Air Conditioning/Refrigeration, A.A.S.

This program provides training in which students gain the skills, knowledge, and experience for employment in Heating Ventilation, Air Conditioning, and Refrigeration (HVAC/R) occupations.

The students will acquire techniques and skills necessary to install, maintain, repair, or replace HVAC/R equipment. The student will have the opportunity to learn various phases of the fundamental principles of controls and electrical systems associated with HVAC/R. Courses focus on residential and light commercial HVAC/R systems.

Students who complete all courses listed in the curriculum will be awarded an associate in applied science degree in Air Conditioning/ Refrigeration. Admission is conditional and depends on the student's ability to perform the essential functions identified for this program. Reasonable accommodations are considered.

Program: Air Conditioning/Refrigeration
Type: Associate in Applied Science

Area I: Written Composition

Item #	Title	Credits
ENG 101	English Composition I	3

Area II: Humanities and Fine Arts

Item #	Title	Credits
	Speech	3
	Humanities/Fine Arts Elective	3

Area III: Natural Sciences and Mathematics

Item #	Title	Credits
	MTH 116 or higher	3
	Science/Math Elective	3-4

Area IV: History, Social and Behavioral Sciences

Item #	Title	Credits
PSY 200	General Psychology	3

Area V: Career and Technical Courses (Required Orientation Courses)

Item #	Title	Credits
	ORI 101 or ORT 100	1
CIS 146	Microcomputer Applications	3

Area V: Career and Technical Courses (Required Field of Concentration Courses)

Item #	Title	Credits
ACR 111	Principles of Refrigeration	3
ACR 112	HVAC/R Service Procedures	3
ACR 113	Refrigeration Piping Practices	3
ACR 119	Fundamentals of Gas Heating Systems	3
ACR 121	Principles of Electricity for HVAC/R	3
ACR 122	HVAC/R Electric Circuits	3
ACR 123	HVAC/R Electrical Components	3
ACR 132	Residential Air Conditioning	3
ACR 134	Ice Machines	3
ACR 147	Refrigerant Transition and Recovery Theory	3
ACR 148	Heat Pump Systems I	3
ACR 149	Heat Pump Systems II	3
ACR 203	Commercial Refrigeration	3
ACR 209	Commercial Air Conditioning Systems	3
ACR 210	Troubleshooting HVAC/R Systems	3
BUS 100	Introduction to Business	3
	Total credits:	**Total Credits 70-71**

Course Sequencing

Air Conditioning/Refrigeration Associate in Applied Science Degree Suggested Course Sequence FIRST SEMESTER

Item #	Title	Credits
	ORI 101 or ORT 100	1
	MTH 116 or higher	3
ACR 111	Principles of Refrigeration	3
ACR 112	HVAC/R Service Procedures	3
ACR 113	Refrigeration Piping Practices	3
ACR 121	Principles of Electricity for HVAC/R	3

Air Conditioning/Refrigeration Associate in Applied Science Degree Suggested Course Sequence SECOND SEMESTER

Item #	Title	Credits
ACR 122	HVAC/R Electric Circuits	3
ACR 123	HVAC/R Electrical Components	3
ACR 210	Troubleshooting HVAC/R Systems	3
CIS 146	Microcomputer Applications	3

Air Conditioning/Refrigeration Associate in Applied Science Degree Suggested Course Sequence THIRD SEMESTER

Item #	Title	Credits
ACR 119	Fundamentals of Gas Heating Systems	3
ACR 147	Refrigerant Transition and Recovery Theory	3
ACR 148	Heat Pump Systems I	3
ACR 149	Heat Pump Systems II	3
ENG 101	English Composition I	3

Air Conditioning/Refrigeration Associate in Applied Science Degree Suggested Course Sequence FOURTH SEMESTER

Item #	Title	Credits
	Science/Math Elective	3-4
	Speech	3
PSY 200	General Psychology	3
ACR 132	Residential Air Conditioning	3

Air Conditioning/Refrigeration Associate in Applied Science Degree Suggested Course Sequence FIFTH SEMESTER

Item #	Title	Credits
	Humanities/Fine Arts Elective	3
ACR 134	Ice Machines	3
ACR 203	Commercial Refrigeration	3
ACR 209	Commercial Air Conditioning Systems	3
BUS 100	Introduction to Business	3