

# Heating, Ventilation, and Air Conditioning Technology Certificate

---

The certificate program is designed to prepare you for the basic job skills needed to service and maintain heating and air conditioning equipment. Students who elect to complete the certificate option learn the theory of operation and how to service, repair and design gas furnaces, central air conditioners, heat pumps, rooftop air conditioning systems, boilers, and commercial systems air conditioners. This knowledge is reinforced by working on actual equipment in the laboratory. Completion of this program will allow the student to seek employment as a maintenance and service technician in the heating/air conditioning trade.

## Suggested/Sample Course Sequence

The sequence taken by the student may vary depending on prerequisites, course availability, and personal/ professional responsibilities.

(Major Code 6230; State CIP Code 47.0201)

- Heating, Ventilation and Air Conditioning Technology (<http://www.jccc.edu/academics/industrial-technology/hvac>)
- Gainful Employment Data (<http://www.jccc.edu/academics/industrial-technology/hvac/gainful-employment/Gedt.html>)

### First Semester

HVAC 105	HVAC Fundamentals	4
HVAC 110	Electrical Fundamentals	4
HVAC 136	Heating System Fundamentals	3
HVAC 164	EPA 608 Refrigerant Management	1
HVAC 167	Sheet Metal Layout and Fabrication	3
INDT 155	Workplace Skills	1
Total Hours		16

### Second Semester

INDT 125	Industrial Safety/OSHA 30	3
HVAC 142	Load Calculations	3
HVAC 201	Cooling Systems*	3
HVAC 236	Advanced Heating Applications*	3
HVAC 250	HVAC Installation and Start-up Procedures*	3
HVAC 280	HVAC Internship*	1-3
Note: Only 1 credit hour internship for certificate program.		
Total Hours		16-18

**Total Program Hours: 32**