

Last Name

First Name

**ASSOCIATE OF APPLIED SCIENCE
HEATING, REFRIGERATION, AND AIR CONDITIONING TECHNOLOGY DEGREE PLAN**

COURSE TITLES	COURSE NUMBERS	DONE	NOW	NEED	INSTALLER CERTIFICATE	TECHNICIAN CERTIFICATE	DEGREE
Electricity for HVAC (5)	HRA101				X	X	X
Principles of Refrigeration (5)	HRA105				X	X	X
Refrigeration and A/C Mechanical Systems (5)	HRA125				X	X	X
Intro to International Mechanical Code (3)	HRA135					X	X
Piping Design, Sizing, & Installation for HRA (3)	HRA145				X	X	X
Customer Relations and Record Keeping (2)	HRA150				X	X	X
Duct, Envelope Testing, and Leakage Detection (2)	HRA155					X	X
Sheet Metal Design, Sizing & Installation for HRA (3)	HRA160				X	X	X
Residential Gas Heating Systems (4)	HRA205					X	X
Electric and Hydronic Heat (2)	HRA210					X	X
Residential Air Conditioning Systems (3)	HRA216					X	X
Advanced Electricity for HVAC (3)	HRA230					X	X
Heat Pumps and Mini-Splits (3)	HRA240					X	X
Commercial Refrigeration Systems (5)	HRA249					X	X
Technical Internship (1-3) optional	INT191,192, or193						
Group I. <i>Communications</i> (3)	ENG101(H)						X
Group II. <i>Humanities/Communications</i> (3)							X
Group III. <i>Social/Behavioral Sciences</i> (3)							X
<i>Civics</i> (3)							X
<i>MO Higher Ed Civics Exam</i>	PSC001						X
Group IV. <i>Math and/or Science</i> (3)							X
<i>Industrial Math</i> (3)	MTH105*					X	X
Group V. <i>Computer Literacy</i> (3)							X
Group VI. <i>First Year Experience</i> (1-3)					X	X	X
Student Signature/Date							
Advisor Signature/Date							

Total Credit Hours:

24

52

70

GENERAL EDUCATION & INSTITUTIONAL REQUIREMENTS

Group I. Communications 3 hrs.
ENG101(H) required

Group II. Humanities/Communications 3 hrs.
[See MOTR CORE 42 list for choices](#)
Cannot use Performance classes

Group III. Social/Behavioral Sciences 6 hrs.
3 hours must fulfill Civics requirement
[See MOTR CORE 42 list for choices](#)

Group IV. Math and/or Science 6 hrs.
MTH105* required
MGT103*;MTH110*,128*;
[See MOTR CORE 42 list for additional choices](#)

Group V. Computer Literacy 3 hrs.
CIS125*; EDU205*

Group VI. First Year Experience 1-3 hrs.
COL100*, COL101*, or COL136* required

*These courses listed in the General Education and Institutional Requirements are not part of the MOTR CORE 42 general education program, and are not guaranteed to transfer to other institutions.

NOTE: Students must complete at least 15 credit hours at Jefferson College to meet the residency requirement for graduation. Computer literacy requirement must be completed with "C" or better.

Revised May 2023