

# AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY

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. In addition, the AAS degree covers residential building codes, residential system sizing, and advanced comfort systems. Diploma graduates should be able to assist in the start-up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems. AAS degree graduates should be able to demonstrate an understanding of system selection and balance and advanced systems.

## AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY

A.A.S. Degree (A35100)

*Suggested Sequence of Courses*

Prefix	Course Title	Class	Lab	Clinic	Work	Credit
<b>FALL SEMESTER 1</b>						
ACA 115	Success and Study Skills	0	2	0	0	1
AHR 110	Introduction to Refrigeration	2	6	0	0	5
AHR 111	HVACR Electricity	2	2	0	0	3
AHR 113	Comfort Cooling	2	4	0	0	4
AHR 115	Refrigeration Systems	1	3	0	0	2
ISC 112	Industrial Safety	2	0	0	0	2
<b>TOTALS</b>		<b>9</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>17</b>
<b>SPRING SEMESTER 1</b>						
AHR 112	Heating Technology	2	4	0	0	4
AHR 114	Heat Pump Technology	2	4	0	0	4
AHR 212	Advanced Comfort Systems	2	6	0	0	4
CIS 110	Introduction to Computers <i>or</i>	1	2	0	0	2
CIS 111	Basic PC Literacy	1	2	0	0	2
	Humanities/Fine Arts Elective	3	0	0	0	3
<b>TOTALS</b>		<b>10</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>17</b>
<b>SUMMER SEMESTER 1</b>						
ENG 110	Freshman Composition <i>or</i>					
ENG 111	Writing and Inquiry	3	0	0	0	3
<b>TOTALS</b>		<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>FALL SEMESTER 2</b>						
AHR 211	Residential Systems Design	2	2	0	0	3
AHR 213	HVACR Building Code	1	2	0	0	2
BPR 111	Print Reading	1	2	0	0	2
ELC 112	AC/DC Electricity	3	6	0	0	5
MAT 110	Math Measurement & Literacy	3	0	0	0	3
<b>TOTALS</b>		<b>10</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>15</b>
<b>SPRING SEMESTER 2</b>						
AHR 120	HVAC Maintenance	1	3	0	0	2
AHR 160	Refrigeration Certification	1	0	0	0	1
BUS 137	Principles of Management	3	0	0	0	3
COM 231	Public Speaking <i>or</i>					
ENG 115	Oral Communication	3	0	0	0	3
	Behavioral/Social Sciences Elective	3	0	0	0	3
<b>TOTALS</b>		<b>11</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>12</b>
<b>PROGRAM TOTAL</b>						<b>64</b>

## AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY

Diploma Program (D35100)

*Suggested Sequence of Courses*

Prefix	Course Title	Class	Lab	Clinic	Work	Credit
<b>FALL SEMESTER 1</b>						
ACA 115	Success and Study Skills <i>or</i>					
ACA 122	College Transfer Success	0	2	0	0	1
AHR 110	Introduction to Refrigeration	2	6	0	0	5
AHR 111	HVACR Electricity	2	2	0	0	3
AHR 113	Comfort Cooling	2	4	0	0	4
AHR 115	Refrigeration Systems	1	3	0	0	2
ISC 112	Industrial Safety	2	0	0	0	2
<b>TOTALS</b>		<b>9</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>17</b>
<b>SPRING SEMESTER 1</b>						
AHR 112	Heating Technology	2	4	0	0	4
AHR 114	Heat Pump Technology	2	4	0	0	4
AHR 212	Advanced Comfort Systems	2	6	0	0	4
CIS 110	Introduction to Computers	2	2	0	0	3
	Humanities/Fine Arts Elective	3	0	0	0	3
<b>TOTALS</b>		<b>11</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>18</b>
<b>SUMMER SEMESTER 1</b>						
ENG 110	Freshman Composition <i>or</i>					
ENG 111	Writing & Inquiry	3	0	0	0	3
<b>TOTALS</b>		<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>DIPLOMA TOTAL</b>						<b>38</b>

## AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY

Refrigeration Certificate Program (C35100A)

*Required Courses*

Prefix	Course Title	Class	Lab	Clinic	Work	Credit
AHR 110	Introduction to Refrigeration	2	6	0	0	5
AHR 111	HVAC Electricity	2	2	0	0	3
AHR 113	Comfort Cooling	2	4	0	0	4
AHR 115	Refrigeration Systems	1	3	0	0	2
<b>TOTALS</b>		<b>7</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>14</b>
<b>CERTIFICATE TOTAL</b>						<b>14</b>