## Secondary to Postsecondary Pathway for Heating, Air-conditioning, Ventilation, and Refrigeration
### Mechanical Trades
#### Plumbing
#### Carpentry

### Suggested High School Courses

<table>
<thead>
<tr>
<th>Grade</th>
<th>Core Academic Courses*</th>
<th>Career Path Courses</th>
<th>Suggested Electives:</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th</td>
<td>English I, Algebra I, Biology or Environmental Science, State History/Civics</td>
<td>Computer Applications</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10th</td>
<td>English II, Geometry, Biology, US History, Foreign Language I</td>
<td>Metal Fabrication, Introduction to the Building Environment</td>
<td>Electrical Wiring and Applications</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>11th</td>
<td>English III, Algebra II/ or other, Chemistry</td>
<td>Principles of Maintenance Operations, Safety, Health in the Workplace Environment</td>
<td>Principles of Technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12th</td>
<td>English IV, Trigonometry or other Math, Physics or other lab based science</td>
<td>Applications in Maintenance Operations</td>
<td>Principles of Technology</td>
</tr>
</tbody>
</table>

### Secondary to Postsecondary Linkages & Contacts

**Postsecondary Credit Options:**

ENY 101 Introduction to Energy Technology; ENY 205 Green Building

**Red Rocks Community College Department of High School Relations:** For more information on postsecondary course options for high school students and for admission to RRCC, please contact, Ernie Navarette at 303-914-6320 or ernie.navarette@rrcc.edu.

* $ = $15-25,000; $$ = $25-55,000; $$$ = $55-90,000; $$$$ = Above $90,000

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### Pathway: Renewable Energy Technology

<table>
<thead>
<tr>
<th>Career Goal (O*Net Code):</th>
<th>Plan of Study: Solar/Thermal Installation/Energy Auditing</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Click the code to access education, skills, and employment outlook information)</td>
<td>Relevant Occupational Experience</td>
</tr>
<tr>
<td>49-9021.00 Heating, Air Conditioning, and Refrigeration Mechanics and Installers</td>
<td>(Your Life Experiences may be worth College Credit!):</td>
</tr>
<tr>
<td>47-2211.00 Sheet Metal Workers</td>
<td>CCCS Credit for Prior Learning Guide</td>
</tr>
<tr>
<td>47-2152.02 Plumbers</td>
<td>Contact Larry Snyder (<a href="mailto:larry.snyder@rrcc.edu">larry.snyder@rrcc.edu</a>) for inquiries concerning earning college credit for life experience in HVAC, Mechanical Trades, Plumbing, or Carpentry.</td>
</tr>
<tr>
<td>47-4011.00 Plumbers, Pipefitters, and Steamfitters</td>
<td>Colorado Labor Market Information</td>
</tr>
<tr>
<td>47-2031.00 Construction and Building Inspectors</td>
<td></td>
</tr>
<tr>
<td>47-2031.01 Carpenters</td>
<td></td>
</tr>
<tr>
<td>47-2031.02 Rough Carpenters</td>
<td></td>
</tr>
<tr>
<td>49-9098.00 Helpers—Installation, Maintenance, and Repair Workers</td>
<td></td>
</tr>
</tbody>
</table>

* - High Demand Career

### Possible Pathways to your Career!

<table>
<thead>
<tr>
<th>Programs Available</th>
<th>Program Length (Based on meeting Program Entrance Requirements)</th>
<th>Estimated Tuition</th>
<th>Career Options</th>
<th>Salary Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate Option(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level I Refrigeration</td>
<td>10.5</td>
<td>$1,379</td>
<td>Service Technician, Heating, Ventilation, Air Conditioning Service Technician, Heating, Ventilation, Air Conditioning Mechanic, HVAC Installer, Plumber, Journeyman Plumber,</td>
<td>$ - $$$</td>
</tr>
<tr>
<td>Level II Refrigeration</td>
<td>22.5</td>
<td>$2919</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HVAC Fundamentals</td>
<td>14.5</td>
<td>$1893</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Conditioning</td>
<td>34.5</td>
<td>$4459</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refrigeration</td>
<td>30.5</td>
<td>$3946</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HVAC Controls Tech</td>
<td>21.5</td>
<td>$2791</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forced-Air Heating</td>
<td>33.5</td>
<td>$4330</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydronic Heating</td>
<td>37.5</td>
<td>$4844</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HVAC Energy Efficiency</td>
<td>21.5</td>
<td>$2791</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Energy and HVAC Advanced</th>
<th>37.5</th>
<th>$4844</th>
<th>Drain Technician, Plumber Gasfitter, Plumbing and Heating Mechanic, Residential Plumber, Service Plumber, Commercial Plumber; Building Maintenance, Carpenter, Lead Carpenter, Assembler, Finish Carpenter, Construction Worker, Custom Stair Builder, Installer, Production Worker, Trim Carpenter, Concrete Carpenter, Building Inspector, Engineering Technician, Construction Inspector, Engineer, Associate Architect, Inspector, Plumbing Inspector, Building Code Administrator, Building Mechanical Engineer, Building Official</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plumbing</td>
<td>18</td>
<td>$2342</td>
<td>$ - $$$</td>
</tr>
<tr>
<td>Basic Mechanical Skills</td>
<td>23</td>
<td>$2983</td>
<td>Service Technician, Heating, Ventilation, Air Conditioning Service Technician, Air Conditioning Technician, Heating, Ventilation, Air Conditioning Mechanic HVAC Installer; Plumber, Journeyman Plumber, Drain Technician, Plumber Gasfitter, Plumbing and Heating Mechanic, Residential Plumber, Service Plumber, Commercial Plumber; Building Maintenance, Carpenter, Lead Carpenter, Assembler,</td>
</tr>
<tr>
<td>Advanced Mechanical Skills</td>
<td>39</td>
<td>$5036</td>
<td>$ - $$$</td>
</tr>
<tr>
<td>Heating Specialties</td>
<td>37</td>
<td>$4780</td>
<td>$ - $$$</td>
</tr>
<tr>
<td>Residential Remodeling (carpentry)</td>
<td>20.5</td>
<td>$2662</td>
<td>$ - $$$</td>
</tr>
<tr>
<td>Advanced Remodeling (carpentry)</td>
<td>31.5</td>
<td>$4074</td>
<td>$ - $$$</td>
</tr>
<tr>
<td>Home Energy Efficiency (carpentry)</td>
<td>20.5</td>
<td>$2662</td>
<td>$ - $$$</td>
</tr>
</tbody>
</table>


Associate Degree(s) - $ - $$$

| Heating, Air Conditioning, Ventilation, and Refrigeration | 60.5-62.5 credits (4 sem) | Approximately $7800 | Service Technician, Heating, Ventilation, Air Conditioning Service Technician, Air Conditioning Technician, Heating, Ventilation, Air Conditioning Mechanic HVAC Installer; Plumber, Journeyman Plumber, Drain Technician, Plumber Gasfitter, Plumbing and Heating Mechanic, Residential Plumber, Service Plumber, Commercial Plumber; Building Maintenance, Carpenter, Lead Carpenter, Assembler, |


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Articulation Opportunities to Advanced Degrees:

<table>
<thead>
<tr>
<th>Advanced Degree(s)</th>
<th>120+ credits or 8 or more semesters</th>
<th>Regis University <a href="http://www.transfertoregis.org/co/rcc/">http://www.transfertoregis.org/co/rcc/</a></th>
<th>HVAC/Plumbing Business Owner</th>
<th>$ - $$$$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's Degree: Management/Business emphasis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate Degree: N/A</td>
<td>Bachelor's Degree + 30 or more graduate level credits</td>
<td><a href="http://www.collegeincolorado.org">www.collegeincolorado.org</a></td>
<td></td>
<td>$- $$$$$</td>
</tr>
</tbody>
</table>

Support Structures:
Childcare facilities, Counseling Services, Tutoring Services, Academic Advising and Career Counseling

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Financial Aid:
* Federal Student Loans, Pell Grant, RRCC Foundation Grant

Professional Affiliations

Practical Learning Experiences:
- State of the Art HVAC Technology Lab; Internships, Apprenticeships

Red Rocks Community College is accredited by the Higher Learning Commission and a member of the North Central Association of Colleges and Schools.

Red Rocks Community College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities. Please direct inquiries to: Bill Dial, Director of HR, Red Rocks Community College, 13300 W. 6th Ave., Lakewood, CO 80228

*** This document is a guide only. It does not act as a legally binding contract.