

# CONSTRUCTION MANAGEMENT TECHNOLOGY

## Overview

Construction Management Technology Associate of Applied Science Degree

Program Code: 10-455-4

For more information: [wctc.edu/construction-mgmt](http://wctc.edu/construction-mgmt)

Gain the knowledge and skills needed to be a leader in residential, commercial or industrial construction. Hone your technical and engineering skills while exploring the business and management aspects of the industry. Learn how to manage contractors and construction workers to meet project deadlines and overcome potential obstacles.

The minimum required course grades and program grade point average (GPA) for students under this catalog are:

Core Courses = C

General Studies Courses = C-

Program GPA = 2.0

## Learning Outcomes

### Program Outcomes

1. Demonstrate technical knowledge of building materials, systems, and processes to provide for cost-effective management.
2. Analyze technical graphic and written information found in prints, specifications, building codes, regulations, manufacturers' data and other contract documents.
3. Manage budget preparation and administration from project conception through completion.
4. Schedule human, physical and financial resources necessary for construction project activities.
5. Manage construction personnel including subcontractors, suppliers and field staff to ensure timely, cost-effective project completion.
6. Comply with established company safety measures and OSHA regulations.
7. Apply accounting principles necessary to work within budget and assist with project buyout, management and cost accounting.
8. Participate in the preparation, tracking and maintenance of change orders, purchase orders, RFI's, submittals, and other construction documents.
9. Use various software that supports construction technology.
10. Comply with contractual and regulatory obligations of construction projects.
11. Apply the sustainable construction and development solutions utilizing the Green Building Rating System.
12. Employ applications for Building Information Modeling (BIM) through the use of leading industry software for modeling and management.
13. Evaluate Quality Assurance techniques for building design, materials, and methods.

## Critical Life Skills

To help our students prepare for success in a workplace and society that is increasingly global, multi-cultural, and collaborative, all students are

given opportunities to develop and demonstrate Critical Life Skills, both in and out of the classroom. The following Critical Life Skills are learning outcomes for WCTC students.

- **Communication:** Demonstrate appropriate communication.
- **Critical Thinking/Problem Solving:** Demonstrate critical thinking skills to analyze situations and solve problems.
- **Relationships:** Demonstrate effective interpersonal skills.
- **Self-management:** Demonstrate responsible and respectful behavior.

## Required Courses

Listed below are the required courses for the program. To view the recommended sequence for taking courses click on the plan of study tab(s) above. See your Academic Advisor to design a full-time or part-time plan that works for you!

View your **Program Matrix** to find out when each course will be offered (term and time of day).

Code	Title	Credits
<b>Core Courses</b>		
101-105	Accounting Fundamentals	3
Approved Substitutes: 101-111 OR 101-109		
196-140	Managing People	3
Approved Substitute: 196-191		
455-103	CM Materials and Methods	2
455-106	Foundations & Enclosures	3
455-109	CM MEP Systems	3
Approved Substitutes: 614-149 OR (614-139 and 614-151)		
455-112	CM Electronic Drafting	3
Approved Substitutes: 614-110 or 614-131		
455-115	Site Layout and Construction	2
455-118	Construction Safety Mgmt	1
455-124	Construction Scheduling	2
455-127	Construction Estimating	2
Approved Substitute: 475-112		
455-130	Construction Financial Mgmt	2
455-133	Construction Contracts & Law	2
455-136	Construction Project Mgmt	2
455-139	Computer Integrated Const	2
455-150	CM Internship	1
475-103	Blueprint Reading/Construction	2
614-134	Architectural Building Codes	1
614-138	Structural Concepts	2
614-152	Sustainable Building Concepts	3
Approved Substitute: 614-137		
890-108	Employment Success	1
<b>General Studies</b>		
801-136	English Composition 1	3
801-196	Oral/Interpersonal Comm	3
Approved Substitute: 801-198		
804-107	College Mathematics	3
Approved Substitutes: 804-115 OR 804-116 OR 804-118 OR 804-195 OR 804-198 OR (804-304 AND 804-305)		
806-139	Survey of Physics	3

Approved Substitutes: 806-143 OR 806-187		
809-195	Economics	3
Approved Substitute: 809-143		
809-199	Psychology of Human Relations	3
Approved Substitute: 809-198		
<b>Total Credits</b>		<b>60</b>

455-136	Construction Project Mgmt	2
455-139	Computer Integrated Const	2
<b>Credits</b>		<b>6</b>
<b>Third Year</b>		
<b>Summer Term</b>		
455-150	CM Internship	1
<b>Credits</b>		<b>1</b>
<b>Total Credits</b>		<b>60</b>

## Full-time Plan

### First Year

Fall Term 1		Credits
455-103	CM Materials and Methods	2
475-103	Blueprint Reading/Construction	2
804-107	College Mathematics	3
<b>Credits</b>		<b>7</b>

### Fall Term 2

455-106	Foundations & Enclosures	3
801-136	English Composition 1	3
806-139	Survey of Physics	3
<b>Credits</b>		<b>9</b>

### Spring Term 1

455-112	CM Electronic Drafting	3
455-109	CM MEP Systems	3
<b>Credits</b>		<b>6</b>

### Spring Term 2

196-140	Managing People	3
455-115	Site Layout and Construction	2
614-138	Structural Concepts	2
<b>Credits</b>		<b>7</b>

### Second Year

#### Summer Term

455-118	Construction Safety Mgmt	1
809-199	Psychology of Human Relations	3
<b>Credits</b>		<b>4</b>

#### Fall Term 1

101-105	Accounting Fundamentals	3
614-152	Sustainable Building Concepts	3
<b>Credits</b>		<b>6</b>

#### Fall Term 2

455-124	Construction Scheduling	2
455-127	Construction Estimating	2
801-196	Oral/Interpersonal Comm	3
<b>Credits</b>		<b>7</b>

#### Winter Interim

890-108	Employment Success	1
<b>Credits</b>		<b>1</b>

#### Spring Term 1

455-130	Construction Financial Mgmt	2
614-134	Architectural Building Codes	1
809-195	Economics	3
<b>Credits</b>		<b>6</b>

#### Spring Term 2

455-133	Construction Contracts & Law	2
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