

ACR - AIR COND, HEATING & REFRIGERAT (ACR)

ACR 102 Tools and Service Techniques 3 SHC

This course is a basic study of the uses of tools and service equipment used in the installation and repair of HVAC equipment.

Lecture Hours: 2

Lab/Clinical Hours: 3

ACR 106 Basic Electricity for HVAC/R 4 SHC

This course includes a basic study of electricity including Ohm's Law and series and parallel circuits as they relate to heating, ventilating, air conditioning and/or refrigeration systems.

Lecture Hours: 3

Lab/Clinical Hours: 3

ACR 107 Wiring Diagrams 2 SHC

This course covers the basic requirements for interpretation of wiring diagrams used in air conditioning and refrigeration equipment.

Lecture Hours: 1

Lab/Clinical Hours: 3

ACR 108 Refrigeration Fundamentals 3 SHC

This course is an introduction to the principles of refrigeration.

Lecture Hours: 2

Lab/Clinical Hours: 3

ACR 110 Heating Fundamentals 4 SHC

This course covers the basic concepts of oil, gas and electric heat, their components and operation.

Lecture Hours: 3

Lab/Clinical Hours: 3

ACR 118 Air Conditioning Fundamentals 3 SHC

This course is an introduction to the principles of air conditioning.

Prerequisites: ACR 108.

Lecture Hours: 2

Lab/Clinical Hours: 3

ACR 131 Commercial Refrigeration 4 SHC

This course is a study of maintenance and repair of commercial refrigeration systems.

Prerequisites: ACR 108.

Lecture Hours: 3

Lab/Clinical Hours: 3

ACR 140 Automatic Controls 3 SHC

This course is a study of the adjustment, repair and maintenance of a variety of pressure and temperature sensitive automatic controls.

Lecture Hours: 2

Lab/Clinical Hours: 3

ACR 150 Basic Sheet Metal 2 SHC

This course covers the tools and procedures required in the fabrication of duct work.

Lecture Hours: 1

Lab/Clinical Hours: 3

ACR 175 EPA 608 Certification Preparation 1 SHC

This course covers EPA guidelines and procedures required by law for refrigerant recovery and recycling during the installation, service, and repair of all HVAC and refrigeration systems. A comprehensive review of essential material necessary to take the EPA 608 exam will be included.

Lecture Hours: 1

Lab/Clinical Hours: 0

ACR 201 Troubleshooting and Maintenance 3 SHC

This course is a study of troubleshooting and maintenance of air conditioning equipment.

Lecture Hours: 2

Lab/Clinical Hours: 3

ACR 206 Advanced Electricity for HVAC/R 2 SHC

This course includes a practical application of electrical and electronic components and circuits used to control HVAC and/or refrigeration systems.

Prerequisites: ACR 106.

Lecture Hours: 1

Lab/Clinical Hours: 3

ACR 210 Heat Pumps 4 SHC

This course is a study of theory and operational principles of the heat pump.

Prerequisites: ACR 108.

Lecture Hours: 3

Lab/Clinical Hours: 3

ACR 223 Testing and Balancing 3 SHC

This course covers testing and balancing of air distribution in duct work and water flow in piping.

Prerequisites: ACR 110.

Lecture Hours: 2

Lab/Clinical Hours: 3

ACR 224 Codes and Ordinances 2 SHC

This course covers instruction on how to reference appropriate building codes and ordinances where they apply to installation of heating and air conditioning equipment.

Lecture Hours: 2

Lab/Clinical Hours: 0

ACR 231 Advanced Refrigeration 4 SHC

This course is an in-depth study of commercial and industrial refrigeration equipment.

Prerequisites: ACR 131.

Lecture Hours: 3

Lab/Clinical Hours: 3

ACR 242 Electronic Controls 2 SHC

This course covers the basic fundamentals for the adjustment, repair, and maintenance of electronic controls used in air conditioning systems.

Prerequisites: ACR 108.

Lecture Hours: 1

Lab/Clinical Hours: 3

ACR 250 Duct Fabrication 3 SHC

This course covers the design, fabrication, and installation of air duct systems.

Lecture Hours: 2

Lab/Clinical Hours: 3

ACR 252 Special Topics in Air Conditioning & Heating 2 SHC

This course is designed as the capstone for the Basic Air Conditioning and Heating curriculum. Emphasis will be placed on customer service, troubleshooting, and documentation skills in order to prepare students for the workplace.

Prerequisites: ACR 110, ACR 201, and ACR 210.

Corequisites: ACR 242.

Lecture Hours: 1

Lab/Clinical Hours: 3