

LANSING COMMUNITY COLLEGE

Computer, Engineering/Manufacturing Industrial Technologies

Curriculum Code: 1634
(Effective Fall 2018 –
Summer 2023)

Construction Management A.A.S. Pathways

The Construction Management Degree is designed to prepare students to work in entry-level supervisory and management positions related to construction, including site supervisors, construction and project superintendents, field supervisors, project engineers, and estimating/scheduling assistants. Construction management professionals plan, direct, or coordinate activities related to the construction and maintenance of buildings and infrastructure. They participate as members of an integrated project team in the conceptual development of a construction project and oversee its organization, scheduling, budgeting, and implementation. This curriculum incorporates elements of the Associate Constructor Level I examination body of knowledge as established by the American Institute of Construction. The curriculum provides graduates with a broad foundation of technical and management abilities with an emphasis on job entry skill development, estimating, scheduling, project management, and specialized technical skills related to one of four construction focus areas (building, heavy/civil, electrical/construction, and HVAC/mechanical construction). 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 in this program choose one subspecialty to determine the courses to take each semester. Subspecialty options are Building Construction, Heavy/Civil Construction, Electrical Construction, and HVAC/Mechanical Construction.

Upon completion of a subspecialty, any additional subspecialty courses will not count toward the student's enrollment level for determining financial aid eligibility.

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 courses may also be used to fulfill the prerequisite for ARCH 113, ELTE 108, ELTE 109, HVAC 110 and the BLDT courses.

For More Information

Contact the Construction Management Program, West Campus Building, Room M103, telephone number (517) 483-5338 or Student Services West Campus, West Campus Building, Room M016, telephone number (517) 267-5452.

Students in this program **choose one subspecialty pathway** to determine the courses to take each semester. Pathway options are **Building Construction, Heavy/Civil Construction, Electrical Construction, and HVAC/Mechanical Construction.**

Semester I-Fall	Course Title	Prerequisites	Credit/Billing Hours
Math Core Area - <i>Select 1</i>			
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

MATH 120	College Algebra	(Minimum 2.0 in MATH 109 or MATH 112 within 2 years or Math Level 6 within 2 years) and Reading Level 5 and Writing Level 4	4 / 4
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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 courses may also be used to fulfill the prerequisite for ARCH 113, ELTE 108, ELTE 109, HVAC 110 and the BLDT courses.

ARCH 113	Materials & Methods of Constr.	Minimum 2.0 in (DCTM 102 or ELTE 102 or HVAC 102 or METS 102 or WELD 102 or concurrently) and Reading Level 4 and Writing Level 4	4 / 6
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

Subspecialty Pathway Requirements

Students take the course(s) listed for their specific pathway.

Building Construction Subspecialty

BLDT 120	Structural Framing	Minimum 2.0 in (DCTM 102 or ELTE 102 or HVAC 102 or METS 102 or WELD 102 or concurrently) and Reading Level 4 and Writing Level 4 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	4 / 6
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Heavy/Civil Construction Subspecialty

CIVL 120	Surveying	Minimum 2.0 in MATH 114 or Math Level 5	4 / 6
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Electrical Construction Subspecialty			
ELTE 108 (1 st 8 weeks)	Practical Electricity I	Minimum 2.0 in (ELTE 102 or DCTM 102 or HVAC 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)	2 / 3
ELTE 109 (2 nd 8 weeks)	Practical Electricity II	Minimum 2.0 in ((ELTE 102 or DCTM 102 or HVAC 102 or METS 102 or WELD 102 or concurrently) and (ELTE 108 or concurrently)) and Reading Level 3 and Writing Level 2 and (Math Level 3 or minimum 2.0 in MATH 105 or MATH 106)	2 / 3
HVAC/Mechanical Construction Subspecialty			
HVAC 100	Fundamentals of HVAC	Reading Level 3 and Writing Level 2	3 / 3
Credits			16-17 / 20-23
Semester II-Spring	Course Title	Prerequisites	Credit/Billing Hours
Science Core Area - <i>Select 1</i>			
PHYS 200	Intro Physics With Application	Reading Level 5 and Writing Level 6 and (Math Level 5 or MATH 109 concurrently)	4 / 5
PHYS 221	Introductory Physics I	Reading Level 5 and Writing Level 6 and (Math Level 9 or minimum 2.0 in MATH 122 or Math 126 or MATH 141)	4 / 6
Program of Study Requirements			
ACCG 101	Accounting Info for Management	Reading Level 4 and Math Level 4	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

Subspecialty Pathway Requirements - *Select 1*

Students take the course listed for their specific pathway.

Building Construction Subspecialty			
BLDT 130	Building Exterior Construction	Minimum 2.0 in ((DCTM 102 or ELTE 102 or HVAC 102 or METS 102 or WELD 102 or concurrently) and Reading Level 4 and Writing Level 4 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	4 / 6
Heavy/Civil Construction Subspecialty			
CIVL 135	Soils Technology	Minimum 2.0 in MATH 114 or Math Level 5	3 / 3
Electrical Construction Subspecialty			
ELTE 112	Basic Wiring Installation	Minimum 2.0 in (ELTE 109 or ELTE 110 or HVAC 110) and Reading Level 3 and Writing Level 2 and Math Level 3	2 / 3
ELTE 141	National Electrical Code I	Minimum 2.0 in (ELTE 109 or ELTE 110 or HVAC 110) and Reading Level 3 and Writing Level 2 and Math Level 3	4 / 4
HVAC/Mechanical Construction Subspecialty			
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			10-13 / 11-16

Semester III – Summer	Course Title	Prerequisites	Credit/Billing Hours
Writing Core Area - <i>Select 1</i>			
ENGL 121	Composition I	Reading Level 5 and Writing Level 6 or (Reading Level 4 and Writing Level 4 and ENGL 099 concurrently)	4 / 4
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
Communication Core Area - <i>Select 1</i>			
COMM 130	Fund of Public Speaking	Reading Level 5 and Writing Level 6	3 / 3
Credits			6-7 / 6-7
Semester IV-Fall	Course Title	Prerequisites	Credit/Billing Hours
Program of Study Requirements			
ARCH 125	Environmental Systems	Reading Level 4 and Writing Level 4 and (Math Level or minimum 2.0 in MATH 105 or MATH 106)	4 / 4
CIVL 241	Statics/Strength of Materials	Minimum 2.0 in MATH 114 or Math Level 5	4 / 5
DCTM 200	Construction Management I	Reading Level 5 and Writing Level 6	4 / 6
LEGL 215	Business Law-Basic Principles	None	3 / 3
Credits			15 / 18
Semester V-Spring	Course Title	Prerequisites	Credit/Billing Hours
Global Perspectives and Diversity Core Area - <i>Select 1</i>			
MGMT 234	Diversity in the Workplace	Reading Level 5 and Writing Level 6	3 / 3
Program of Study Requirements			
DCTM 201	Construction Management II	Minimum 2.0 in (DCTM 200 and (MATH 115 or Math Level 6)) and Reading Level 5 and Writing Level 6	4 / 6
DCTM 220	BIM for Construction	Reading Level 4 and Writing Level 4 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	4 / 6

Subspecialty Pathway Requirements - <i>Select 1</i>			
<i>Students choose one course for their pathway.</i>			
Building Construction Subspecialty			
BLDT 140	Building Interior Construction	Minimum 2.0 in (DCTM 102 or ELTE 102 or HVAC 102 or METS 102 or WELD 102 or concurrently) and Reading Level 4 and Writing Level 4 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	4 / 6
BLDT 150	Intro Masonry/Concrete Const	Reading Level 4 and Math Level 3	4 / 6
BLDT 180	Builder Pre-Licensure Prep	Reading Level 4 and Writing Level 4 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	4 / 4
Heavy/Civil Construction Subspecialty			
CIVL 141	Site Inspection	Reading Level 3 and Writing Level 2 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	3 / 3
Electrical Construction Subspecialty			
<i>Courses may not be duplicated</i>			
ELTE 141	National Electrical Code I	Minimum 2.0 in (ELTE 109 or ELTE 110 or HVAC 110) and Reading Level 3 and Writing Level 2 and Math Level 3	4 / 4
ELTE 145	Electrical Prints for Building	Minimum 2.0 in ELTE 141 and Reading Level 3 and Writing Level 2 and Math Level 3	4 / 5
HVAC/Mechanical Construction Subspecialty			
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
Credits			14-15 / 18-21
Total Credits			61-67 / 73-85