

Air Conditioning & Refrigeration (ACR)
Associate in Applied Science
M.A.P.

Semester	Suggested Courses	Semester(s) Offered*	Credit Hrs.
Semester 1 17 credit hours	ACR 111 Principles of Refrigeration	Fall	3
	ACR 112 HVACR Service Procedures	Fall	3
	ACR 113 Refrigeration Piping Practices	Fall	3
	ACR 132 Residential Air Conditioning	Fall	3
	MTH 100 <i>or</i> Intermediate College Algebra <i>or</i> MTH 116 Mathematical Applications	Fall, Spring, Summer	3
	ORI 101 Orientation to College	Fall, Spring, Summer	2
Semester 2 15 credit hours	ACR 121 Principles of Electricity for HVACR	Spring	3
	ACR 122 HVACR Electric Circuits	Spring	3
	ACR 123 HVACR Electrical Components	Spring*	3
	ACR 147 Refrigeration Transition & Recovery (Recommended ACR Elective)	Spring	3
	ENG 101 English Composition I	Fall, Spring, Summer	3
Semester 3 12 credit hours	ACR 148 Heat Pumps I (Recommended ACR Elective)	Summer	3
	ACR 128 Heat Load Calculations (Recommended ACR Elective)	Summer	3
	ACR 205 System Sizing and Air Distribution (Recommended ACR Elective)	Summer	3
	SPH 106 <i>or</i> Fundamentals of Oral Communication <i>or</i> SPH 107 Fundamentals of Public Speaking	Fall, Spring, Summer	3
	ACR 210 Troubleshooting HVACR Systems (Recommended ACR Elective)	Fall	3
Semester 4 12 credit hours	ACR 135 Mechanical/Gas/Safety Codes (Recommended ACR Elective)	Fall	3
	ACR 138 Customer Relation in HVAC	Fall	3
	Area IV History or Social/Behavioral Science	Fall, Spring, Summer	3
	Semester 5 12-13 credit hours ACR Certificate Achieved	ACR 125 Fund Gas and Elec Heating Systems (Recommended ACR Elective)	Spring
Area II Fine Arts or Humanities	Fall, Spring, Summer	3	
Area III Math or Natural Science Elective	Fall, Spring, Summer	3-4	
Semester 6 3-6 credit hours ACR AAS Degree Achieved	ACR 149 Heat Pumps II (Recommended ACR Elective)	Summer	3
	ACR 192 HVAC Apprenticeship/Internship**	Summer	3
Total Hours			71-75

Course(s) may be offered in additional semesters but are only assured to run in the semester(s) indicated. It is **highly** recommended for the course(s) to be completed in the semester(s) indicated.

**ACR 192 is recommended but not required. Students who have not secured a work-based learning opportunity by semester 5 should consult with an academic advisor prior to registration and develop an alternate semester 5 degree completion plan.

Part-time students and full-time students desiring to begin the ACR program of study during a spring or summer semester should consult with an academic advisor to establish an alternate degree completion pathway.

Area II – Area IV Options

Area II	
<u>Humanities and Fine Arts</u>	
Art 100	Art Appreciation
ART 203	Art History I
ART 204	Art History II
ENG 251	American Literature I
ENG 252	American Literature II
ENG 261	English Literature I
ENG 262	English Literature II
ENG 271	World Literature I
ENG 272	World Literature II
HUM 298	Directed Studies in Humanities
MUS 101	Music Appreciation
PHL 206	Ethics and Society
REL 100	History of World Religions
REL 151	Survey of Old Testament
REL 152	Survey of New Testament
SPA 101	Introduction to Spanish I
SPA 102	Introduction to Spanish II
THR 120	Theatre Appreciation

Area III	
<u>Math or Natural Science</u>	
AST 220	Introduction to Astronomy
BIO 101 or	Introduction to Biology I or
BIO 103	Principles of Biology I
BIO 102 or	Introduction to Biology II or
BIO 104	Principles of Biology II
CHM 104 or	Introduction to Inorganic Chemistry or
CHM 111	College Chemistry I
CHM 105 or	Introduction to Organic Chemistry or
CHM 112	College Chemistry II
CHM 221	Organic Chemistry I
CHM 222	Organic Chemistry II
GEO 101	Principles of Physical Geography I
GEO 102	Principles of Physical Geography II
MTH 100	Intermediate College Algebra
MTH 110	Finite Mathematics
MTH 112	Precalculus Algebra
MTH 113	Precalculus Trigonometry
MTH 115	Precalculus Algebra & Trigonometry
MTH 120	Calculus and Its Applications
MTH 125	Calculus I
MTH 126	Calculus II
MTH 227	Calculus III
MTH 237	Linear Algebra
MTH 238	Applied Differential Equations I
MTH 265	Elementary Statistics
PHS 111	Physical Science I
PHS 112	Physical Science II
PHY 201	General Physics I -Trig Based
PHY 202	General Physics II-Trig Based
PHY 213	General Physics with Calculus I
PHY 214	General Physics with Calculus II

Area IV	
<u>History, Social, and Behavioral Sciences</u>	
ANT 200	Introduction to Anthropology
ANT 220	Cultural Anthropology
ECO 231	Principles of Macroeconomics
ECO 232	Principles of Microeconomics
GEO 100	World Regional Geography
HIS 101	Western Civilization I
HIS 102	Western Civilization II
HIS 201	United States History I
HIS 202	United States History II
POL 200	Introduction to Political Science
POL 211	American National Government
PSY 200	General Psychology
PSY 210	Human Growth & Development
SOC 200	Introduction to Sociology
SOC 210	Social Problems