



Energy Management Specialist A.A.S.

Curriculum Code: 1606

Effective: Fall 2021 – Summer 2026

Description

Energy Management Specialists are involved in the commissioning, evaluation, planning, design, installation, and maintenance of a wide variety of energy systems in the built environment. The energy efficiency specialist will need a working knowledge of energy efficient building concepts and energy efficient design principles. Students completing this curriculum may also be eligible to apply for the Certificate of Completion in Alternative Energy Engineering Technology (1486). Not all courses in this program transfer to all colleges. Students planning to transfer should see an academic advisor before enrolling in any course.

Additional Information

Students who have already completed ELTE 102, HVAC 102, METS 102 or WELD 102 with a grade of 2.0 or higher may substitute one of these courses for DCTM 102. Any of these classes may also be used to fulfill the prerequisite for HVAC 110.

Contact Information

Contact the Energy Management Program at the West Campus Building, Room M103, telephone number 517-483-5338 or Student Services West Campus, West Campus Building, Room M106, telephone number 517-267-5452.

General Education - Applied Degrees, Recommended Courses

(For the full list of options, see [General Education](#))

- English Composition or Applied English – *Select one*
ENGL 124, Technical Writing, 3 credits / 3 billing hours
- English Composition (Second Course)/Communications or Applied Communications – *Select one*
COMM 110, Communication in the Workplace, 3 credits / 3 billing hours
- Humanities and Fine Arts or Social Sciences or Applied Social Sciences – *Select one*
MGMT 234, Diversity in the Workplace, 3 credits / 3 billing hours
- Mathematics or Applied Mathematics – *Select one*
MATH 115, Technical Math II, 4 credits / 4 billing hours
- Natural Sciences Lab or Applied Science and Technology Lab – *Select one*
BIOL 120, Environmental Science, 4 credits / 6 billing hours
CHEM 135, Chemistry in Society, 4 credits / 5 billing hours
PHYS 200, Intro to Applied Physics, 4 credits / 5 billing hours

Program of Study Required Courses

Course Code	Course Title	Credit / Billing Hours
DCTM 100	Intro to the Built Environment	3 / 4
DCTM 101	Drafting/Intro to CAD	3 / 4
DCTM 102	Industrial/Construction Safety	2 / 3
DCTM 103	Codes and Specifications	3 / 3
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 140	Residential Energy	3 / 4
HVAC 210	Solar Energy Technologies	3 / 4
HVAC 230	Air Conditioning II	3 / 4
HVAC 231	Heat Pump	3 / 4
HVAC 251	Fund of Direct Digital Control	3 / 4
HVAC 260	Building Commissioning	3 / 4

Program of Study Required Courses, Limited Choice – *Select one*

Course Code	Course Title	Credit / Billing Hours
AEET 275	Sustainable Building Design	4 / 6
AEET 280	Alternative Energy Practicum	4 / 4

Total Credit Hours

65 credits / 79-82 billing hours

Recommended Course Sequence

Semester I	Semester II
Gen Ed – Humanities and Fine Arts or Social Sciences or Applied Social Sciences Gen Ed – Mathematics or Applied Mathematics DCTM 100 DCTM 102 HVAC 100 HVAC 110	Gen Ed – English Composition or Applied English HVAC 111 HVAC 120 HVAC 130 HVAC 140
Semester III	Semester IV
Gen Ed – English Composition (Second Course)/Communications or Applied Communications	Gen Ed – Natural Sciences Lab or Applied Science and Technology Lab HVAC 231

Semester III	Semester IV
DCTM 101 DCTM 103 HVAC 210 HVAC 230	HVAC 251 HVAC 260 Limited Choice