CONSTRUCTION MANAGEMENT - B.S.

College of Architecture and Environmental Design
Center for Architecture and Environmental Design
Kent Campus
330-672-2917
CAED_info@kent.edu
www.kent.edu/caed

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.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destination Kent State: First Year Experience</td>
<td>1</td>
</tr>
<tr>
<td>Course is not required for students with 25 transfer credits, excluding College Credit Plus, or age 21+ at time of admission.</td>
<td></td>
</tr>
<tr>
<td>Diversity Domestic/Global (DIVD/DIVG)</td>
<td>2 courses</td>
</tr>
<tr>
<td>Students must successfully complete one domestic and one global course, of which one must be from the Kent Core.</td>
<td></td>
</tr>
<tr>
<td>Experiential Learning Requirement (ELR)</td>
<td>varies</td>
</tr>
<tr>
<td>Students must successfully complete one course or approved experience.</td>
<td></td>
</tr>
<tr>
<td>Kent Core (see table below)</td>
<td>36-37</td>
</tr>
<tr>
<td>Writing-Intensive Course (WIC)</td>
<td>1 course</td>
</tr>
<tr>
<td>Students must earn a minimum C grade in the course.</td>
<td></td>
</tr>
</tbody>
</table>
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 (KCMP) - 6
- Kent Core Mathematics and Critical Reasoning (KMCR) - 3
- Kent Core Humanities and Fine Arts (KHUM/KFA) (minimum 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 Credit Hours

KENT STATE UNIVERSITY CATALOG 2018-2019

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMGT 10001</td>
<td>INTRODUCTION TO CONSTRUCTION MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 11044</td>
<td>CONSTRUCTION SAFETY</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 11071</td>
<td>CONSTRUCTION MATERIALS AND METHODS I</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 21071</td>
<td>CONSTRUCTION MATERIALS AND METHODS II</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 22200</td>
<td>CONSTRUCTION DOCUMENT READING</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 25000</td>
<td>PRINCIPLES OF L.E.E.D.</td>
<td>1</td>
</tr>
<tr>
<td>CMGT 31023</td>
<td>CONSTRUCTION SURVEYING</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 31033</td>
<td>MECHANICAL SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 31040</td>
<td>ELECTRICAL SYSTEMS FOR CONSTRUCTION MANAGERS</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 33092</td>
<td>CONSTRUCTION MANAGEMENT INTERNSHIP (ELR) (WIC)</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 41040</td>
<td>CONSTRUCTION ESTIMATING I</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 41041</td>
<td>CONSTRUCTION ESTIMATING II</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 42105</td>
<td>CONSTRUCTION CONTRACTS AND LAW</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 42107</td>
<td>CONSTRUCTION SCHEDULING</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 42110</td>
<td>CONSTRUCTION MANAGEMENT CAPSTONE</td>
<td>3</td>
</tr>
<tr>
<td>TECH 13580</td>
<td>ENGINEERING GRAPHICS I</td>
<td>3</td>
</tr>
<tr>
<td>TECH 27210</td>
<td>INTRODUCTION TO SUSTAINABILITY</td>
<td>3</td>
</tr>
<tr>
<td>TECH 33111</td>
<td>STATICS AND STRENGTH OF MATERIALS</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 23020</td>
<td>INTRODUCTION TO FINANCIAL ACCOUNTING</td>
<td>3</td>
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<tr>
<td>ECON 22060</td>
<td>PRINCIPLES OF MICROECONOMICS (KSS)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 22061</td>
<td>PRINCIPLES OF MACROECONOMICS (KSS)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 20002</td>
<td>INTRODUCTION TO TECHNICAL WRITING</td>
<td>3</td>
</tr>
<tr>
<td>FIN 26074</td>
<td>LEGAL ENVIRONMENT OF BUSINESS</td>
<td>3</td>
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<tr>
<td>MATH 11012</td>
<td>INTUITIVE CALCULUS (KMCR)</td>
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<tr>
<td>MATH 11022</td>
<td>TRIGONOMETRY (KMCR)</td>
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<tr>
<td>MIS 24163</td>
<td>PRINCIPLES OF MANAGEMENT</td>
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<tr>
<td>MKTG 25010</td>
<td>PRINCIPLES OF MARKETING</td>
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<tr>
<td>PHY 13001</td>
<td>GENERAL COLLEGE PHYSICS I (KBS)</td>
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<tr>
<td>PHY 13021</td>
<td>GENERAL COLLEGE PHYSICS LABORATORY I (KBS) (KLAB)</td>
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</tr>
<tr>
<td>UC 10097</td>
<td>DESTINATION KENT STATE: FIRST YEAR EXPERIENCE</td>
<td>1</td>
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</tbody>
</table>

Kent Core Composition: 6
Kent Core Humanities and Fine Arts: 9
Kent Core Social Sciences: 3
Kent Core Basic Sciences: 3
General Electives: 2

Additional Requirements or Concentrations

Choose from the following:

1. Additional Requirements for Students Not Declaring a Concentration
2. Additional Requirements for Students Declaring a Concentration
3. Civil Management concentration
4. Mechanical and Electrical Management concentration
5. Safety Management concentration

Minimum Total Credit Hours: 120

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

Additional Requirements for Students Not Declaring a Concentration

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Electives</td>
<td>12</td>
</tr>
</tbody>
</table>

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

Civil Management Concentration Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Concentration Requirements (courses count in major GPA)</td>
<td>12</td>
</tr>
</tbody>
</table>

1. CMGT 42053: SUBCONTRACTOR LEADERSHIP AND PRACTICES
2. CMGT 42054: CIVIL ESTIMATING
3. CMGT 42055: CIVIL UTILITY SYSTEMS
4. CMGT 42056: SOILS AND MATERIALS

Minimum Total Credit Hours: 120

Mechanical and Electrical Management Concentration Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Concentration Requirements (courses count in major GPA)</td>
<td>12</td>
</tr>
</tbody>
</table>

1. CMGT 42053: SUBCONTRACTOR LEADERSHIP AND PRACTICES
2. CMGT 42054: CIVIL ESTIMATING
3. CMGT 42055: CIVIL UTILITY SYSTEMS
4. CMGT 42056: SOILS AND MATERIALS

Minimum Total Credit Hours: 120
### Concentration Requirements (courses count in major GPA)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMGT 42030</td>
<td>BUILDING INFORMATION MODELING FOR CONSTRUCTION MANAGERS</td>
<td>3</td>
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<tr>
<td>CMGT 42051</td>
<td>ALTERNATIVE ENERGY SYSTEMS IN BUILDING DESIGN</td>
<td>3</td>
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<tr>
<td>CMGT 42052</td>
<td>MECHANICAL AND ELECTRICAL ESTIMATING</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 42053</td>
<td>SUBCONTRACTOR LEADERSHIP AND PRACTICES</td>
<td>3</td>
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</tbody>
</table>

Minimum Total Credit Hours: 12

### Safety Management Concentration Requirements

[BS-COMA-SFTM]

<table>
<thead>
<tr>
<th>Code</th>
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<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMGT 31044</td>
<td>ADVANCED CONSTRUCTION SAFETY AND MANAGEMENT</td>
<td>3</td>
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<tr>
<td>CMGT 31045</td>
<td>CONSTRUCTION RISK MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 31046</td>
<td>INTRODUCTION TO INSURANCE AND WORKER'S COMPENSATION</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 41047</td>
<td>FUNDAMENTALS OF INDUSTRIAL AND CONSTRUCTION HYGIENE</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 41048</td>
<td>OCCUPATIONAL SAFETY AND HEALTH LAW</td>
<td>3</td>
</tr>
</tbody>
</table>

Minimum Total Credit Hours: 12

### Graduation Requirements

Minimum Major GPA: 2.250  
Minimum Overall GPA: 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.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester One</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMGT 10001</td>
<td>INTRODUCTION TO CONSTRUCTION MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>MATH 11022</td>
<td>TRIGONOMETRY (KMCRR)</td>
<td>3</td>
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<tr>
<td>Kent Core Requirement</td>
<td></td>
<td>3</td>
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<tr>
<td>Kent Core Requirement</td>
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<td>3</td>
</tr>
<tr>
<td>Credit Hours</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Semester Two</td>
<td></td>
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<tr>
<td>CMGT 11044</td>
<td>CONSTRUCTION SAFETY</td>
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</tr>
<tr>
<td>CMGT 11071</td>
<td>CONSTRUCTION MATERIALS AND METHODS I</td>
<td>3</td>
</tr>
<tr>
<td>CMGT 22200</td>
<td>CONSTRUCTION DOCUMENT READING</td>
<td>3</td>
</tr>
<tr>
<td>MATH 11012</td>
<td>INTUITIVE CALCULUS (KMCRR)</td>
<td>3</td>
</tr>
<tr>
<td>Kent Core Requirement</td>
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<td>3</td>
</tr>
<tr>
<td>Credit Hours</td>
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<td>15</td>
</tr>
<tr>
<td>Semester Three</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 20002</td>
<td>INTRODUCTION TO TECHNICAL WRITING</td>
<td>3</td>
</tr>
</tbody>
</table>