

LANSING COMMUNITY COLLEGE

Computer, Engineering/Manufacturing Industrial Technologies

Curriculum Code: 1635  
(Effective Fall 2018 –  
Summer 2023)

**Construction Management C.A. Pathways**

The Construction Management Certificate of Achievement 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 provides students with the opportunity to add construction management competencies to another trade-or technical related certificate or degree (AEET, ARCH, BLDT, CIVL, ELTE, HVAC) or to work toward completion of the Construction Management Associate in Applied Science degree. This 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 (residential, 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.

**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 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
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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.*

ACCG 101	Accounting Info for Management	Reading Level 4 and Math Level 4	3 / 3
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
<b>Credits</b>			<b>12 / 16</b>

Semester II-Spring	Course Title	Prerequisites	Credit/Billing Hours
<b>Program of Study Requirements</b>			
DCTM 200	Construction Management I	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
<b>Pathway Requirements - Select 1 Pathway</b> <i>Students take the number of course(s) listed for their specific pathway.</i>			
<b>Building Construction – Select both courses</b> <i>11 credits required for degree</i>			
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
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
<b>Heavy/Civil Construction –Select one course</b> <i>10 credits required for degree</i>			
CIVL 120	Surveying	Minimum 2.0 in MATH 114 or Math Level 5	4 / 6

<b>Electrical Construction –Select all three courses</b>			
<i>10 credits required for degree</i>			
ELTE 108 (1 <sup>st</sup> 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 <sup>nd</sup> 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
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
<b>HVAC/Mechanical Construction –Select both courses</b>			
<i>9 credits required for degree</i>			
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
<b>Credits</b>			<b>12-15 / 18-21</b>

Semester III-Fall	Course Title	Prerequisites	Credit/Billing Hours
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
MGMT 234	Diversity in the Workplace	Reading Level 5 and Writing Level 6	3 / 3
<b>Pathway Requirements</b> <i>Students take the number of course(s) listed for their specific pathway.</i>			
<b>Building Construction - Select one course</b> <i>11 credits required for degree</i>			
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
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 or minimum 2.0 in MATH 105 or MATH 106)	4 / 6
<b>Heavy/Civil Construction - Select both courses</b> <i>10 credits required for degree</i>			
CIVL 135	Soils Technology	Minimum 2.0 in MATH 114 or Math Level 5	3 / 3
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

<b>Electrical Construction - Select one course</b> <i>10 credits required for degree</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
<b>HVAC/Mechanical Construction - Select one course</b> <i>9 credits required for degree</i>			
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>10-13 / 13-15</b>
			<b>Total Credits</b>
			<b>36-38 / 48-52</b>