## Heating, Ventilation and Air Conditioning, Certificate

**MECHANIC I** 

## **School of Technology**

The Heating, Ventilation and Air Conditioning Mechanic I Certificate is designed to prepare students for entry-level positions in the HVAC 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**

Upon successful completion of this degree, students will be able 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.

Sugg. Term	Seq #	Course ID	Course Title	Cr.	Term Offered	Prereq(s)	Options Available
Fall	1	PDV 101	First Year Seminar	1	F, Sp, Su		
	2	HAC 101	Introduction to Refrigeration/AC	4	F		
	3	HAC 240	HVAC Duct Fabrication	2	F		
	4	HAC 175	Direct Digital Controls	2	F		
	5	HAC 250	Gas and Oil Heating Technology	4	F		
	6	HAC 256	Geothermal and Solar Technology	3	F		

**Total Program Credits**