

# Heating, Ventilation, Air Conditioning, and Refrigeration - CAS

The one-year Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC-R) Certificate of Applied Science (CAS) is designed to teach the technical and procedural aspects of the HVAC-R industry, with an emphasis on preparing students for entry level positions as HVAC-R installers in residential and commercial settings. The program includes a combination of hands-on fundamental and advanced instruction in HVAC-R theory and practice. Along with heating, ventilation, air conditioning, and refrigeration specific courses, industry related courses, such as technical math, professional communication, and OSHA and EPA safety training will be included.

This certification is also the foundation for a two-year HVAC-R Associate of Applied Science degree for students interested in pursuing HVAC-R Technician careers.

Year 1	Credits	
	Fall	Spring
COMX 115 - Introduction to Interpersonal Communication	3	
M 111 - Technical Mathematics	3	
ELCT 100 - Introduction to Electricity	3	
HVC 110 - Introduction to HVAC-R	3	
OSH 110 - OSHA 10 Safety Training for Construction Trades	1	
HVC 115 - Trade Tools and Test Equipment	2	
HVC 125 - Environmental Protection Agency 608 Certification		1
HVC 130 - HVAC-R Electrical		3
HVC 140 - HVAC Systems I		3
HVC 145 - HVAC-R Welding, Brazing and Pipe Joining		2
HVC 150 - HVAC Installation and Sheet Metal Fabrication		4
HVC 155 - Blueprint Reading and Wiring Schematics		3
Year Total:	15	16
<b>Total Program Credits:</b>		<b>31</b>