Associate of Applied Science in Refrigeration and Heating Technology

This program is offered only through Matanuska-Susitna College.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (http://catalog.uaa.alaska.edu/academicpoliciesprocesses/admissions/undergraduate).

Students must achieve an acceptable score on placement tests in reading, writing and mathematics.

Advising

Students are urged to meet with a faculty advisor prior to enrolling in RH courses. See an advisor for information on the recommended course sequence.

Graduation Requirements

• Satisfy the General University Requirements for Associate of Applied Science Degrees (http://catalog.uaa.alaska.edu/undergraduateprograms/aasrequirements).
• Complete the General Course Requirements for Associate of Applied Science Degrees (http://catalog.uaa.alaska.edu/undergraduateprograms/aasrequirements/generalcourserequirements) (15 credits).
• Complete the Program Requirements below.
• Earn a cumulative GPA of 2.00 (C) or higher in required RH courses.

Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RH A101</td>
<td>Refrigeration and Air Conditioning Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>RH A103</td>
<td>Technical Mathematics for Industrial Trades</td>
<td>3</td>
</tr>
<tr>
<td>RH A105</td>
<td>Electrical Circuits for Refrigeration and Heating I</td>
<td>3</td>
</tr>
<tr>
<td>RH A109</td>
<td>Principles of Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>RH A122</td>
<td>Refrigeration and Air Conditioning</td>
<td>4</td>
</tr>
<tr>
<td>RH A126</td>
<td>Electrical Circuits for Refrigeration and Heating II</td>
<td>3</td>
</tr>
<tr>
<td>RH A132</td>
<td>Troubleshooting for HVAC/R Systems</td>
<td>3</td>
</tr>
<tr>
<td>RH A201</td>
<td>Commercial and Ammonia Refrigeration</td>
<td>4</td>
</tr>
<tr>
<td>RH A203</td>
<td>HVAC/R Basic Controls</td>
<td>3</td>
</tr>
<tr>
<td>RH A209</td>
<td>Codes for HVAC/R</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Credits: 51

A total of 66 credits is required for the degree.

Licensure and/or Certification

Graduates of the Associate of Applied Science in Refrigeration and Heating Technology are eligible to sit for the Environmental Protection Agency Section 608 National Certification Exam and the North American Technical Excellence entry level certification exam. Graduates of the program are also eligible for an institutional recommendation for the Unlimited Refrigeration Mechanical Administrator License from the Alaska Department of Business and Professional Licensing Section.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

Students graduating with a degree in the Refrigeration and Heating Technology program will be able to:

• Apply the fundamental laws of physics related to the Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) industry.
• Use mathematical skills required to succeed in HVAC/R trades.
• Understand and describe the function of individual components that make up HVAC/R systems.
• Work safely with tools, torches, electricity, refrigerants, heating fuels, and other equipment and material associated with HVAC/R work.
• Follow work practices that are environmentally responsible.
• Obtain employment as an entry level HVAC/R technician and be able to advance professionally.
• Work effectively with customers, employers, and co-workers.
• Systematically troubleshoot HVAC/R systems.
• Apply municipal, state, and national mechanical codes to decisions involving the design, installation, operation, and maintenance of HVAC/R systems.