HEATING, VENTILATION, AND AIR CONDITION (HVAC)

HVAC 102 Basic Refrigeration4 Credits
Introduction to the theory of refrigeration, components, charging, recycling, and evacuation of refrigeration units.
Terms Typically Offered: Spring.
Fees: Yes.

HVAC 103 Basic Electricity3 Credits
Introduction to the basic electrical AC theory, including the study of Ohm’s Law to explain the operation of electrical devices.
Terms Typically Offered: Fall.
Fees: Yes.

HVAC 106 Introduction to Service Technician Training1 Credit
Introduction to basic HVAC service from which the student will build their knowledge and understanding of this great career. Studies include class and school policies, safety for the service tech, first aid, and basic physics as it applies to heat, matter, and energy.
Terms Typically Offered: Fall.
Fees: Yes.

HVAC 110 Fundamentals of Gas Heating4 Credits
Introduction to the fundamentals of gas heating. Students work in a classroom and shop environment. Topics include the basics of gas heating systems, operation of gas valves and burners, gas pipe system design, gas piping system code requirements, and basic code requirements for heating systems.
Terms Typically Offered: Fall.
Fees: Yes.

HVAC 111 Piping Skills for HVAC4 Credits
Introduction to the different types of tubing and piping materials used in HVAC applications, including the proper tubing and piping installation methods, proper cutting and bending procedures, pipe math, and piping offsets. Common piping joints will be discussed, including swaging, flaring, soldering, brazing, cutting, and threading of steel pipe and other alternatives. Shop projects include bench projects and mock-up installations.
Terms Typically Offered: Spring.
Fees: Yes.

HVAC 113 Refrigerant Recovery Training1 Credit
Introduction to the laws regarding refrigerant recovery. The course includes hands-on use of recovery equipment. Environmental Protection Agency certification is included in this course and required nationally. Upon completion of the course, students will be prepared for successful completion of the certification exam. The student will be required to pay approximately $40.00 to sit for the EPA exam.
Terms Typically Offered: Spring.
Fees: Yes.

HVAC 117 OSHA Ten-Hour Voluntary Compliance1 Credit
Introduction to a 10-Hour OSHA certification course for general industry. Participants will review the current OSHA standards contained in 29 CFR 1910. Participants that complete the course will receive a certificate of completion from the United States Department of Labor, Occupational Safety and Health Administration. The course is taught by instructors certified by the Occupational Safety and Health Administration.
Terms Typically Offered: Fall.

HVAC 122 Commercial Refrigeration4 Credits
Introduction to commercial ice makers, walk-in coolers, walk-in freezers, and self-contained refrigeration units.
Prerequisites: HVAC 102.
Terms Typically Offered: Fall.
Fees: Yes.

HVAC 146 Residential Duct Design2 Credits
Introduction to the theory of refrigeration, components, charging, recycling, and evacuation of refrigeration units.
Prerequisites: HVAC 102.
Terms Typically Offered: Spring.
Fees: Yes.

HVAC 149 Troubleshooting and Customer Service3 Credits
Introduction to the theory of refrigeration, components, charging, recycling, and evacuation of refrigeration units.
Prerequisites: HVAC 102.
Terms Typically Offered: Spring.
Fees: Yes.

HVAC 166 Residential Duct Design2 Credits
Introduction to troubleshooting industrial and commercial heating, ventilation, refrigeration, and air conditioning equipment. Customer interaction and diagnosis efficiency stressed.
Prerequisites: HVAC 103, HVAC 110, HVAC 117, and HVAC 240.
Terms Typically Offered: Spring.
Fees: Yes.

HVAC 202 Servicing Forced Air Systems3 Credits
Operation, repair, and maintenance of forced air heating systems. Operation, repair, and maintenance of forced air heating systems.
Prerequisites: HVAC 102.
Terms Typically Offered: Fall.
Fees: Yes.

HVAC 204 Direct Digital Controls4 Credits
Prerequisites: HVAC 103, HVAC 110, HVAC 117, and HVAC 240.
Terms Typically Offered: Fall.
Fees: Yes.

HVAC 222 Heating, Ventilation, Air Conditioning, and Refrigeration Systems Troubleshooting5 Credits
Introduction to troubleshooting industrial and commercial heating, ventilation, air conditioning, and refrigeration systems.
Prerequisites: HVAC 202.
Terms Typically Offered: Spring.
Fees: Yes.

HVAC 240 Servicing Forced Air Systems4 Credits
Prerequisites: HVAC 102.
Terms Typically Offered: Fall.
Fees: Yes.

HVAC 261 Air Conditioning Systems Service and Repair4 Credits
Introduction to the service and repair of HVAC systems. Troubleshooting techniques and equipment repair will be practiced.
Terms Typically Offered: Spring.
Fees: Yes.