

Heating, Ventilation and Air-Conditioning Mechanic I, Certificate

School of Technology

The heating ventilation and air conditioning mechanic I certificate is designed to prepare students for entry level positions in the HVACR field. The class and lab experiences will help the student develop skills to work with the installation and service of heating and cooling systems, air conditioners and heat pumps, basic wiring, gas and oil furnaces, and refrigerant recovery techniques.

Career Opportunities

Graduates of this program can obtain jobs as service technicians, installers, maintenance technicians, or troubleshooters.

Program Learning Outcomes

This curriculum is designed to prepare students to:

- Demonstrate the skills, professional values, and ethics necessary to be employed in the heating, ventilation, and air conditioning field.
- Demonstrate effective oral and written communication skills with customers, salesman, and fellow employees.
- Describe the general principles and terminology of HVAC systems.
- Identify and interpret occupational health and safety standards in the entry level occupation.
- Demonstrate the ability to utilize direct digital controls
- Design, install and maintain heating and cooling equipment.
- Understand the operation of gas and oil furnaces.
- Build and maintain air conditioning, gas furnace and oil burning systems.
- Demonstrate the ability to utilize direct digital controls.
- Understand and implement heating and air conditioning systems that utilize natural technologies.
- Build and maintain air conditioning and heat pump equipment.

Seq #	Course	Course Title	Credits	Type	Term Offered	Pre-Req	Options Available
1	HAC 101	Introduction to Refrigeration/AC	4	Major	F		
2	HAC 240	HVAC Duct Fabrication	2	Major	F		
3	HAC 250	Gas and Oil Heating Technology	4	Major	F		
4	HAC 256	Geothermal and Solar Technology	3	Major	F		
5	HAC 175	Direct Digital Controls	2	Major	F		

Total Program Credits 15

Total Pathway Credits 15

PDV 101 - First-Year Seminar is required for all first-time credential-seeking students.