



HVAC/R-Energy Management Engineering Technology A.A.S.

Career Community: Building and Construction Trades

Curriculum Code: 1257

Effective: Fall 2024 – Summer 2029

Description

This degree is for students interested in pursuing a Bachelor of Science Degree in HVAC/R Energy Management Engineering Technology. As this is a transfer engineering degree, be aware that this pathway contains a higher math requirement and students may need additional math prerequisite classes depending upon math placement levels.

Milestone

In addition to the required General Education courses in Math and English, completion of HVAC 100 and HVAC 110 with a 2.0 or higher is a key component for success in completing this program. Knowledge obtained in these courses is the foundation for learning in other required courses. Students are encouraged to contact their faculty if they need additional assistance with learning the concepts presented in these courses.

Additional Information

If students have already completed DCTM 102, ELTE 102, HVAC 102, METS 102, or WELD 102 with a grade of 2.0 or higher, that will satisfy the TECH 102 requirement. Any of these courses will fulfill the prerequisite for HVAC 110.

Contact Information

For further information, including career options, course substitutions and waivers, etc., contact the Heating and Air Conditioning Program, West Campus Building, Room M127, telephone number 517-483-1570 or Student Services West Campus, West Campus Building, Room M106, telephone number 517-267-5452.

General Education – Applied Degrees, Recommended Courses

- English Composition or Applied English
Program of Study Required Courses will meet this requirement
- English Composition (second course)/Communication or Applied Communication
Program of Study Required Courses will meet this requirement
- Humanities and Fine Arts or Social Sciences or Applied Social Sciences
Program of Study Required Courses will meet this requirement
- Mathematics or Applied Mathematics
Program of Study Required Courses will meet this requirement
- Natural Sciences Lab or Applied Science and Technology Lab
Program of Study Required Courses will meet this requirement

Program of Study Required Courses

Course Code	Course Title	Credit / Billing Hours
COMM 130	Fundamentals Public Speaking	3 / 3
ENGL 121	Composition I	4 / 4
ENGL 124	Technical Writing	3 / 3
GEOG 200	World Regional Geography	4 / 4
HUMS 160	Mythology	4 / 4
HVAC 100	Fundamentals of HVAC	3 / 3
HVAC 110	Applied Electricity I	3 / 4
HVAC 111	Applied Electricity II	3 / 4
HVAC 120	Heating I	3 / 4
HVAC 130	Air Conditioning I	3 / 4
HVAC 201	Mechanical Code	4 / 4
HVAC 220	Heating II	3 / 4
HVAC 221	Introduction to Hydronics	3 / 4
HVAC 230	Air Conditioning II	3 / 4
HVAC 240	Refrigeration I	3 / 4
HVAC 241	Refrigeration II	3 / 4
HVAC 251	Fund of Direct Digital Control	3 / 4
MATH 126	Precalculus	5 / 5
PHYS 120	The Art of Physics	4 / 5
TECH 102	General Industry Safety	2 / 3

Additional Credits

After completing the course and credit requirements as noted on this pathway, students who fall short of the 60-credit minimum required for an Associate Degree may select any course(s) needed to reach 60 credits, except those courses noted in number 7 in the [Institutional Requirements for Associate Degrees](#). Students are encouraged to use Degree Works and meet with an Advisor to ensure all requirements are met and for course recommendations.

Minimum Total Credit Hours

66 credits / 78 billing hours

Recommended Course Sequence

Semester I
ENGL 124
HUMS 160
HVAC 100 – Milestone course
HVAC 110 – Milestone course
TECH 102

Semester II
ENGL 121
HVAC 111
HVAC 120
HVAC 130
MATH 126

Semester III
COMM 130
HVAC 220
HVAC 221
HVAC 230
HVAC 240

Semester IV
GEOG 200
HVAC 201
HVAC 241
HVAC 251
PHYS 120

LCC makes every effort to limit revisions to the pathways during their effective timeframe. However, the College reserves the right to update certificate and degree title changes, and make course changes as needed, without prior notice.