

CONSTRUCTION MANAGEMENT - B.S.

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

About This Program

Build your future with the Construction Management bachelor's degree program. Our program prepares graduates for leadership in the increasingly complex, sophisticated and rewarding field of construction management through access to advanced technologies, leading experts, hands-on training and industry insights that prepare you to lead in a variety of construction management roles. Read more...

Contact Information

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- Speak with an Advisor
- Chat with an Admissions Counselor

Program Delivery

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

Examples of Possible Careers and Salaries*

Construction managers

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

Accreditation

The B.S. degree in Construction Management is accredited by the American Council for Construction Education (ACCE).

* Source of occupation titles and labor data comes 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.

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 campuses 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. For more information on admissions, contact the Regional Campuses admissions offices.

International Students: All international students must provide proof of English language proficiency unless they meet specific exceptions. For more information, visit the admissions website for international students.

Transfer Students: Students who have attended any other educational institution after graduating from high school must apply as undergraduate 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.

Admission policies for undergraduate students may be found in the University Catalog.

Some programs may require that students meet certain requirements before progressing through the program. For programs with progression requirements, the information is shown on the Coursework tab.

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 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 42030 | BUILDING INFORMATION MODELING FOR CONSTRUCTION MANAGEMENT | 3 |
| CMGT 42105 | CONSTRUCTION CONTRACTS AND LAW | 3 |
| CMGT 42107 | CONSTRUCTION SCHEDULING | 3 |
| CMGT 43099 | CONSTRUCTION MANAGEMENT CAPSTONE (ELR) | 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 10001 | FLASHES 101 | 1 |
| Kent Core Composition | | 6 |
| Kent Core Humanities and Fine Arts (minimum one course from each) | | 6 |
| Kent Core Social Sciences (must be from two disciplines) | | 3 |
| Kent Core Basic Sciences (total credit hours in this category must be 8 for this major) | | 3 |
| General Elective (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 Electives (30000 or 40000 level) ¹ | | 9 |
| College of Architecture and Environmental Design Elective, choose from the following: ² | | 3 |
| Any Architectural Studies (ARCS) course | | |
| Any Architecture (ARCH) course | | |
| Any Architecture and Environmental Design (AED) course | | |
| Any Construction Management (CMGT) course ¹ | | |
| Any Interior Design (ID) course | | |
| Minimum Total Credit Hours: | | 12 |

- ¹ Maximum 6 credit hours of CMGT 33092 may be applied toward the major.
- ² Special approval is required to take elective courses in the following subjects: Architectural Studies (ARCS), Architecture (ARCH), Architecture and Environmental Design (AED) and Interior Design (ID).

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) | | |
| Concentration Electives, 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 10001 | FLASHES 101 | 1 |
| Kent Core Requirement | | 3 |
| Kent Core Requirement | | 3 |
| Credit Hours | | 16 |

Semester Two

| | | |
|-----------------------|--------------------------------------|---|
| 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

| | | |
|-----------------------|-----------------------------------------------------------|---|
| 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

| | | |
|-----------------------|---------------------------------------------------|---|
| 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

| | | |
|------------------|--------------------------------------|---|
| ACCT 23020 | INTRODUCTION TO FINANCIAL ACCOUNTING | 3 |
| CMGT 31023 | CONSTRUCTION SURVEYING | 3 |
| CMGT 31033 | MECHANICAL SYSTEMS | 3 |
| CMGT 41040 | CONSTRUCTION ESTIMATING I | 3 |
| General Elective | | 3 |

Credit Hours 15

Semester Six

| | | |
|------------|----------------------------------------------|---|
| CMGT 31040 | ELECTRICAL SYSTEMS FOR CONSTRUCTION MANAGERS | 3 |
| CMGT 33111 | INTRODUCTION TO BUILDING STRUCTURES | 3 |
| CMGT 41041 | CONSTRUCTION ESTIMATING II | 3 |
| CMGT 42105 | CONSTRUCTION CONTRACTS AND LAW | 3 |
| MKTG 25010 | PRINCIPLES OF MARKETING | 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 |
| MGMT 24163 | PRINCIPLES OF MANAGEMENT | 3 |

Credit Hours 15

Semester Eight

| | | |
|------------|----------------------------------------|---|
| CMGT 43099 | CONSTRUCTION MANAGEMENT CAPSTONE (ELR) | 3 |
|------------|----------------------------------------|---|

Additional or Concentration Requirements 12

Credit Hours 15

Minimum Total Credit Hours: 120

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.

| | |
|--------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Flashes 101 (UC 10001) | 1 credit hour |
| Course is not required for students with 30+ 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 credit hours |
| Writing-Intensive Course (WIC) | 1 course |
| Students must earn a minimum C grade in the course. | |
| Upper-Division Requirement | 39 credit hours |
| Students must successfully complete 39 upper-division (numbered 30000 to 49999) credit hours to graduate. | |
| Total Credit Hour Requirement | 120 credit hours |

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 Learning Outcomes

Graduates of this 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. Quantify 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.

Full 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 worksite activities and manage projects.

The Construction Management major includes the following optional concentrations:

- The **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 provides construction managers with the tools to navigate civil construction on any project.
- The **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.
- The **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 take advanced OSHA and safety courses while exposing themselves to insurance and workers' 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.