

Awards

Associate Degree:	A/C, Heating & Refrigeration Technology (A35100)
Length of Program:	5 Semesters
Prerequisite:	High School Diploma, Placement Test Equivalent
Diploma:	A/C, Heating & Refrigeration Technology (D35100)
Length of Program:	3 Semesters
Prerequisite:	High School Diploma, Placement Test Equivalent
Certificate:	Basic Air Conditioning, Heating & Refrigeration (C35100)
Length of Program:	2 Semesters
Prerequisite:	High School Diploma, Placement Test Equivalent
Certificate:	Basic Air Conditioning, Heating & Refrigeration (C35100H1)
Length of Program:	2 Semesters
Prerequisite:	Placement Test Equivalent

Program Information Contact

Curriculum Chairperson

Justin Hawkes
(910) 678-8428
Lafayette Hall, Room 146A
hawkesj@faytechcc.edu
www.faytechcc.edu

Other Important Information

Application Deadlines: The program is designed for a student to enter during the fall semester. A student may enter at other times with approval of the Department Chairperson.

Scholarship/Title IV Financial Aid/VA Services: Scholarships/Title IV Financial Aid/Veteran's assistance may be available for associate degrees. Certificates and diplomas that fall under this program/area of study **may or may not be eligible** for Scholarship/Title IV Financial Aid/VA Services. Please contact the Financial Aid Office, Student Center, Room 2; Telephone (910) 678-8242. Veterans Services, General Classroom Building, Room 202, (910) 678-8580.



Faytechcc

2201 Hull Road
P.O. Box 35236
Fayetteville, NC 28303
(910) 678-8400

AC, HEATING & REFRIGERATION TECHNOLOGY



www.faytechcc.edu

Fayetteville Technical Community College

910-678-8400
P.O. Box 35236 • 2201 Hull Road
Fayetteville, NC 28303

PROGRAM FACT SHEET AC, HEATING & REFRIGERATION TECHNOLOGY (A35100)



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.

FAYETTEVILLE TECHNICAL COMMUNITY COLLEGE AC, HEATING & REFRIGERATION TECHNOLOGY (A35100)

Effective: Fall 2025

Revised: 02/18/25

Length: 5 Semesters

Prerequisite: High School Diploma, Placement Test Equivalent

Award: Associate in Applied Science

FALL SEMESTER 1

Prefix	No.	Title	Class	Lab	Clinical	Credit
AHR	110	Intro to Refrigeration	2	6	0	5
AHR	111	HVACR Electricity	2	2	0	3
AHR	113	Comfort Cooling	2	4	0	4
ENG	110	Freshman Composition	3	0	0	3
or						
ENG	111	Writing and Inquiry	3	0	0	3
TOTALS			9	12	0	15

SPRING SEMESTER 1

Prefix	No.	Title	Class	Lab	Clinical	Credit
AHR	112	Heating Technology	2	4	0	4
AHR	114	Heat Pump Technology	2	4	0	4
AHR	130	HVAC Controls	2	2	0	3
AHR	160	Refrigerant Certification	1	0	0	1
MAT	110	Math Meas & Literacy	2	2	0	3
or						
PHY	121	Applied Physics I	3	2	0	4
TOTALS			9	12	0	15

SUMMER SEMESTER 1

Prefix	No.	Title	Class	Lab	Clinical	Credit
AHR	115	Refrigeration Systems	1	3	0	2
AHR	213	AVACR Building Code	1	2	0	2
PSY	118	Interpersonal Psychology	3	0	0	3
		Humanities/Fine Arts Elec	3	0	0	3
TOTALS			8	5	0	10

FALL SEMESTER 2

Prefix	No.	Title	Class	Lab	Clinical	Credit
AHR	133	HVAC Servicing	2	6	0	4
AHR	151	HVAC Duct Systems I	1	3	0	2
AHR	180	HVACR Cust Relations	1	0	0	1
AHR	211	Residential System Design	2	2	0	3
AHR	255	Indoor Air Quality	1	2	0	2
WLD	112	Basic Welding Processes	1	3	0	2
TOTALS			8	16	0	14

SPRING SEMESTER 2

Prefix	No.	Title	Class	Lab	Clinical	Credit
AHR	212	Advance Comfort Systems	2	6	0	4
AHR	215	Commercial HVAC Controls	1	3	0	2
AHR	245	Chiller Systems	1	3	0	2
AHR	250	HVAC System Diagnostics	0	4	0	2
or						
WBL	112	Work Based Learning I	0	4	0	2
COM	120	Intro Interpersonal Com	3	0	0	3
or						
COM	231	Public Speaking	3	0	0	3
TOTALS			7	16	0	13

TOTAL REQUIRED CREDITS.....67

Work-Based Learning Option: Qualified students may elect to take up to two (2) credit hours of Work-Based Learning in lieu of AHR-250 provided they acquire prior approval from the Work-Based Learning Coordinator and the Department Chairperson.

***Note:** Students **may not** take an introductory foreign language to fulfill the Humanities/Fine Arts requirement.



Refer to the FTCC website for the most current information. Go to www.faytechcc.edu and click on College Catalog.