b>	<b>Industrial Technology or Welding I</b>	
<b>10th</b>	Graduation Requirements Workforce/2-Year College Prep	Algebra 1, Geometry, Physical Education/Health, Biology I, Fine Art, English II	<b>Recommended CTE Pathway Courses:</b> Money Management, Small Business Management, Law and Justice, Auto I, Welding I, Drafting, Bengal Business
	4-Year MT College/Univ Prep (Rigorous Core)	Algebra 1, Geometry, Foreign Languages	
	<b>CTE and/or Electives</b>	<b>Auto II, Welding I or II, Drafting</b>	
<b>11th</b>	Graduation Requirements Workforce/2-Year College Prep	<b>Technical Writing (WRIT121T), Technical Math (M111T)</b> American History, English III, Electives	<b>Other Recommended CTE Courses:</b> Auto II, Welding II or III, CAD, Bengal Business, Career Planning
	4-Year MT College/Univ Prep (Rigorous Core)	Algebra 2, Pre-Calculus, Chemistry I, Biology II, Physics, Foreign Languages	
	<b>CTE and/or Electives</b>	<b>Auto II, Welding II or III, CAD</b>	
<b>12th</b>	Graduation Requirements Workforce/2-Year College Prep	<b>Technical Writing(WRIT121T), Technical Math (M111T),</b> Government, English IV ( <b>WRIT101</b> )	<b>Career &amp; Technical Student Organization(s):</b> Participate in Skills USA, Auto III, Welding III or IV, Bengal Business
	4-Year MT College/Univ Prep (Rigorous Core)	College Algebra, Statistics, Pre-Calculus, Calculus, Carroll Calculus, Foreign Languages, Chemistry I or II, Bio II, Physics, Science Seminar	
	<b>CTE and/or Electives</b>	<b>Auto III, Welding III or IV</b>	

### ADVANCED LEARNING OPPORTUNITIES High School to College/Career Linkages

<b>Advanced Placement or IB courses:</b>
<b>Dual Enrollment courses:</b> M11T Technical Math, WRIT121, Intro to Tech Writing College Writing WRIT 101
<b>Online courses:</b>
<b>Other:</b> work experience:

### POSTSECONDARY PROGRAM OF STUDY (72 credits)

	Math	English	Major	Other
<b>Semester 1</b>	M111T Technical Math 3cr		AUTO104 Automotive Mechanics 2cr AST108 Auto Manual Drive Trains 6 AST130 Intro to Auto Electronics 7	

<b>Semester 2</b>			AST160 Auto Engine Repair 6 AST172 Auto Heating/Air Conditioning 5 Electric/Electronics Systems II 4	
<b>Semester 3</b>		WRIT121 Intro to Tech Writing 3cr	AST118 Brake Chassis 6 AST262 Engine Performance I 8cr	
<b>Semester 4</b>			AST264 Engine Performance II 5cr AST 270 Auto Transmissions/Transaxles 7 AST280 Applied Lab Experience Light Repair 4	HR110T Career Development and Human Relations

## MONTANA POSTSECONDARY OPPORTUNITIES

*Montana University System Degree and Program Inventory: <http://www.homepage.montana.edu/~mus/drqinv/>  
Your Guide to Montana's Certificate and Associate Degree Programs: <http://mus.edu/twoyear/YourGuide.html>*

<b>MSU Two Year Colleges and Programs:</b> City College MSUB—Billings (CC); Great Falls College MSU—Great Falls (GFC); Helena College UM—Helena (HC) Highlands College MT Tech—Butte(HC-Tech); Missoula College UM—Missoula (MC); Gallatin College MSU—Bozeman(GC)	<b>Community Colleges:</b> Dawson Community College (DCC) Flathead Valley Community College (FVCC) Miles Community College (MCC)	<b>Tribal Colleges:</b> Aaniiih Nakoda College (ANC);Blackfeet Community College(BCC); Chief Dull Knife College (CDKC);Fort Peck Community College (FPCC);Little Big Horn College (LBHC);Stone Child College (SCC);Salish Kootenai College (SKC)	<b>Four Year Colleges/Universities:</b> MSU—Bozeman; MSUB—Billings; MSUN—Havre; MT Tech—Butte; UM—Missoula; UMW—Dillon
<b>MILITARY</b>	<ul style="list-style-type: none"> <li>Requires diploma or GED</li> <li>17 with parental consent; 18 without</li> </ul>	Air Force, Air Guard, Army, Coast Guard, Marines, and Navy For more information: <a href="http://todaysmilitary.com">http://todaysmilitary.com</a>	
<b>PROFESSIONAL CERTIFICATE</b>	<ul style="list-style-type: none"> <li>Requires diploma or GED</li> <li>Less than 30 credits; little/no general ed credits</li> <li>Complete in one year or less</li> </ul>	Automotive Technology — FVCC Truck Driving — MCC	
<b>APPRENTICESHIP</b>	<ul style="list-style-type: none"> <li>Requires diploma or GED</li> <li>Must be at least 18</li> <li>Minimum 2,000 hours of supervised experience</li> </ul>	Aircraft Mechanics, Avionics Technicians, Bus and Truck Mechanics, Diesel Engine Mechanics, Heavy Equipment Mechanics, Material Coordinators/Shipping & Receiving Clerks  See the MT Dept of Labor website for more information: <a href="http://wsd.dli.mt.gov/apprenticeship/default.asp">http://wsd.dli.mt.gov/apprenticeship/default.asp</a>	
<b>CERTIFICATE OF APPLIED SCIENCE</b>	<ul style="list-style-type: none"> <li>Requires diploma or GED</li> <li>30-45 credits; limited general education credits</li> <li>Complete in one year or less</li> </ul>	Automotive Collision & Refinishing — CC, GFC Automotive Technology — HC Tech, MSUN, CC, MCC, FPCC Diesel Equipment/Technology — CC Heavy Equipment Operation — MC, FVCC, MCC, FPCC, BCC Highway Construction Worker — SKC Recreational Power Equipment — MC Truck Driving — FPCC	
<b>ASSOCIATE'S OF APPLIED SCIENCE DEGREE</b>	<ul style="list-style-type: none"> <li>Requires diploma or GED</li> <li>60-72 credits; includes 15-25 general ed credits</li> <li>Complete in two years (<i>if prepared academically in math and English</i>)</li> </ul>	Automotive Collision & Refinishing — CC Automotive Technology — HC, CC, MSUN, MCC, FPCC Aviation — GC Aviation Maintenance — Helena College Diesel Equipment/Technology — CC, HC, MC, MSUN	
<b>BACCALAUREATE DEGREE</b>	<ul style="list-style-type: none"> <li>Requires 4-year college prep for admission</li> <li>128 credits (approximately)</li> <li>Complete in four years</li> </ul>	Diesel Technology — MSUN	

*Degree and Program Inventory above may not be all inclusive*