



Catalog Addendum No. 1 for the 2025-2026 Catalog XXXVI, Edition No. 3

The following program on pages 158-159 is revised as of July, 2026.

Heating, Ventilation & Air Conditioning Diploma

Description

The Heating, Ventilation, and Air Conditioning (HVAC) program provides students with skills needed to obtain entry level employment as an HVAC Technician. HVAC Technicians are also known as HVAC mechanics or HVAC installers.

Students will have the opportunity to complete HVAC certifications, including the Occupational Safety and Health Administration (OSHA) 10-Hour Safety Certification, Environmental Protection Agency (EPA) Section 608 Refrigerant Transition Certification. Outside work required.

Objectives

The Heating, Ventilation, and Air Condition (HVAC) program will prepare students to be able to:

- Meet essential entry-level skills and knowledge required of an HVAC technician*
- Utilize fundamental skills required to service, troubleshoot, and repair commercial and residential HVAC air management systems*
- Understand the concepts associated with HVAC systems*
- Demonstrate content knowledge in the field of HVAC*
- Analyze, synthesize, and evaluate real-world work experiences and apply textbook theory and hands-on training*

Prerequisites:

Have a high school diploma or G.E.D.

Pass the entrance examination

Background check and drug screening where applicable

Program Outline

To receive a Diploma in Heating, Ventilation, and Air Conditioning, students must complete 42.0 credit hours (1080 clock hours). This Diploma program can be completed in 12 months for full-time students and 24 months for part-time students.

Courses: 42.0 credit hours

		Credit Hours	Clock Hours	Federal Student Aid
ACR0070C	HVAC Safety and Professional Success	3.5	90	3

ACR0100C	Electricity for Trades	3.5	90	3
ACR0008C	Fundamentals of Refrigeration	3.5	90	3
ACR0700C	Air Distribution Systems	3.5	90	3
ACR0307C	Controls	3.5	90	3
ACR0215C	Refrigeration Systems	3.5	90	3
ACR0107C	Electrical Circuitry	3.5	90	3
ACR0548C	Air Conditioning Systems	3.5	90	3
ACR0741C	Commercial Refrigeration	3.5	90	3
ACR0746C	Commercial Systems	3.5	90	3
ACR0600C	Heating Systems	3.5	90	3
ACR0610C	Heat Pumps	3.5	90	3

Course Descriptions

ACR0070C HVAC Safety and Professional Success

3.5 credit hours

This course provides students with an opportunity to gain an understanding of basic building construction; blueprint reading; tools; device boxes; safety procedures; OSHA standards and regulations; and mathematics emphasizing units of measure, temperature, and conversion used by technicians in the building trade professions. In addition, students explore the communication skills and strategies that are needed by professionals in the building trades. This module is also designed to cover safety practices/precautions, professional skills, and proactive career management. Outside work required.

ACR0100C Electricity for Trades

3.5 credit hours

This course focuses upon basic electricity, electrical power systems, and electrical safety. The course topics include conductors and insulators, voltage, current, resistance, direct current, parallel and series circuits, and electrical power. This course is also designed to develop professional skills and proactive career management. Outside work required.

ACR0008C Fundamentals of Refrigeration

3.5 credit hours

This course provides students with an opportunity to gain an understanding of the major tools and equipment of refrigeration for the HVAC/R technician and instructs students in their use. Topics include principles of matter; thermodynamics; gas laws; the refrigeration cycle; refrigerants; and use of the major tubing, piping, refrigerant servicing, testing equipment, and refrigeration components for the HVAC/R technician. Professional development is also covered. Outside work required.

ACR0700C Air Distribution Systems

3.5 credit hours

This course provides students with an opportunity to gain an understanding of the basic requirements of central air conditioning equipment operation. Topics include basic air properties, indoor air quality and air distribution, ductwork, refrigeration load calculations, and construction, and blueprints for an indoor air system. Outside work required. (Prerequisites: ACR0070C, ACR0100C, ACR0008C)

ACR0307C Controls

3.5 credit hours

This course provides students with an opportunity to gain an understanding of control systems, major tools, equipment for the HVAC/R technician, and instructs students in their use. Topics include terminology of the profession; contactors, relays, overloads, thermostats, pressure switches, and other electric control devices; heating control devices; troubleshooting electric control devices; air conditioning control systems; and control systems circuitry. Professional development is also covered. Outside work required. (Prerequisites: ACR0070C, ACR0100C, ACR0008C)

ACR0215C Refrigeration Systems

3.5 credit hours

This course provides students with an opportunity to gain an understanding of the major tubing, piping, and refrigeration components for the HVAC/R technician and instructs students in their use. Topics include terminology; tubing and piping; system evacuation; refrigerant and oil management (recovery, recycling, reclaiming, and retrofitting; system charging). Outside work required. (Prerequisites: ACR0070C, ACR0100C, ACR0008C)

ACR0107C Electrical Circuitry

3.5 credit hours

This course provides students with an opportunity to gain an understanding of the major components, diagrams, electrical circuits, and graphs for the HVAC/R technician and instructs students in their use. Topics include terminology of the profession; circuits, components and symbols for air conditioning; wiring diagrams; and reading schematics and diagrams. Electric motors and their components, and professional development are also explored. Outside work required. (Prerequisites: ACR0070C, ACR0100C, ACR0008C)

ACR0548C Air Conditioning Systems

3.5 credit hours

This course provides students with an opportunity to gain an understanding of central air conditioning equipment installation, maintenance, operation, repair, service, and troubleshooting. Topics include basic troubleshooting techniques using wiring diagrams and electrical controls, installation procedures, and service and maintenance. The course also covers heat pump systems, packaged air systems, and professional development. Outside work required. (Prerequisites: ACR0070C, ACR0100C, ACR0008C)

ACR0741C Commercial Refrigeration

3.5 credit hours

This course provides students with an opportunity to gain an understanding of safety and teaches students to troubleshoot basic commercial refrigeration systems used in the industry. Topics include application of commercial refrigeration systems, typical operating conditions for commercial refrigeration, troubleshooting, and professional development. Hands-on laboratory work provides practical experience so students can troubleshoot mechanical and control malfunctions as they relate to the operation of commercial refrigeration systems. Outside work required. (Prerequisites: ACR0070C, ACR0100C, ACR0008C)

ACR0746C Commercial Systems

3.5 credit hours

This course explores special topics in commercial refrigeration. The topics covered in this class include special refrigeration system components, application of refrigeration systems, special refrigeration applications, troubleshooting, and typical operating conditions for commercial refrigeration. Employment skills are also covered. Outside work required. (Prerequisites: ACR0070C, ACR0100C, ACR0008C)

ACR0600C Heating Systems

3.5 credit hours

This course provides students with an opportunity to gain an understanding of the use of safety practices as well as the installation and troubleshooting of basic heating systems. Topics include basic installation, operation, terminology of the profession, troubleshooting techniques and tools, the efficiency and operating costs of different fuels, and sketching basic wiring diagrams of gas furnaces. Professional development is also included. Outside work required. (Prerequisites: ACR0070C, ACR0100C, ACR0008C)

ACR0610C Heat Pumps

3.5 credit hours

This course provides students with an opportunity to gain an understanding of the use of safety practices as well as the installation and troubleshooting of basic heating systems. Topics include boilers, electric heat, terminology of the profession, preventive maintenance and troubleshooting hydronic heating systems. Outside work required. (Prerequisites: ACR0070C, ACR0100C, ACR0008C)

