

Occupational Endorsement Certificate in Refrigeration and Heating

This program is delivered only through Matanuska-Susitna College.

The Occupational Endorsement Certificate (OEC) in Refrigeration and Heating prepares students with the technical skills required to install, diagnose, and repair modern commercial and residential heating, ventilation, air-conditioning, and refrigeration (HVAC/R) systems.

Licensure and/or Certification

Graduates of the OEC in Refrigeration and Heating are eligible to sit for the Environmental Protection Agency (EPA) Section 608 National Certification Exam and the ESCO Institute Employment Ready certification exam. The EPA 608 Certification is a federal requirement for working with refrigeration or air conditioning systems.

Please go to UAA's Authorization by State (https://www.uaa.alaska.edu/academics/office-of-academic-affairs/provost_office/uaa-state-authorization/authorization.cshtml/) website for information about licensure or certification in a state other than Alaska.

Admission Requirements

- Complete the Admission Requirements for Occupational Endorsement Certificates (<https://catalog.uaa.alaska.edu/academicpoliciesprocesses/admissions/undergraduate/>).

Graduation Requirements

- Complete the General University Requirements for Occupational Endorsement Certificates (<https://catalog.uaa.alaska.edu/undergraduateprograms/oecrequirements/>).
- Complete the following major requirements with a minimum grade of C:

Code	Title	Credits
RH A101	Refrigeration and Air Conditioning I	4
RH A105	Electrical Circuits for Refrigeration and Heating	3
RH A107	Fundamentals of Heating	4
RH A109	HVAC/R Codes	1
RH A122	Refrigeration and Air Conditioning II	4
RH A124	HVAC/R Distribution Systems	4
RH A126	HVAC/R Control Systems	3

RH A132	HVAC/R Troubleshooting Essentials	1
Total		24

A minimum of 24 credits are required for the degree.

Students graduating with an Occupational Endorsement Certificate in Refrigeration & Heating will be able to:

- Apply the fundamental laws of physics related to the Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) industry.
- 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.
- 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.