

BLUEGRASS COMMUNITY AND TECHNICAL COLLEGE

**Air Conditioning Technology
Associate in Applied Science**

Academic Plan Code - 4702017019

Academic courses, theory courses, and laboratory experiences are designed to promote success in the air conditioning field.

Students enrolled in the Air Conditioning Technology program must achieve a minimum grade of “C” in each technical course.

Description:

Installing and servicing heating, air conditioning and refrigeration equipment is the focus of this program. Academic courses, theory courses, and laboratory experiences are designed to promote success in the air conditioning field.

Students enrolled in the Air Conditioning Technology program must achieve a minimum grade of “C” in each technical course.

Course Number	Course Title	Credit Hours
General Education Core		
	Mathematics	3
	Science	3
	Social Interaction	3
	Heritage/Humanities/Foreign Language	3
	Writing	3
	Oral Communication	3
	Computer Literacy: Computer Literacy must be demonstrated either by competency exam or by completing a computer literacy course.	0-3
	Subtotal Credit Hours	18-21
Technical Core or Support Courses		
ACR100	Refrigeration Fundamentals	3
ACR101	Refrigeration Fundamentals Lab	2
ACR102	HVAC Electricity	3
ACR103	HVAC Electricity Lab OR	1
	Comparable Electrical Course	(4-5)
ACR130	Electrical Components	3
ACR131	Electrical Components Lab	2
ACR170	Heat Load/Duct Design	3
ACR250	Cooling and Dehumidification	3
ACR251	Cooling and Dehumidification Lab	2
ACR260	Heating and Humidification	3
ACR261	Heating and Humidification Lab	3
ACR270	Heat Pump Application	3
ACR271	Heat Pump Application Lab	2
	Electives	9-11
	Subtotal Credit Hours	42-45
	Total Credit Hours	60-66

Course Number	Course Title	Credit Hours
General Education Core		
Area 1	Writing/Accessing Information, Oral Communications, Humanities/Heritage/Foreign Language	3
Area 2	Social Science, Behavioral Science, Natural/Applied Science, or Mathematics	3
Area 3	Computer Literacy Course or demonstrated competency	0-3
	Subtotal Credit Hours	6-9
Technical Core or Support Courses		
ACR100	Refrigeration Fundamentals	3
ACR101	Refrigeration Fundamentals Lab	2
ACR102	HVAC Electricity	3
ACR103	HVAC Electricity Lab OR	1
	Comparable Electrical Course	(4-5)
ACR130	Electrical Components	3
ACR131	Electrical Components Lab	2
ACR170	Heat Load/Duct Design	3
ACR250	Cooling and Dehumidification	3
ACR251	Cooling and Dehumidification Lab	2
ACR260	Heating and Humidification	3
ACR261	Heating and Humidification Lab	2
ACR270	Heat Pump Application	3
ACR271	Heat Pump Application Lab	2
	Electives (Technical)	8-11
	Subtotal Credit Hours	40-44
	Total Credit Hours	46-53

**Air Conditioning Technology
Certificates**

Course Number	Course Title	Credit Hours
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Environmental Control System Servicer
Academic Plan Code - 4702013039

ACR100	Refrigeration Fundamentals	3
ACR101	Refrigeration Fundamentals Lab	2
ACR102	HVAC Electricity	3
ACR103	HVAC Electricity Lab OR	1
	Comparable Electrical Course	(4-5)
ACR130	Electrical Components	3
ACR131	Electrical Components Lab	2
ACR250	Cooling and Dehumidification	3
ACR251	Cooling and Dehumidification Lab	2
ACR260	Heating and Humidification	3

**Heating, Ventilation, and Air
Conditioning Mechanic – Diploma**

Academic Plan code - 4702014009

Description:

Installing and servicing heating, air conditioning and refrigeration equipment is the focus of this program.

(Courses are listed by category and not necessarily in the order to be taken)

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ACR261	Heating and Humidification Lab	2
	Total Credit Hours	24-25

Environmental System Repair Helper

Academic Plan Code – 4702013049

ACR100	Refrigeration Fundamentals	3
ACR101	Refrigeration Fundamentals Lab	2
ACR102	HVAC Electricity	3
ACR103	HVAC Electricity Lab OR	1
ACR130	Electrical Components AND	(3)
ACR131	Electrical Components Lab OR Comparable Electrical Course	(2) (4-5)
	Total Credit Hours	9-10

Domestic Air Conditioner and Furnace Installer

Academic Plan Code - 4702013029

ACR100	Refrigeration Fundamentals	3
ACR101	Refrigeration Fundamentals Lab	2
ACR102	HVAC Electricity	3
ACR103	HVAC Electricity Lab OR	1
	Comparable Electrical Course	(4-5)
ACR130	Electrical Components	3
ACR131	Electrical Components Lab	2
ACR170	Heat Load/Duct Design	3
ACR250	Cooling and Dehumidification	3
ACR251	Cooling and Dehumidification Lab	2
ACR260	Heating and Humidification	3
ACR261	Heating and Humidification Lab	2
ACR270	Heat Pump Application	3
ACR271	Heat Pump Application Lab	2
ACR290	Journeyman Preparation	3
	Total Credit Hours	35-36

Refrigeration Mechanic

Academic Plan Code – 4702013059

ACR100	Refrigeration Fundamentals	3
ACR101	Refrigeration Fundamentals Lab	2
ACR102	HVAC Electricity	3
ACR103	HVAC Electricity Lab OR	1
	Comparable Electrical Course	(4-5)
ACR130	Electrical Components	3
ACR131	Electrical Components Lab	2
ACR200	Commercial Refrigeration	3
ACR201	Commercial Refrigeration Lab	2
ACR210	Ice Machines	3
ACR250	Cooling and Dehumidification	3
ACR251	Cooling and Dehumidification Lab	2
	Total Credit Hours	27-28