The Program
The HVACR Technician installs, maintains, and repairs heating, ventilating, air-conditioning and refrigeration systems in residential, commercial, and industrial sites. WWCC’s HVACR training program is nationally accredited offering a two-year degree and a one-year certificate. Students exit the program with related certifications in entry-level positions covering safety, electrical theory, refrigeration basics and components, applied wiring, air conditioning systems, controls, electric motors, duct design and installation, heating systems, industrial refrigeration, electronics, national electrical code, programmable logic controllers and direct digital controls, and commercial refrigeration. The HVACR curriculum is reviewed by an advisory committee composed of local and regional industry members and adheres to national and state skill standards.

WWCC’s Degree Options
An Associate in Applied Arts and Sciences (AAAS) in Heating Ventilating Air-Conditioning and Refrigeration is available upon completion of the two-year program of study. Also, the Heating & Air Conditioning Certificate is available upon completion of the one-year program of study.

Career Opportunities
• Test And Balance (TAB) Technician
• HVAC Installer, Service, Maintenance Technician
• Indoor Air Quality (IAQ) Technician
• Environmental Control Technician, Energy Auditor
• DDC Controls Technician
• Sheet Metal Worker
• Specialty Electrician
• Boiler Operator & Refrigeration Mechanic
• Refrigeration Mobile Service Technician (Railroad, Transport, Sea)
• Marine Service HVACR Technician

For More Information
Mike Houdak • (509) 527-4252 • michal.houdak@wwcc.edu
Walla Walla Community College • Your Best Choice
## HVACR Technology

### Required Coursework for Heating & Air Conditioning Certificate and HVACR AAAS Degree

The actual order and specific coursework may vary depending on student placement, start date, and quarter. Please check with your advisor prior to any substitutions.

### Summer Quarter

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 191</td>
<td>Cooperative Training*</td>
<td>2-12</td>
</tr>
</tbody>
</table>

**Total Credits**: 2-12

### Fall Quarter

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 100</td>
<td>Refrigeration Basics I</td>
<td>4</td>
</tr>
<tr>
<td>EST 131</td>
<td>Principles of Electricity Theory</td>
<td>5</td>
</tr>
<tr>
<td>EST 144</td>
<td>Industrial Safety in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>OCSUP 107</td>
<td>Quantitative Problem Solving for the Trades II (M) or OCSUP 105 or OCSUP 106</td>
<td>5</td>
</tr>
<tr>
<td>IFA 022</td>
<td>AHA HeartSaver First Aid</td>
<td>0.4</td>
</tr>
</tbody>
</table>

**Total Credits**: 17.4

### Winter Quarter

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 101</td>
<td>Refrigeration Basics II</td>
<td>4</td>
</tr>
<tr>
<td>EST 110</td>
<td>Refrigeration Components</td>
<td>5</td>
</tr>
<tr>
<td>EST 130</td>
<td>Electricity for HVACR**</td>
<td>5</td>
</tr>
<tr>
<td>EST 192</td>
<td>Human Relations Seminar (R)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total Credits**: 16

### Spring Quarter

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 120</td>
<td>Air Conditioning Systems &amp; Heating Systems</td>
<td>5</td>
</tr>
<tr>
<td>EST 133</td>
<td>Introduction to Controls</td>
<td>5</td>
</tr>
<tr>
<td>EST 150</td>
<td>Electric Motors &amp; Motor Maintenance</td>
<td>5</td>
</tr>
<tr>
<td>WRITE 100</td>
<td>Writing in the Workplace (W)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits**: 18

### Year One Credits

51.4

### Total Certificate Credits

51.4

### Year Two Credits

48

### Total Degree Credits

99.4

Degree With options - 111.4

Air Conditioning Certificate can be earned by completing first 3 quarters of program. Degree can be earned after completing all identified courses.

*EST 191 Cooperative Training may be taken in addition to EST 291 series as determined by EST instructor and with Dean permission.

**EST 132 may substitute for EST 130

***For certificate completion only, not for degree

The following courses can be substituted for identified related instruction courses.

(W) Written Communications: ENGL 087 or Higher
(M) Math: MATH& 141, MATH 201
(O) Oral Communications: CMST& 220
(J) Jobs: AGPR 100 or OCSUP 103
(R) Human Relations: Any 192 course, OCSUP 101, PSYCH 100
(L) Leadership: Any 292 course

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