

**Air Conditioning & Refrigeration (ACR)  
 Certificate  
 M.A.P.**

Semester	Suggested Courses	Semester(s) Offered*	Credit Hrs.
<b>Semester 1</b> 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
<b>Semester 2</b> 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
<b>Semester 3</b> 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
<b>Semester 4</b> 9 credit hours	ACR 210 Troubleshooting HVACR Systems (Recommended ACR Elective)	Fall	3
	ACR 135 Mechanical/Gas/Safety Codes (Recommended ACR Elective)	Fall	3
	ACR 138 Customer Relation in HVAC	Fall	3
<b>Semester 5</b> 6 credit hours <b>ACR Certificate Achieved</b>	ACR 125 Fund Gas and Elec Heating Systems (Recommended ACR Elective)	Spring	6
<b>Total Hours</b>			56-59

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

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.