

AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY

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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 should be able to assist in the startup, preventive maintenance, service, repair, and/or installation of residential and light commercial systems.

Learning Outcomes

Upon completion of this program, students will be able to:

- Analyze and evaluate a broad variety of AHR technologies
- Exhibit industry standard skills and competencies
- Exhibit industry standards and competencies for Air Conditioning, Heating and Refrigeration design technologies

- Air Conditioning, Heating and Refrigeration Technology - Diploma (p. 1)
- Basic HVACR Certificate (p. 1)
- Intermediate HVACR Certificate (p. 1)
- Air Conditioning, Heating and Refrigeration Technology - CCP (p. 1)

Air Conditioning, Heating and Refrigeration Technology Diploma – D35100

Gainful Employment Disclosure (<https://www.stanly.edu/ajax/gedt/ED35100.html>)

Course	Title	Credit Hours
First Year		
Fall		
ACA 111	College Student Success	1
ENG 101 or ENG 111	Applied Communications I or Writing and Inquiry	3
AHR 110	Introduction to Refrigeration	5
AHR 112	Heating Technology	4
AHR 111	HVACR Electricity	3
Credit Hours		16
Spring		
MAT 110	Mathematical Measurement and Literacy	3

BPR 130	Print Reading-Construction	3
AHR 113	Comfort Cooling	4
AHR 114	Heat Pump Technology	4
AHR 160	Refrigerant Certification	1
WBL 110 or WBL 111	World of Work or Work-Based Learning I	1
Credit Hours		16
Summer		
AHR 130	HVAC Controls	3
AHR 211	Residential System Design	3
AHR 213	HVACR Building Code	2
Credit Hours		8
Total Credit Hours		40

Basic HVACR Certificate – C35100B

Course	Title	Credit Hours
First Year		
Fall		
AHR 110	Introduction to Refrigeration	5
AHR 112	Heating Technology	4
AHR 111	HVACR Electricity	3
AHR 160	Refrigerant Certification	1
ACA 111	College Student Success	1
Credit Hours		14
Total Credit Hours		14

Intermediate HVACR Certificate – C35100I

Course	Title	Credit Hours
First Year		
Spring		
AHR 113	Comfort Cooling	4
AHR 114	Heat Pump Technology	4
BPR 130	Print Reading-Construction	3
Credit Hours		11
Summer		
AHR 130	HVAC Controls	3
AHR 211	Residential System Design	3
AHR 213	HVACR Building Code	2
Credit Hours		8
Total Credit Hours		19

Air Conditioning, Heating & Refrigeration – CCP

Tuition-waived program for Career & College Promise (<https://www.stanly.edu/future-students/career-college-promise>) (high school juniors and seniors)

Course	Title	Credit Hours
First Year		
Fall		
AHR 110	Introduction to Refrigeration	5
AHR 111	HVACR Electricity	3
ACA 111	College Student Success	1
Credit Hours		9
Spring		
AHR 160	Refrigerant Certification	1
AHR 113	Comfort Cooling	4
AHR 114	Heat Pump Technology	4
Credit Hours		9
Total Credit Hours		18

View Our Video (<https://www.youtube.com/watch?v=43a6aoSnlgQ>)