

CONSTRUCTION MANAGEMENT - B.S.

College of Architecture and Environmental Design
www.kent.edu/caed

Examples of Possible Careers*

Construction managers

- 8.5% much faster than the average
- 476,700 number of jobs
- \$97,180 potential earnings

Contact Information

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- Speak with an Advisor
- Chat with an Admissions Counselor

Fully Offered

- **Delivery:**
 - In person
- **Location:**
 - Kent Campus

*Note

Source of occupation titles and labor data is from the U.S. Bureau of Labor Statistics'

Occupational Outlook Handbook. Data comprises projected percent change in employment over the next 10 years; nation-wide employment numbers; and the yearly median wage at which half of the workers in the occupation earned more than that amount and half earned less.

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** concentration offers students an opportunity to further explore civil construction estimating functions, utility systems, soils, and subcontractor leadership. Focusing on the critical systems that are needed on all projects, this concentration will provide construction managers with the tools to navigate civil construction on any project.
- **Mechanical and Electrical Management** concentration offers students expertise in mechanical systems. By exposing students to sustainable building technologies, specific mechanical and electrical estimating, BIM, and leadership this concentration sets students apart in knowledge base and experience. Construction Managers

are more effective with an in-depth understanding of critical MEP systems.

- **Safety Management** concentration is for those wishing to pursue a career in safety and/or construction managers looking to expand their knowledge in safety-related to construction. Students will take advanced OSHA and safety course while exposing them to insurance and workman's compensation laws and procedures. Safety is the #1 priority of project management teams, and this concentration looks to provide future leaders with the tools to lead a safe job site.

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.

Twelve credit hours of electives (from a total of 15 credit hours of electives) must be taken from the CAED, with at least nine credit hours from the CM Program. Three credit hours of non-Construction Management electives, taken in the CAED must be with special approval. The three remaining credit hours of electives can be taken outside of the CAED, but if taken within the CAED, special approval will also apply.

Accreditation

The B.S. degree in Construction Management is accredited by 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.

First-Year Students on the Kent Campus: First-year admission policy on the Kent Campus is selective. Admission decisions are based upon cumulative grade point average, strength of high school college preparatory curriculum and grade trends. Students not admissible to the Kent Campus may be administratively referred to one of the seven regional campus to begin their college coursework. For more information, visit the admissions website for first-year students.

First-Year Students on the Regional Campuses: First-year admission to Kent State's campuses at Ashtabula, East Liverpool, Geauga, Salem, Stark, Trumbull and Tuscarawas, as well as the Twinsburg Academic Center, is open to anyone with a high school diploma or its equivalent. Check with a regional campus admissions office to determine application requirements, as they may differ among campuses.

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, minimum 48 PTE score or minimum 100 DET score; or by completing the ESL level 112 Intensive Program. For more information, visit the admissions website for international students.

Transfer Students: For more information, visit the admissions website for transfer students.

Former Students: Former Kent State students or graduates who have not attended another college or university since Kent State may complete the reenrollment or reinstatement form on the University Registrar's 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
Students must successfully complete 39 upper-division (numbered 30000 to 49999) credit hours to graduate.	
Total Credit Hour Requirement	120

Kent Core Requirements

Kent Core Composition (KCMP)	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)		
ARCH 10001	UNDERSTANDING ARCHITECTURE (KFA)	3
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 27210	SUSTAINABILITY IN THE BUILT ENVIRONMENT	3
CMGT 42030	BUILDING INFORMATION MODELING FOR CONSTRUCTION MANAGEMENT	3
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) ²	3
CMGT 33111	INTRODUCTION TO BUILDING STRUCTURES	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 43099	CONSTRUCTION MANAGEMENT CAPSTONE	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)		6
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)		3
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

¹ Students declaring a dual degree program with the B.A. in Architectural Studies major may substitute AED 10102 for CMGT 22200.

² 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)		
	Construction Management (CMGT) Upper Division Elective (30000 or 40000 level)	9
	College of Architecture and Environmental Design Elective, choose from the following:	3
	Architectural Studies (ARCS)	
	Architecture (ARCH)	
	Architecture and Environmental Design (AED)	
	Construction Management (CMGT)	
	Interior Design (ID)	
Minimum Total Credit Hours:		12

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 MANAGEMENT	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
ARCH 10001	UNDERSTANDING ARCHITECTURE (KFA)	3
CMGT 10001	INTRODUCTION TO CONSTRUCTION MANAGEMENT	3
MATH 11022	TRIGONOMETRY (KMCR)	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
CMGT 27210	SUSTAINABILITY IN THE BUILT ENVIRONMENT	3
CMGT 42030	BUILDING INFORMATION MODELING FOR CONSTRUCTION MANAGEMENT	3
ENG 20002	INTRODUCTION TO TECHNICAL WRITING	3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		15

Semester Four		Credits
CMGT 21071	CONSTRUCTION MATERIALS AND METHODS II	3
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		14

Semester Five		Credits
ACCT 23020	INTRODUCTION TO FINANCIAL ACCOUNTING	3
CMGT 31033	MECHANICAL SYSTEMS	3
CMGT 31023	CONSTRUCTION SURVEYING	3
CMGT 33111	INTRODUCTION TO BUILDING STRUCTURES	3
CMGT 41040	CONSTRUCTION ESTIMATING I	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
General Elective		3
Credit Hours		15
Semester Seven		
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
Additional or Concentration Requirements		3
Credit Hours		15
Semester Eight		
CMGT 42105	CONSTRUCTION CONTRACTS AND LAW	3
CMGT 43099	CONSTRUCTION MANAGEMENT CAPSTONE	3
Additional or Concentration Requirements		9
Credit Hours		15
Minimum Total Credit Hours:		120