Heating and Air Conditioning (HAC)

HAC 102 Residential Electrical Wiring

4 Hours

on

all aspects of residential wiring installation, parts ID, and circuit analysis. Harots knowledge of wiring of switches, way switches, 4way switches, load centers, lighting and duplex receptacles will be covered. This course will follow all NEC cest and standards for safety and wire sizing.

HAC 105 Basic Sheet Metal Lagut

3 Hours

Prerequisites: None

4 hours weekly (-22)

A basic course for sheet metal pattern layout techniques as used in residential air conditioning and ventilation.

HAC 106 Advanced Sheet Metal Lagut

2 Hours

Prerequisites: HAC 105

4 hours weekly (4)

An advanced course for sheet metal layout techniques as used in residential and commercial air conditioning and ventilation systems. The triangulation method of sheet metal layoutwill be emphasized in this course. **HAC 107 Electrical Controls and Circuitry**

3 Hours

Prerequisites: ELT 162 HAC 102
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> The student is introduced to air conditioning, heating, conditioning systems. Maintenance and repair of gas, oil, and hydronic furnaces will be covered.

HAC 122 Heating II

4 Hours

Prerequisites: HAC 121

6 hours weekly (-24)

Introduction to air distribution, air cleaning, and calculation of heat loads. Special emphasis will be placed on electriculation testing and servicing along with heat load calculations.

HAC 131 Refrigeration and Air Conditioning I

4 Hours

Prerequisites: None

6 hours weekly (24)

This course covers the fundamentals of refrigeration, refrigeration cycle, and basic refrigeration systems. Compression systems, refrigeration controls, charging, evacuating, and refrigeration toolsand materials will be covered.

HAC 132 Refrigeration and Air Conditioning II

4 Hours

Prerequisites: HAC 131

6 hours weekly (24)

This course cove the operation and design of window units and split systems. Air conditioning controls and troubleshooting will also be covered. Special emphasis will be placed on psychrometrics, troubleshooting, and system design.

HAC 140 Weatherization

3 Hours

Prerequisites: None

4 hours weekly (-22)

HAC 224 Geothermal Sytems

3 Hours

Prerequisites: None

4 hours week (2-2)

This course covers Geothermal as it is used in the HVAC industry. Basic concepts of geothermal installation, design, maintenance, and troubleshooting will be covered. This class will also cover refrigeration theory, heat transfer, payback, currentax incentives, common problems and pricing geothermal systems.

HAC 240 Installation of HVAC Sytems

3 Hours

Prerequisites: HAC 121, HAC 131

5 hours weekly (-44)

Student will develop advanced skills and knowledge of the installation and stamp of residential heating and air conditioning systems. Focuses on installation code requirements and startup procedures for residential heating and air conditioning systems. Tools safety and add purchases will also be covered.

HAC 279 ICE Testing

2 Hours

Prerequisites: None

2 hours weekly (-20)

This course is designed to help prepare the student to pass the ICE Exams. The Industry Competency Exams were organized by the ARI (Air Conditioning and Refrigeration Institute) to encourage high standards in education HVAC installation, service, and maintenance.