

GOALS AND OBJECTIVES

The **Heat Pump** Certificate provides students with a career path for attaining the communication skills, practical knowledge, and technical training necessary for pursuing a career in Heat Pump Technical Servicing. Students completing this certificate will develop an advanced understanding of heat pump systems.

CERTIFICATE

Heat Pump (24 units)

To earn this certificate, complete the required courses as listed with a minimum grade of "C." At least 50% of all major course work must be completed at Cypress College.


CERTIFICATE

Heat Pump Certificate = 24 units

Program Code: 1C31192

Required courses are listed in numeric sequence:

		Units
_____AC/R 100 C	Principles of Thermodynamics and Heat Transfer	3
_____AC/R 110 C	Air Conditioning I	3
_____AC/R 120 C	Piping Practice, Tools and Safety	2
_____AC/R 036 C	Refrigerants, Charging and Recovery	1
_____AC/R 137 C	Blueprints and Dimension Analysis	2
_____AC/R 105 C	Electricity for Air Conditioning and Refrigeration I	3
_____AC/R 115 C	Gas Heating and Carbon Monoxide	2
_____AC/R 125 C	Boiler and Hydronic Heating	2
_____AC/R 135 C	Solar Energy for Heat and Cool	2
_____AC/R 145 C	Load Calculations for Heating and Cooling	2
_____AC/R 230 C	Heat Pumps	<u>2</u>
	Total Units Required	24

 **Key Tips:** You may opt to “double major” by applying some of these courses to other **Air Conditioning & Refrigeration Degree/Certificate Programs**. Remember to apply for certificates/degrees/graduation at the beginning of your last semester.