

# Air Conditioning, Heating, and Refrigeration Technology AAS (A35100) – 68 Credit Hours

2022 - 2023

Fall – 1 <sup>st</sup> Year				
Course Number	Course Name	Lec	Lab	Credit
<b>AHR 110</b>	<b>Intro to Refrigeration</b> (1 <sup>st</sup> 8 week) <b>(S) (A)</b>	2	6	5
<b>AHR 112</b>	<b>Heating Technology</b> (2 <sup>nd</sup> 8 week) <b>(A)</b>	2	4	4
<b>AHR 111</b>	<b>HVACR Electricity</b> (1 <sup>st</sup> 8 week) <b>(A)</b>	2	2	3
<b>AHR 113</b>	<b>Comfort Cooling</b> <b>(A)</b>	2	4	4
<b>AHR 130</b>	<b>HVACR Electronics</b> (2 <sup>nd</sup> 8 weeks) <b>(A)</b>	1	3	3
<b>Total</b>				<b>19</b>

Fall – 2 <sup>nd</sup> Year				
Course Number	Course Name	Lec	Lab	Credit
AHR 115	Refrigeration Systems (2 <sup>nd</sup> 8 week)	1	3	2
ENG 111	Writing and Inquiry	3	0	3
AHR 151	HVAC Duct Systems I	1	3	2
AHR 255	Indoor Air Quality (2 <sup>nd</sup> 8 week)	1	2	2
	Social/Behavioral Science Elective	3	0	3
	Major Elective			3
CIS 110	Introduction to Computers <b>(A) or</b> <i>Choose one of the following groups:</i>	2	2	3
WBL 110	World of Work <i>and</i> <b>★★★★</b>	0	0	1
WBL 111	Work-Based Learning I <i>and</i> <b>★★★★</b>	0	10	1
WBL 115	Work-Based Learning Seminar I <b>★★★★</b> <i>or</i>	1	0	1
WBL 112	Work-Based Learning I <i>and</i> <b>★★★★</b>	0	20	2
WBL 115	Work-Based Learning Seminar I <b>★★★★</b>	1	0	1
<b>Total</b>				<b>18</b>

Major Electives				
Course Number	Course Name	Lec	Lab	Credit
AHR 140	All Weather Systems	1	3	2
AHR 250	HVAC System Diagnostics	0	4	2
BPR 115	Elc/Fluid Power Diagrams	1	2	2
BUS 280	REAL Small Business	4	0	4

- ★ - Designates classes preparing students to sit for NATE certification tests
- ★★ - Designates classes preparing students to sit for NC H3-II contractor license.
- (A)** – Students may receive credit for this course by successfully completing the articulated non-credit course, or submitting evidence of an articulated industry certification.  
See: <https://spcc.edu/credit-articulation-at-spcc/>

Spring – 1 <sup>st</sup> Year				
Course Number	Course Name	Lec	Lab	Credit
<b>AHR 114</b>	<b>Heat Pump Technology</b> ★	2	4	4
<b>AHR 213</b>	<b>HVACR Building Code</b> <b>(S) ★★ (A)</b>	1	2	2
<b>AHR 211</b>	<b>Residential System Design</b> <b>(S) ★★ (A)</b>	2	2	3
	Communications Elective			3
	Mathematics Elective			3
<b>Total</b>				<b>15</b>

Spring – 2 <sup>nd</sup> Year				
Course Number	Course Name	Lec	Lab	Credit
<b>AHR 180</b>	<b>HVACR Customer Relations</b>	1	0	1
<b>AHR 212</b>	<b>Advanced Comfort Systems</b>	2	6	4
AHR 240	Hydronic Heating	1	3	2
	Humanities/Fine Arts Elective	3	0	3
	Major Elective			6
<b>Total</b>				<b>16</b>

Major Electives (cont.)				
Course Number	Course Name	Lec	Lab	Credit
ELC 131	Circuit Analysis I	3	3	4
ELC 131A	Circuit Analysis I Lab	0	3	1
HYD 110	Hydraulics/Pneumatics I <b>(A)</b>	2	3	3
<i>ISC 112</i>	<i>Industrial Safety</i> <b>(A)</b>	2	0	2
WLD 112	Basic Welding Processes	1	3	2
AHR 152	HVAC Duct Systems II	1	3	2
AHR 133	HVAC Servicing	2	6	4
	All-Weather Systems	1	3	2

- Bold** – Core Courses (no substitutes)
- Highlighted Yellow** – Heating Fundamentals Certificate (C31100B)
- Italics** – Heat Pump Certificate (C35100C)

- (S)** – Designates recommended classes for students starting in spring of the first year
- ★★★ – Students must speak with the Director of Work-Based Learning before selecting WBL courses.