



## Career and Technical Education Pathway Engineering and Applied Technology

### Air Conditioning, Heating & Refrigeration Technology Diploma

The Air Conditioning, Heating, and Refrigeration Technology curriculum provides the basic knowledge to develop skills necessary to work with residential and light commercial systems. Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools, and instruments.

Diploma graduates will be able to assist in the startup, preventive maintenance, service, repair, and/or installation of residential and light commercial systems. **Upon completion of the diploma, all diploma courses transfer towards the AAS degree. Students must earn a C or higher in all AHR and ELC classes.**

<b>GENERAL EDUCATION COURSES</b> (certificate general education is optional)			
<u>PHY 121*</u>	Applied Physics I	4	SHC
<u>COM 110*</u>	Introduction to Communications	3	SHC
<b>Total SHC for General Education Courses:</b>		<b>7</b>	<b>SHC</b>
<b>CORE COURSES</b>			
<u>AHR 110</u>	Intro. to Refrigeration	5	SHC
<u>AHR 111</u>	HVACR Electricity	3	SHC
<u>AHR 112</u>	Heating Technology	4	SHC
<u>AHR 113</u>	Comfort Cooling	4	SHC
<u>AHR 114</u>	Heat Pump Technology	4	SHC
<u>AHR 130</u>	HVAC Controls	3	SHC
<u>AHR 213</u>	HVACR Building Code	2	SHC
<b>Total SHC for Core Courses:</b>		<b>25</b>	<b>SHC</b>
<b>OTHER MAJOR COURSES</b>			
<u>AHR 160</u>	Refrigerant Certification	1	SHC
<u>AHR 170</u>	Heating Lab	1	SHC
<u>AHR 171</u>	Comfort Cooling Lab	1	SHC
<u>ELC 132</u>	Electrical Drawings	2	SHC
<u>WBL 111</u>	Work-Based Learning I	1	SHC
<u>WLD 113</u>	Soldering and Brazing	2	SHC
<b>Total SHC for Other Major Courses:</b>		<b>8</b>	<b>SHC</b>
<b>Total SHC for Program</b>		<b>40</b>	

\*Requires benchmark testing

**Estimated Costs:**

Textbooks: \$150 per semester; Materials: \$30-95 a semester