

AIR CONDITIONING AND REFRIGERATION CERTIFICATE

PROGRAM CODE: 1C31173

Financial Aid Eligible

The **Air Conditioning and Refrigeration Certificate** the primary emphasis of this program is to prepare the student with job entry-level skills. Although further training must be done on the job, the student will have a strong background in fundamental skills of refrigeration, electricity, mathematics, communication skills, and drafting. At least 50% of all major course work must be completed at Cypress College. This certificate requires a total of 40 units.

Code	Title	Units
Required Courses are listed in suggested sequence (40 units):		
AC/R 100 C	Principles of Thermodynamics and Heat Transfer	3
AC/R 110 C	Air Flow Design & Pscymtrcs	2
AC/R 120 C	Piping Prac-Tools and Safety	3
AC/R 137 C	Blueprints and Dimension Analysis (formerly AC/R 037 C)	2
AC/R 036 C	Refrigerant Cert Training	1
AC/R 055 C	Technician Customer Relations	1
AC/R 105 C	Electricity for Air Conditioning and Refrigeration I	3
AC/R 115 C	Gas Heat Transfer Systems	3
AC/R 135 C	Sustainability Design and Application (formerly Solar Energy for Heat and Cool)	2
AC/R 106 C	Electricity for Air Conditioning and Refrigeration II	3
AC/R 210 C	Commercial Refrigeration	3
AC/R 220 C	Introduction to Air Conditioning Controls (formerly A/C Controls and Energy Management)	2
AC/R 230 C	Heat Pumps	2
AC/R 205 C	Commercial Air Conditioning	3
AC/R 215 C	Codes and Commissioning (formerly Estimating for HVAC)	3
AC/R 245 C	Load Calculations for Heating and Cooling (formerly AC/R 145 C)	2
AC/R 235 C	Air Conditioning Capstone	2
Total Units		40

Program Student Learning Outcomes:

Objective 1: Acquire the workforce preparation skills, including fundamental skills in refrigeration, electricity, mathematics, communication, and drafting, necessary for entry level job positions.

https://www.curricunet.com/Cypress/reports/program_report.cfm?programs_id=1579