

Career Pathway: STEM

Get the Facts STEM careers include planning, managing, and providing scientific research and professional and technical services in a wide range of areas such as physical science, social science, engineering, laboratory and testing services, and research and development. Workforce Trends Employment in science, technology, engineering and math (STEM) occupations has grown 79% since 1990, from 9.7 million to 17.3 million, outpacing overall U.S. job growth. STEM workers enjoy a pay advantage compared with non-STEM workers with similar levels of education. Among those with some college education, the typical full-time, year-round STEM worker earns \$54,745 while a similarly educated non-STEM worker earns \$40,505, or 26% less.	<table><tr><th colspan="3">CAREER AND TECHNICAL EDUCATION Recommended Pathway Courses</th></tr><tr><td colspan="3">Courses listed below provide a suggested sequence of courses for career and curriculum planning. Schools may offer additional courses beyond those listed within local Pathways.</td></tr><tr><td colspan="3">CLASS AVAILABILITY MAY VARY AT YOUR SCHOOL</td></tr><tr><th>Course #</th><th>Foundation Courses (required)</th><th>Credit</th></tr><tr><td>21051</td><td>Technological Literacy</td><td>.50/1.0</td></tr><tr><td>21053</td><td>Emerging Technologies</td><td>.50/1.0</td></tr><tr><td>21054</td><td>Technology Innovation and Assessment</td><td>.50</td></tr><tr><td>21107</td><td>CAD Design and Software</td><td>.50</td></tr><tr><td>21102</td><td>Drafting—General</td><td>.50</td></tr><tr><td colspan="3">Elective Courses</td></tr><tr><td>21007</td><td>Engineering Design and Development</td><td>1.0</td></tr><tr><td>21008</td><td>Digital Electronics</td><td>1.0</td></tr><tr><td>21012</td><td>Civil Engineering and Architecture</td><td>1.0</td></tr><tr><td>21013</td><td>Aerospace Engineering</td><td>1.0</td></tr><tr><td>21102</td><td>Engineering Drafting</td><td>.50</td></tr><tr><td>21103</td><td>Drafting—Architectural</td><td>.50</td></tr><tr><td>21009</td><td>Robotics</td><td>.50</td></tr><tr><td>21098</td><td>Technology—Workplace Experience (Engineering)</td><td>.50</td></tr><tr><td colspan="3">Foundation courses taken beyond the required credits can be used as elective credit Any High School CTE course(s) required for graduation may count towards Pathway completion Additional CTE Credits are recommended for Pathway completion</td></tr></table>	CAREER AND TECHNICAL EDUCATION Recommended Pathway Courses			Courses listed below provide a suggested sequence of courses for career and curriculum planning. Schools may offer additional courses beyond those listed within local Pathways.			CLASS AVAILABILITY MAY VARY AT YOUR SCHOOL			Course #	Foundation Courses (required)	Credit	21051	Technological Literacy	.50/1.0	21053	Emerging Technologies	.50/1.0	21054	Technology Innovation and Assessment	.50	21107	CAD Design and Software	.50	21102	Drafting—General	.50	Elective Courses			21007	Engineering Design and Development	1.0	21008	Digital Electronics	1.0	21012	Civil Engineering and Architecture	1.0	21013	Aerospace Engineering	1.0	21102	Engineering Drafting	.50	21103	Drafting—Architectural	.50	21009	Robotics	.50	21098	Technology—Workplace Experience (Engineering)	.50	Foundation courses taken beyond the required credits can be used as elective credit Any High School CTE course(s) required for graduation may count towards Pathway completion Additional CTE Credits are recommended for Pathway completion			Careers in STEM Fields are: • High Skill; High Wage; In-Demand Career Examples • Climate Change Analyst • Drafter • Electronic Technician • Engineer: Biological, Civil, Chemical, Computer, Electrical, Electronic, Environmental, Mechanical, or Mining and Geological • Environmental Scientist • Geothermal Technician • GIS Scientist or Technician • Robotics Technician • Survey Technician According to the Montana Department of Labor and Industry, the median hourly wage for occupations within Engineering Occupations is \$32.12; \$66,000/year.																							
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• *Talk to your school counselor about requirements in the core curriculum. Core curriculum and elective requirements vary district to district. • Many CTE courses may qualify for dual enrollment credit, which in some cases may earn up to 1.0 credit toward Pathway completion. Talk to your school counselor about availability.		• Dual enrollment course offerings vary by school and district. • Many Montana post-secondary programs accept high school courses toward a two- and four-year degree through dual enrollment. Check with post-secondary campuses for details.																																																																																