

High School to College and Career Pathway: Secondary

Area of Study: Skilled & Technical Sciences Education



Pathway: Building Trades HVAC

Middle School		State Requirements			High School Suggested Education Plan				College & Careers																																									
7 th Grade	8 th Grade	Middle School	High School	9 th Grade Suggested	10 th Grade Suggested	11 th Grade Suggested	12 th Grade Suggested	Beyond High School																																										
Language Arts 7 1.00	Language Arts 8 1.00	2.00	Language Arts 4.00	Language Arts 9 1.00	Language Arts 10 1.00	Language Arts 11 1.00	Language Arts 12 1.00	<p>There are a number of options for education and training beyond high school, depending on your career goals.</p> <ul style="list-style-type: none"> > Certificate > Associate degree > Bachelor's degree > Professional degree > On-the-job training > Apprenticeship > Military training <p>HVAC is:</p> <ul style="list-style-type: none"> > High skill > High wage > High demand > Nontraditional for females <p>Sample Occupations</p> <ul style="list-style-type: none"> > HVAC Mechanic and Installer > HVAC Teacher > Stationary Engineer <p>For more information on salary projections, labor market demand, and training options, visit www.utahfutures.org.</p>																																										
Pre-Algebra 1.00	Elem. Algebra or Applied Math 1.00	2.00	Math 3.00	Geometry or Applied Math II 1.00	Intermediate Algebra 1.00	Additional credit 1.00																																												
Science .50	Science 1.00	1.50	Science 3.00	Earth Systems 1.00	Physics 1.00 or Physics with Technology 1.00	Additional credit 1.00																																												
Utah Studies .50	U.S. History I 1.00	1.50	Social Studies 2.50	Geography for Life .50	World Civilizations .50	U.S. History II 1.00	U.S. Government and Citizenship .50																																											
P.E. 1.00	Health .50	1.50	P.E./Health 2.00	Participation Skills and Techniques .50	Fitness for Life .50 / Health Education .50 Lifetime Activities or Sport .50																																													
The Arts .50	The Arts .50	1.00	Fine Arts 1.50	Fine Arts Courses 1.50																																														
			Financial Literacy .50				Financial Literacy .50																																											
Keyboarding .50			Computer Tech. .50	Computer Technology .50																																														
CTE Intro 1.00		1.00	Career and Technical Education 1.00																																															
<p>Workforce Trends Advances in computer technology have revolutionized the way we monitor and control the engineering systems in buildings. Job openings continue to multiply and the job outlook is very good through the year 2014.</p> <p>Get the Facts Energy-efficient homes can reduce home energy needs by 20 to 30 percent, saving Americans thousands of dollars in their utility bills. In Utah, an HVAC mechanic/installer must be licensed.</p>		<p>Core Curriculum and elective requirements may vary district to district. Check with your school counselor. Concurrent enrollment course offerings vary by school and district.</p> <p>This is a nontraditional occupation for women. In 2007, less than 1 percent of the people employed in this occupation were women.</p>		<p>Career and Technical Education Recommended Pathway Courses (Students may select individual courses for exploration, or a complete Pathway for an in-depth focus.)</p> <p>CLASS AVAILABILITY MAY VARY AT YOUR HIGH SCHOOL</p> <table border="1"> <thead> <tr> <th>Course #</th> <th>Foundation Course: (required)</th> <th>Credit</th> </tr> </thead> <tbody> <tr> <td>46.0000</td> <td>Construction Trades Foundation</td> <td>.50</td> </tr> <tr> <td>47.0201</td> <td>Heating/Air Conditioning/Refrigeration (HVAC)</td> <td>1.00</td> </tr> <tr> <td colspan="3">Elective Courses:</td> </tr> <tr> <td>15.1301</td> <td>Drafting & Design Technology</td> <td>.50</td> </tr> <tr> <td>15.1302</td> <td>CAD Drafting Technology</td> <td>.50</td> </tr> <tr> <td>15.1303</td> <td>Architectural Drafting</td> <td>.50</td> </tr> <tr> <td>46.0201</td> <td>Carpentry 1</td> <td>1.00</td> </tr> <tr> <td>46.0302</td> <td>Electrician 1</td> <td>1.00</td> </tr> <tr> <td>46.0501</td> <td>Plumbing 1</td> <td>1.00</td> </tr> <tr> <td>47.0105</td> <td>Basic Electronics</td> <td>.50</td> </tr> <tr> <td>47.0107</td> <td>Advanced Electronics</td> <td>1.00</td> </tr> <tr> <td>47.0108</td> <td>Digital Electronics</td> <td>1.00</td> </tr> <tr> <td>32.0199</td> <td>Student Internship (Critical Workplace Skills)</td> <td>.50</td> </tr> </tbody> </table> <p>Many Utah post-secondary programs accept high school courses toward a two- or four-year degree through concurrent enrollment. Check regional post-secondary Pathways for details.</p>					Course #	Foundation Course: (required)	Credit	46.0000	Construction Trades Foundation	.50	47.0201	Heating/Air Conditioning/Refrigeration (HVAC)	1.00	Elective Courses:			15.1301	Drafting & Design Technology	.50	15.1302	CAD Drafting Technology	.50	15.1303	Architectural Drafting	.50	46.0201	Carpentry 1	1.00	46.0302	Electrician 1	1.00	46.0501	Plumbing 1	1.00	47.0105	Basic Electronics	.50	47.0107	Advanced Electronics	1.00	47.0108	Digital Electronics	1.00	32.0199	Student Internship (Critical Workplace Skills)	.50
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