

LANSING COMMUNITY COLLEGE

CURRICULUM GUIDE

HVAC/R–Energy Management Engineering Technology
Associate in Applied Science Degree

Curriculum Code: 1257 (Effective Fall 2015 – Summer 2020)

This curriculum will teach students current methods of identifying and performing efficiency evaluations on different types of heating, ventilation and air conditioning systems found in commercial and industrial buildings and methods of adjusting and balancing equipment for maximum performance. This curriculum also addresses designing, retrofitting, testing and balancing on a problem-solving level to prepare technologists to fill the wide technological gap between service technicians and engineers. Graduates will be able to seek employment in manufacturing, contracting, building operations, and in the engineering of commercial, institutional and industrial building systems. **Not all courses in this program transfer to all colleges.** Students planning to transfer should see an academic advisor before enrolling in any course.

PREREQUISITES

Students should see [Course Descriptions](#) for course prerequisite information. See [Academic Assessment and Placement Testing for Student Success](#) for skills assessment and advising information.

INFORMATION

Contact the Utility & Energy Systems Program, West Campus Building, Room M127, telephone number (517) 483-1570 (Website: www.lcc.edu/utility/hvac/) or Student Services West Campus, West Campus Building, Room M106, telephone number (517) 267-5452.

REQUIREMENTS

TOTAL: 71 CREDITS

CODE	TITLE	CREDIT HOURS
CITA 110	Intro to Microsoft Office	3
HUMS 213	World Civilizations to 1600	4
HVAC 100	Fundamentals of HVAC	3
HVAC 102	Industrial/Construction Safety (See Note 1)	2
HVAC 110	Applied Electricity I (See Note 1)	3
HVAC 111	Applied Electricity II	3
HVAC 120	Heating I	3
HVAC 130	Air Conditioning I	3
HVAC 201	Mechanical Code	4
HVAC 220	Heating II	3

HVAC 221	Introduction to Hydronics	3
HVAC 230	Air Conditioning II	3
HVAC 240	Refrigeration I	3
HVAC 241	Refrigeration II	3
HVAC 251	Fund of Direct Digital Control	3
MATH 114	Technical Math I	4
MATH 115	Technical Math II	4
PHYS 120	The Art of Physics	4
POLS 260	Comparative Political Systems	3
SPCH 130	Fund of Public Speaking	3
WRIT 121	Composition I	4
WRIT 124	Technical Writing	3

LIMITED CHOICE REQUIREMENTS

TOTAL: 0 CREDITS

Complete the indicated number of credits from **EACH CHOICE** listed below.

CHOICE 1: [General Education Core Areas](#)

0 Credits

(Click the link above for information on how to fulfill these requirements. Core area proficiency exams, where appropriate, are available for each core area.)

Communication Core Area (See Note 2)	0
Global Perspectives and Diversity Core Area (See Note 2)	0
Mathematics Core Area (See Note 2)	0
Science Core Area (See Note 2)	0
Writing Core Area (See Note 2)	0

MINIMUM TOTAL

71

NOTES:

1. Students who have already completed DCTM 102, ELTE 102, METS 102 or WELD 102 with a grade of 2.0 or higher may substitute one of these courses for HVAC 102. Any of these courses may also be used to fulfill the prerequisite for HVAC 110.
2. Students completing "REQUIREMENTS" have fulfilled the requirements for this Core area.

SUGGESTED COURSE SEQUENCE

Students should see course descriptions to find out when departments plan to offer courses. Students who for any reason are unable to follow the course sequence suggested below (for example, those who are part-time, have transferred in courses from another school, or have prerequisites to fulfill) should contact an academic advisor for help with adjustments.

I

HVAC 100
HVAC 102
HVAC 110
MATH 114
SPCH 130

II

CITA 110
HVAC 111
HVAC 120
HVAC 130
MATH 115

III

HUMS 213
HVAC 220
HVAC 230
HVAC 240
WRIT 124

IV

HVAC 201
HVAC 221
HVAC 241
POLS 260

V

HVAC 251
PHYS 120
WRIT 121