

AIR CONDITIONING AND REFRIGERATION SERVICE (CERTIFICATE)

Manufacturing and Construction

Program website (<https://www.harpercollege.edu/academics/manufacturing/hvac/air-conditioning-service-certificate.php>)

Program Overview

This 29 credit-hour certificate program is designed to provide students the skill set to perform preventative maintenance, service and repairs on residential and commercial air conditioning and refrigeration systems. Emphasis is placed on practical application to perform system diagnostics and develop troubleshooting techniques.

Program Requirements

Code	Title	Hours
Required		
ELT 110	Introductory Electronics	4
ELT 144	AC and DC Motors	2
ELT 145	Variable Frequency Drives	2
HVA 101	Refrigeration Fundamentals	3
HVA 102	Refrigeration Systems	3
HVA 105	Heating and Cooling Controls	3
HVA 106	Pneumatic Controls Systems	3
HVA 107	Commercial Air Conditioning Systems	3
HVA 108	Domestic Refrigeration Appliances	3
MTH 100	Applied Math for Technical Careers ¹	3
Total Hours		29

¹ Students may take MTH 100, MTH 101 or higher.

Gainful Employment

Harper College provides Gainful Employment information to comply with the U.S. Department of Education.