



CHATTAHOOCHEE VALLEY COMMUNITY COLLEGE

**Certificate - Applied Technology:  
Air Conditioning and Refrigeration (HVAC) option**

This program emphasizes the fundamental principles for air conditioning and refrigeration. Instruction is provided in the theory and principles of refrigeration and heat transfer, HVAC/R system components, common and specialty tools for HVAC/R and application of the concepts of basic compression refrigeration. Upon completion, students should identify system components and understand their functions, identify and use common and specialty HVAC/R tools and maintain components of a basic compression refrigeration system.

	<b>credit hours</b>
<b>Required general education courses</b> .....	<b>12</b>
ENG 101 English Composition I. ....	3
MTH 100 Intermediate College Algebra or higher level MTH. ....	3
SPH 106 Fundamentals of Oral Communication .....	3
or SPH 107 Fundamentals of Public Speaking .....	3
CIS 146 Microcomputer Applications .....	3
<b>Required Air Conditioning and Refrigeration courses</b> .....	<b>43</b>
ADM 100 Industrial Safety .....	3
ADM 101 Precision Measurement .....	3
ADM 102 Computer Aided Design .....	3
ADM 103 Intro to Computer Integrated Manufacturing/Material Processes .....	3
ADM 104 Introduction to Thermal/Electrical Principles .....	3
ADM 105 Fluid Systems .....	3
ADM 106 Quality Control Concepts .....	3
ACR 111 Principles of Refrigeration .....	3
ACR 112 HVACR Service Procedures .....	3
ACR 113 Refrigeration Piping Practices .....	3
ACR 119 Fundamentals of Gas Heating Systems .....	3
ACR 120 Fundamentals of Electric Heating Systems .....	3
ACR 121 Principles of Electricity for HVACR .....	3
ACR 148 Heat Pump Systems .....	3
ACR 183 Special Topics in Air Conditioning and Refrigeration .....	1
<b>Additional certificate requirements</b> .....	<b>4</b>
*ORI 101 Orientation to College .....	1
WKO 102 Workplace Skills Development II .....	3
<b>Total</b> .....	<b>58-61</b>