Jefferson College

Certificate in Heating, Refrigeration, and Air Conditioning – Technician
2025 – 2026 Academic Plan

This academic plan is a semester-by-semester guide for the college-ready student. Students should consider bachelor's degree requirements at transfer institutions, potential for continuing education to a graduate degree, and future career goals when selecting specific courses. This plan is not a substitute for meeting with an Advising Specialist or full-time Faculty Advisor.

Academic Plan: Fall 1st Year			Notes
Requirement	Course	Credits	
FYEX	*First Year Experience	1	
MATH	MTH105 Industrial Math	3	• HRA101 and HRA105 with grades of "C" or better are prerequisites for future coursework.
CORE	HRA101 Electricity for HVAC	5	
CORE	HRA105 Principles of Refrigeration	5	
	Total Credits	14	

Academic Plan: Spring 1st Year			Notes
Requirement	Course	Credits	
CORE	HRA125 Refrigeration and AC Mechanical Systems	5	
CORE	HRA145 Piping Design, Sizing, and Installation for HRA	3	• HRA125 with a grade of "C" or better is a prerequisite for future coursework.
CORE	HRA150 Customer Relations and Record Keeping	2	
CORE	HRA160 Sheet Metal Sizing, Design, and Install	3	
	Total Credits	13	

Academic Plan: Fall 2nd Year			Notes
Requirement	Course	Credits	
CORE	HRA205 Residential Gas Heating System	4	
CORE	HRA216 Residential Air Conditioning Systems	3	
CORE	HRA230 Advanced Electricity for HVAC	3	
CORE	HRA240 Heat Pumps and Mini Splits	3	
	Total Credits	13	

Academic Plan: Spring 2nd Year			Notes
Requirement	Course	Credits	
CORE	HRA135 Introduction to International Mechanical Code	3	
CORE	HRA155 Duct Envelope Testing and Leakage Detection	2	
CORE	HRA210 Electric and Hydronic Heat	2	
CORE	HRA249 Commercial Refrigeration Systems	5	
	Total Credits	12	
	Total Program Credits	52	

*For a list of elective and general education courses visit, the degree/certificate plan webpage.

^This general education requirement must be met by a MOTR equivalent course; see MOTR webpage.

The Computer Literacy (CPLT) requirement must be completed with a grade of "C" or better.