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>
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<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>
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<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>
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<tr>
<td>RH A201</td>
<td>Commercial and Ammonia Refrigeration</td>
<td>4</td>
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<tr>
<td>RH A203</td>
<td>HVAC/R Basic Controls</td>
<td>3</td>
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<tr>
<td>RH A209</td>
<td>Codes for HVAC/R</td>
<td>2</td>
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</table>

RH A211 Customer Relations and Job Etiquette 1
RH A225 Heating Fundamentals and Forced Air Heat 4
RH A226 Commercial HVAC/R Systems 4
RH A228 Advanced Hydronic Heat Systems 4
RH A229 HVAC/R Control Systems 3
RH A232 HVAC/R Sheet Metal 3

Total Credits 51

A total of 66 credits is required for the degree.

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.