CONSTRUCTION MANAGEMENT (BS)

Degree: Bachelor of Science
Major: Construction Management
Program Code: 3180

Construction managers plan, direct, and coordinate a wide variety of construction projects, including the building of all types of residential, commercial and industrial structures, roads, and bridges. They are salaried or self-employed managers who oversee construction supervisors and workers. Construction managers coordinate and supervise the construction process from the conceptual development stage through final construction, ensuring the project is completed on time and within budget. They are also responsible for the safety of the work environment.

Potential majors must be comfortable with mathematics, technical instruction, physical science, computers, and software programs. They should work well under pressure and have good oral and written communication skills. They are managers of processes and people and must excel in both technical and human interaction skills.

For more information on what you can do with this major, visit Career Services' What to Do with a Major? resource.

All CMU baccalaureate graduates are expected to demonstrate proficiency in specialized knowledge/applied learning, quantitative fluency, communication fluency, critical thinking, personal and social responsibility, and information literacy. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Develop knowledge and skills to observe, analyze, make inferences, communicate and problem solve. (Critical Thinking)
2. Create professional Construction Management work products and presentations, independently and collaboratively. (Specialized Knowledge)
3. Communicate clearly, appropriately, and persuasively to the identified audience, both orally and in writing. (Communication Fluency)
4. Analyze construction documents, materials, means and methods, and other communications critically, reason logically, and apply analysis methods correctly to develop appropriate conclusions. (Quantitative Fluency)
5. Utilize current industry trends and technology that facilitate efficient workflows. (Information Literacy, Specialized Knowledge)
6. Identify, formulate and solve construction related problems by applying knowledge of mathematics, science, innovation, construction materials, means and methods. (Specialized Knowledge, Quantitative Literacy)

Requirements

Each section below contains details about the requirements for this program. Select a header to expand the information/requirements for that particular section of the program's requirements.

To print or save an overview of this program's information, including the program description, learning outcomes, requirements, suggested course sequencing (if applicable), and advising and graduation information, scroll to the bottom of the left-hand navigation menu and select "Print Options." This will give you the options to either "Send Page to Printer" or "Download PDF of This Page." The "Download PDF of This Page" option prepares a much more concise presentation of all program information. The PDF is also printable and may be preferable due to its brevity.

Institutional Degree Requirements

The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree. A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

Essential Learning Requirements

(31 semester hours)

See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

Code	Title	Semester Credit Hours
English [1]		
ENGL 111	English Composition I-GTCO1	3
ENGL 112	English Composition II-GTCO2	3
Mathematics [1]		
MATH 113	College Algebra-GTMA1 (or higher) [2]	3
History		
Select one History course		3
Humanities		
Select one Humanities course		3
Social and Behavioral Sciences		

ECON 201	Principles of Macroeconomics-GTSS1	3
or ECON 202	Principles of Microeconomics-GTSS1	
Select one other Social and Behavioral Science course		3
Fine Arts		
Select one Fine Arts course		3
Natural Sciences [3]		
PHYS 111	General Physics I-GTSC1 [2]	3
PHYS 111L	General Physics I Laboratory-GTSC1	1
Select one Natural Sciences course		3
Total Semester Credit Hours		**31**

1 Must receive a grade of "C" or better and must be completed by the time the student has 60 semester hours.
2 This is a 4 semester credit hour course. 3 credits apply to the Essential Learning requirements and 1 credit applies to general elective credit.
3 One course must include a lab.

Other Lower Division Requirements

Code	Title	Semester Credit Hours
Wellness Requirement		
KINE 100	Health and Wellness	1
Select one Activity course		1
Essential Learning Capstone [1]		
ESSL 290	Maverick Milestone	3
ESSL 200	Essential Speech	1
Total Semester Credit Hours		**6**

1 Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.

Foundation Courses

(27 semester hours)

Code	Title	Semester Credit Hours
ACCT 201	Principles of Financial Accounting	3
STAT 200	Probability and Statistics-GTMA1	3
MATH 114	Trigonometry and Analytic Geometry	3
CONC 101	Construction Safety and Regulations	3
CONC 116	Building Materials	3
CONC 161	Building Mechanical/Electrical	3
CONC 208	Construction Equipment	3
CONC 218	Surveying	3
CONC 228	Estimating and Cost Control	3
Total Semester Credit Hours		**27**

Program Specific Degree Requirements

(46 semester hours, must earn a "C" or better in each course)

Code	Title	Semester Credit Hours
Core Courses		
BUGB 351	Business Law I	3
FINA 301	Managerial Finance	3
HRMA 371	Human Resource Management [1]	3
CONM 234	Graphic Communication for Construction Management	3
Concentration Courses		
CONM 181	Principles of Construction Management	3
CONM 316	Construction Materials and Methods	3
CONM 341	Estimating and Bidding for Vertical Construction	3
or CONM 342	Estimating and Bidding for Horizontal Construction	
CONM 361	Advanced MEP Systems	3
CONM 362	Structure Analysis - Statics/Materials Strength	3
CONM 370	Managing the Regulatory Environment	3
or CONM 375	Sustainability in the Built Environment	
CONM 380	Construction Project Management	3
CONM 462	Soil and Foundation Construction	3
CONM 462L	Soil and Foundation Construction Laboratory	1
CONM 472	Construction Planning and Scheduling	3
CONM 475	Construction Company and Financial Management	3
Total Semester Credit Hours		**43**

Code	Title	Semester Credit Hours
Restricted Elective		
Select one of the following:		3
CONM 485	Construction Management Issues	
CONM 495	Independent Study	
CONM 499	Construction Internship	
Total Semester Credit Hours		**3**

1 MANG 201 is a potential prerequisite for HRMA 371.

General Electives

All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 10 semester hours, 1 hour must be upper division

Code	Title	Semester Credit Hours
MATH 113	College Algebra-GTMA1	1
PHYS 111	General Physics I-GTSC1	1
Select additional electives		8
Total Semester Credit Hours		**10**

Suggested Course Plan

First Year		
Fall Semester		**Semester Credit Hours**
ENGL 111	English Composition I-GTCO1	3
CONC 101	Construction Safety and Regulations	3
CONC 116	Building Materials	3
MATH 113	College Algebra-GTMA1	4
CONM 181	Principles of Construction Management	3
	Semester Credit Hours	**16**
Spring Semester		
Essential Learning - Humanities		3
ENGL 112	English Composition II-GTCO2	3
CONC 161	Building Mechanical/Electrical	3
CONC 208	Construction Equipment	3
KINE 100	Health and Wellness	1
KINA Activity		1
	Semester Credit Hours	**14**
Second Year		
Fall Semester		
ACCT 201	Principles of Financial Accounting	3
ECON 201 or ECON 202	Principles of Macroeconomics-GTSS1 or Principles of Microeconomics-GTSS1	3
CONM 234	Graphic Communication for Construction Management	3
CONC 228	Estimating and Cost Control	3
PHYS 111 & 111L	General Physics I-GTSC1 and General Physics I Laboratory-GTSC1	5
	Semester Credit Hours	**17**
Spring Semester		
MATH 114	Trigonometry and Analytic Geometry	3
CONC 218	Surveying	3
Essential Learning - Social and Behavioral Science		3
Essential Learning - Natural Science		3
General Elective		3
	Semester Credit Hours	**15**
Third Year		
Fall Semester		
ESSL 200	Essential Speech	1
ESSL 290	Maverick Milestone	3
BUGB 351	Business Law I	3
CONM 316	Construction Materials and Methods	3
CONM 341 or CONM 342	Estimating and Bidding for Vertical Construction or Estimating and Bidding for Horizontal Construction	3
CONM 370 or CONM 375	Managing the Regulatory Environment or Sustainability in the Built Environment	3
	Semester Credit Hours	**16**
Spring Semester		
HRMA 371	Human Resource Management	3
STAT 200	Probability and Statistics-GTMA1	3
CONM 361	Advanced MEP Systems	3
CONM 362	Structure Analysis - Statics/Materials Strength	3
CONM 380	Construction Project Management	3
	Semester Credit Hours	**15**
Fourth Year		
Fall Semester		
Essential Learning - Fine Arts		3
Essential Learning - History		3
CONM 472	Construction Planning and Scheduling	3
FINA 301	Managerial Finance	3
General Elective		3
	Semester Credit Hours	**15**
Spring Semester		
CONM 462	Soil and Foundation Construction	3
CONM 462L	Soil and Foundation Construction Laboratory	1
CONM 475	Construction Company and Financial Management	3
Restricted Elective [1]		3
General Elective		2
	Semester Credit Hours	**12**
	Total Semester Credit Hours	**120**

[1] If student opts to take CONM 499, it should be planned between Junior and Senior years.

Advising and Graduation

Advising Process and DegreeWorks

Documentation on the pages related to this program is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for their intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar's Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar's Office.

Graduation Process

Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the "Intent to Graduate" form to the Registrar's Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student's petition for graduation is denied, it will be their responsibility to consult the Registrar's Office regarding next steps.