

CONSTRUCTION MANAGEMENT - B.S.

College of Architecture and Environmental Design
 Center for Architecture and Environmental Design
 Kent Campus
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Description

The Bachelor of Science degree in Construction Management employs a professional-service approach that applies effective management techniques and oversight to the building and management of construction projects. Students learn the business of construction from inception to completion of a project—including emphasis on construction materials and methods—that will enable them to estimate costs, schedule work, oversee construction work-site activities and manage projects.

The Construction Management major includes the following optional concentrations:

- Civil Management
- Mechanical and Electrical Management
- Safety Management

Cooperative education opportunities are available to students in construction companies and architect/engineering firms in the region. In addition, students have an opportunity to pursue a dual degree with the B.A. degree in Architectural Studies.

Fully Offered At:

- Kent Campus

Accreditation

The B.S. degree in Construction Management is accredited by the American Council for Construction Education of the Association of Technology Management, and Applied Engineering (ATMAE). The major is candidate status for accreditation with the American Council for Construction Education (ACCE).

Admission Requirements

The university affirmatively strives to provide educational opportunities and access to students with varied backgrounds, those with special talents and adult students who graduated from high school three or more years ago.

Freshman Students on the Kent Campus: The freshman admission policy on the Kent Campus is selective. Admission decisions are based upon the following: cumulative grade point average, ACT and/or SAT scores, strength of high school college preparatory curriculum and grade trends. The Admissions Office at the Kent Campus may defer the admission of students who do not meet admissions criteria but who demonstrate areas of promise for successful college study. Deferred applicants may begin their college coursework at one of seven regional campuses of Kent State University. For more information on admissions,

including additional requirements for some academic programs, visit the admissions website for new freshmen.

Freshman Students on the Regional Campuses: Kent State campuses at Ashtabula, East Liverpool, Geauga, Salem, Stark, Trumbull and Tuscarawas, as well as the Regional Academic Center in Twinsburg, have open enrollment admission for students who hold a high school diploma, GED or equivalent.

English Language Proficiency Requirements for International Students: All international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning a minimum 525 TOEFL score (71 on the Internet-based version), minimum 75 MELAB score, minimum 6.0 IELTS score or minimum 48 PTE score, or by completing the ESL level 112 Intensive Program. For more information on international admission, visit the Office of Global Education’s admission website.

Transfer, Transitioning and Former Students: For more information about admission criteria for transfer, transitioning and former students, please visit the admissions website.

Program Learning Outcomes

Graduates of the program will be able to:

1. Understand construction materials, methods and processes.
2. Competently read and understand construction drawings and specifications.
3. Control and manage the scope of work for a construction jobsite.
4. Maintain a safe work environment.
5. Quantity takeoffs and cost estimates.
6. Understand the scheduling process and use computer software to create construction schedules.
7. Uphold ethical and professional standards.
8. Use critical thinking and problem-solving skills to analyze and perform functions within construction projects.
9. Communicate effectively to operate effectively in a construction management environment.
10. Understand construction laws, codes and regulations.

University Requirements

All students in a bachelor’s degree program at Kent State University must complete the following university requirements for graduation.

NOTE: University requirements may be fulfilled in this program by specific course requirements. Please see Program Requirements for details.

Destination Kent State: First Year Experience	1
Course is not required for students with 25 transfer credits, excluding College Credit Plus, or age 21+ at time of admission.	
Diversity Domestic/Global (DIVD/DIVG)	2 courses
Students must successfully complete one domestic and one global course, of which one must be from the Kent Core.	
Experiential Learning Requirement (ELR)	varies
Students must successfully complete one course or approved experience.	
Kent Core (see table below)	36-37
Writing-Intensive Course (WIC)	1 course
Students must earn a minimum C grade in the course.	

Upper-Division Requirement	39 (or 42)
Students must successfully complete 39 upper-division (numbered 30000 to 49999) credit hours to graduate. Students in a B.A. and/or B.S. degree in the College of Arts and Sciences must complete 42 upper-division credit hours.	
Total Credit Hour Requirement	120
Some bachelor's degrees require students to complete more than 120 credit hours.	

Kent Core Requirements

Kent Core Composition (KCOMP)	6
Kent Core Mathematics and Critical Reasoning (KMCR)	3
Kent Core Humanities and Fine Arts (KHUM/KFA) (min one course each)	9
Kent Core Social Sciences (KSS) (must be from two disciplines)	6
Kent Core Basic Sciences (KBS/KLAB) (must include one laboratory)	6-7
Kent Core Additional (KADL)	6
Total Credit Hours:	36-37

Program Requirements

Major Requirements

Code	Title	Credit Hours
Major Requirements (courses count in major GPA)		
CMGT 10001	INTRODUCTION TO CONSTRUCTION MANAGEMENT	3
CMGT 11044	CONSTRUCTION SAFETY	3
CMGT 11071	CONSTRUCTION MATERIALS AND METHODS I	3
CMGT 21071	CONSTRUCTION MATERIALS AND METHODS II	3
CMGT 22200	CONSTRUCTION DOCUMENT READING ¹	3
CMGT 25000	PRINCIPLES OF L.E.E.D.	1
CMGT 31023	CONSTRUCTION SURVEYING	3
CMGT 31033	MECHANICAL SYSTEMS	3
CMGT 31040	ELECTRICAL SYSTEMS FOR CONSTRUCTION MANAGERS	3
CMGT 33092	CONSTRUCTION MANAGEMENT INTERNSHIP (ELR) (WIC)	3
CMGT 41040	CONSTRUCTION ESTIMATING I	3
CMGT 41041	CONSTRUCTION ESTIMATING II	3
CMGT 42105	CONSTRUCTION CONTRACTS AND LAW	3
CMGT 42107	CONSTRUCTION SCHEDULING	3
CMGT 42110	CONSTRUCTION MANAGEMENT CAPSTONE	3
TECH 13580	ENGINEERING GRAPHICS I ²	3
TECH 27210	INTRODUCTION TO SUSTAINABILITY ³	3
TECH 33111	STATICS AND STRENGTH OF MATERIALS	3
Additional Requirements (courses do not count in major GPA)		
ACCT 23020	INTRODUCTION TO FINANCIAL ACCOUNTING	3
ECON 22060	PRINCIPLES OF MICROECONOMICS (KSS)	3
ECON 22061	PRINCIPLES OF MACROECONOMICS (KSS)	3
ENG 20002	INTRODUCTION TO TECHNICAL WRITING	3
FIN 26074	LEGAL ENVIRONMENT OF BUSINESS	3
MATH 11012	INTUITIVE CALCULUS (KMCR)	3
MATH 11022	TRIGONOMETRY (KMCR)	3
MGMT 24163	PRINCIPLES OF MANAGEMENT	3
MKTG 25010	PRINCIPLES OF MARKETING	3
PHY 13001	GENERAL COLLEGE PHYSICS I (KBS)	4

PHY 13021	GENERAL COLLEGE PHYSICS LABORATORY I (KBS) (KLAB)	1
UC 10097	DESTINATION KENT STATE: FIRST YEAR EXPERIENCE	1
Kent Core Composition		6
Kent Core Humanities and Fine Arts (minimum one course from each)		9
Kent Core Social Sciences		3
Kent Core Basic Sciences (total credit hours in this category must be 8 for this major)		3
General Electives (total credit hours depends on earning 120 credit hours, including 39 upper-division credit hours)		2
Additional Requirements or Concentrations		
Choose from the following:		12
Additional Requirements for Students Not Declaring a Concentration		
Civil Management concentration		
Mechanical and Electrical Management concentration		
Safety Management concentration		
Minimum Total Credit Hours:		120

- Students declaring a dual degree program with the B.A. in Architectural Studies major may substitute AED 10102 for CMGT 22200.
- Students declaring a dual degree program with the B.A. in Architectural Studies may substitute AED 10101 for TECH 13580.
- Students declaring a dual degree program with the B.A. in Architectural Studies may substitute ARCS 30421 for TECH 27210.
- A minimum C grade must be earned to fulfill the writing-intensive requirement.

Additional Requirements for Students Not Declaring a Concentration

Code	Title	Credit Hours
Additional Requirements (courses do not count in major GPA)		
General Electives ¹		12

- Recommended FIN 36053 to complete the Business minor. Also recommended is COMM 15000.

Civil Management Concentration Requirements

Code	Title	Credit Hours
Concentration Requirements (courses count in major GPA)		
CMGT 42053	SUBCONTRACTOR LEADERSHIP AND PRACTICES	3
CMGT 42054	CIVIL ESTIMATING	3
CMGT 42055	CIVIL UTILITY SYSTEMS	3
CMGT 42056	SOILS AND MATERIALS	3
Minimum Total Credit Hours:		12

Mechanical and Electrical Management Concentration Requirements

Code	Title	Credit Hours
Concentration Requirements (courses count in major GPA)		
CMGT 42030	BUILDING INFORMATION MODELING FOR CONSTRUCTION MANAGERS	3

CMGT 42051	ALTERNATIVE ENERGY SYSTEMS IN BUILDING DESIGN	3
CMGT 42052	MECHANICAL AND ELECTRICAL ESTIMATING	3
CMGT 42053	SUBCONTRACTOR LEADERSHIP AND PRACTICES	3
Minimum Total Credit Hours:		12

Safety Management Concentration Requirements

Code	Title	Credit Hours
Concentration Requirements (courses count in major GPA)		
Choose from the following:		12
CMGT 31044	ADVANCED CONSTRUCTION SAFETY AND MANAGEMENT	
CMGT 31045	CONSTRUCTION RISK MANAGEMENT	
CMGT 31046	INTRODUCTION TO INSURANCE AND WORKER'S COMPENSATION	
CMGT 41047	FUNDAMENTALS OF INDUSTRIAL AND CONSTRUCTION HYGIENE	
CMGT 41048	OCCUPATIONAL SAFETY AND HEALTH LAW	
Minimum Total Credit Hours:		12

Graduation Requirements

Minimum Major GPA	Minimum Overall GPA
2.250	2.000

Roadmap

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses designated as critical (!) must be completed in the semester listed to ensure a timely graduation.

Semester One		Credits
CMGT 10001	INTRODUCTION TO CONSTRUCTION MANAGEMENT	3
MATH 11022	TRIGONOMETRY (KMCR)	3
TECH 13580	ENGINEERING GRAPHICS I	3
UC 10097	DESTINATION KENT STATE: FIRST YEAR EXPERIENCE	1
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		16
Semester Two		Credits
CMGT 11044	CONSTRUCTION SAFETY	3
CMGT 11071	CONSTRUCTION MATERIALS AND METHODS I	3
CMGT 22200	CONSTRUCTION DOCUMENT READING	3
MATH 11012	INTUITIVE CALCULUS (KMCR)	3
Kent Core Requirement		3
Credit Hours		15
Semester Three		Credits
ENG 20002	INTRODUCTION TO TECHNICAL WRITING	3
TECH 27210	INTRODUCTION TO SUSTAINABILITY	3
Kent Core Requirement		3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		15
Semester Four		Credits
CMGT 21071	CONSTRUCTION MATERIALS AND METHODS II	3

CMGT 25000	PRINCIPLES OF L.E.E.D.	1
ECON 22060	PRINCIPLES OF MICROECONOMICS (KSS)	3
PHY 13001	GENERAL COLLEGE PHYSICS I (KBS)	4
PHY 13021	GENERAL COLLEGE PHYSICS LABORATORY I (KBS) (KLAB)	1
Kent Core Requirement		3
Credit Hours		15

Semester Five		Credits
ACCT 23020	INTRODUCTION TO FINANCIAL ACCOUNTING	3
CMGT 31033	MECHANICAL SYSTEMS	3
CMGT 31023	CONSTRUCTION SURVEYING	3
CMGT 41040	CONSTRUCTION ESTIMATING I	3
TECH 33111	STATICS AND STRENGTH OF MATERIALS	3
Credit Hours		15

Semester Six		Credits
CMGT 31040	ELECTRICAL SYSTEMS FOR CONSTRUCTION MANAGERS	3
CMGT 41041	CONSTRUCTION ESTIMATING II	3
MGMT 24163	PRINCIPLES OF MANAGEMENT	3
MKTG 25010	PRINCIPLES OF MARKETING	3
Concentration Requirement or General Elective		3
Credit Hours		15

Semester Seven		Credits
CMGT 33092	CONSTRUCTION MANAGEMENT INTERNSHIP (ELR) (WIC)	3
CMGT 42107	CONSTRUCTION SCHEDULING	3
ECON 22061	PRINCIPLES OF MACROECONOMICS (KSS)	3
FIN 26074	LEGAL ENVIRONMENT OF BUSINESS	3
Concentration Requirement or General Elective		3
Credit Hours		15

Semester Eight		Credits
CMGT 42105	CONSTRUCTION CONTRACTS AND LAW	3
CMGT 42110	CONSTRUCTION MANAGEMENT CAPSTONE	3
Concentration Requirements or General Electives		8
Credit Hours		14
Minimum Total Credit Hours:		120