

**LANSING COMMUNITY COLLEGE**

**Computer, Engineering/Manufacturing Industrial Technologies**

**Curriculum Code: 1606  
(Effective Fall 2018 –  
Summer 2023)**

**Energy Management Specialist A.A.S. Pathway**

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.

**For More 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.

Semester I	Course Title	Prerequisites	Credit/Billing Hours
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**Math Core Area - *Select 1***

MATH 115	Technical Math II	(Minimum 2.0 in MATH 114 within 2 years or Math Level 5 within 2 years) and Reading Level 5	4 / 4
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**Global Perspectives and Diversity Core Area - *Select 1***

MGMT 234	Diversity in the Workplace	Reading Level 5 and Writing Level 6	3 / 3
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**Program of Study Requirements**

*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.*

DCTM 100	Intro to the Built Environment	Reading Level 4 and Writing Level 4 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	3 / 4
DCTM 102	Industrial/Construction Safety	Reading Level 3 and Writing Level 2	2 / 3
HVAC 100	Fundamentals of HVAC	Reading Level 3 and Writing Level 2	3 / 3
HVAC 110	Applied Electricity I	Minimum 2.0 in (HVAC 102 or DCTM 102 or ELTE 102 or METS 102 or WELD 102 or concurrently) and Reading Level 3 and Writing Level 2 and (Math Level 3 or minimum 2.0 in MATH 105 or MATH 106)	3 / 4

**Credits**                      **18 / 21**

Semester II	Course Title	Prerequisites	Credit/Billing Hours
<b>Writing Core Area - <i>Select 1</i></b>			
ENGL 124	Technical Writing	Reading Level 5 and Writing Level 6 or (Reading Level 4 and Writing Level 4 and ENGL 099 concurrently)	3 / 3
<b>Program of Study Requirements</b>			
AEET 120	Residential Energy	Reading Level 3 and Writing Level 4 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	3 / 4
HVAC 111	Applied Electricity II	Minimum 2.0 in (HVAC 100 and HVAC 110) and Reading Level 3 and Writing Level 2 and Math Level 3	3 / 4
HVAC 120	Heating I	Minimum 2.0 in (HVAC 100 and HVAC 110) and Reading Level 3 and Writing Level 2 and Math Level 3	3 / 4
HVAC 130	Air Conditioning I	Minimum 2.0 in (HVAC 100 and HVAC 110) and Reading Level 3 and Writing Level 2 and Math Level 3	3 / 4
<b>Credits</b>			<b>15 / 19</b>

Semester III	Course Title	Prerequisites	Credit/Billing Hours
<b>Program of Study Requirements</b>			
AEET 215	Geothermal Technology	Reading Level 3 and Writing Level 4	3 / 4
AEET 216	Solar Energy Technologies	Reading Level 3 and Writing Level 4 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	3 / 4
AEET 220	Energy Modeling	Minimum 2.0 in AEET 120 and Reading Level 4 and Writing Level 4 and Math Level 5	3 / 3
DCTM 103	Codes and Specifications	Reading Level 4 and Writing Level 4 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	3 / 3
HVAC 230	Air Conditioning II	Minimum 2.0 in (HVAC 111 and HVAC 130) and Reading Level 3 and Writing Level 2 and Math Level 3	3 / 4
<b>Credits</b>			<b>15 / 18</b>

Semester IV	Course Title	Prerequisites	Credit/Billing Hours
<b>Science Core Area - <i>Select 1</i></b>			
BIOL 120	Environmental Science	(Reading Level 5 or ENGL 099 concurrently) and Writing Level 6	4 / 6
CHEM 135	Chemistry in Society	Reading Level 5 and Writing Level 6 and (Math Level 4 or minimum 2.0 in MATH 105 or minimum 2.0 in MATH 106)	4 / 5
PHYS 200	Intro Physics With Application	Reading Level 5 and Writing Level 6 and (Math Level 5 or MATH 109 concurrently)	4 / 5
<b>Communication Core Area - <i>Select 1</i></b>			
COMM 110	Oral Comm in the Workplace	Reading Level 5 and Writing Level 6 or (Reading Level 4 and Writing Level 4 and ENGL 099 concurrently)	3 / 3
<b>Program of Study Requirements</b>			
AEET 256	Building Commissioning	Minimum 2.0 in (DCTM 103 or AEET 251) and Reading Level 5 and Writing Level 6 and Math Level 5	3 / 4
HVAC 251	Fund of Direct Digital Control	Minimum 2.0 in (HVAC 230 or concurrently) and Reading Level 3 and Writing Level 2 and Math Level 3	3 / 4
<b>Capstone Project - <i>Select 1</i></b>			
AEET 275	Sustainable Building Design	Department Approval	4 / 6
AEET 280	Alternative Energy Practicum	Department Approval	4 / 4
<b>Credits</b>			<b>17 / 20-23</b>
<b>Total Credits</b>			<b>65 / 78-81</b>