

CONSTRUCTION MANAGEMENT, BS

Introduction

Please click here (<http://catalog.ucdenver.edu/cu-denver/undergraduate/schools-colleges-departments/college-engineering-design-computing/civil-engineering/>) to see Civil Engineering department information.

Construction management professionals combine knowledge of innovative technologies, construction practices and business management to lead a variety of construction projects, from residential, commercial and industrial buildings to infrastructure projects such as roads, bridges and large facilities. Construction managers orchestrate construction projects over their full life-cycle, managing schedules, budgets, quality and safety.

The bachelor of science in construction management at CU Denver includes a solid foundation of construction engineering and management courses, engineering courses and courses from the Business School and College of Architecture and Planning. All students will complete a construction capstone design course. In addition, the program requires the student to complete at least 12 weeks of a full-time internship with an architect, engineer, contractor industry or government agency.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here (<http://catalog.ucdenver.edu/cu-denver/undergraduate/schools-colleges-departments/college-engineering-design-computing/#policiestext>) to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements (<http://catalog.ucdenver.edu/cu-denver/undergraduate/graduation/>)
- CU Denver Core Curriculum (<http://catalog.ucdenver.edu/cu-denver/undergraduate/graduation-undergraduate-core-requirements/>)
- College of Engineering, Design and Computing Graduation Requirements (<http://catalog.ucdenver.edu/cu-denver/undergraduate/schools-colleges-departments/college-engineering-design-computing/#graduationrequirements>)
- Click here (<http://catalog.ucdenver.edu/cu-denver/undergraduate/academic-policies-procedures/>) for information about Academic Policies

Program Requirements

1. Students must maintain a minimum 2.0 GPA in all courses applying to major requirements.

Code	Title	Hours
CU Denver Core Curriculum		
Select 24 credits		24
Business		

BMIN 1000	Introduction to Business	3
BLAW 3050	Business Law and Ethics	3
Select three additional business courses from the following options:		9

Business Fundamentals Minor

BMIN 3001	Fundamentals of Management and Marketing	
BMIN 3002	Fundamentals of Accounting and Finance	
BMIN 3004	Principles of Strategic Management	

*Entrepreneurship Certificate*¹

ENTP 3200	Essentials in Entrepreneurship	
ENTP 3230	Small Business Accounting and Finance	
ENTP 3299	Business Model Development & Planning	

Select three of the following:

ACCT 2200	Financial Accounting and Financial Statement Analysis	
BANA 3000	Operations Management	
MGMT 3000	Managing Individuals and Teams	
MKTG 3000	Principles of Marketing	
MKTG 4700	Personal Selling and Sales Management	

Other courses with advisor approval

Architecture		
ARCH 3330	Building Systems I	3
ARCH 3340	Theory of Structures I	3
ARCH 4340	Theory of Structures II	3
ARCH 4440	Building Systems II	3

Engineering

CVEN 1025	Civil Engineering Graphics and Computer Aided Design	3
or MECH 1025	CAD and Graphics for Mechanical Engineering	
CVEN 2212	Surveying for Construction and Engineering	2
ENGR 1200	Fundamentals of Engineering Design Innovation	3
or ARCH 1110	Introduction to Architecture	
ENGR 1100	Fundamentals of Computational Innovation	3
or IWKS 2300	Fundamentals of Computational Innovation	

Construction

CEMT 1000	Introduction to Construction Management	1
or CVEN 1067	Introduction to Civil Engineering	
CEMT 2100	Construction Management Fundamentals	3
CEMT 2300	Heavy Civil Construction and Equipment	3
CEMT 3100	Field Engineering and Management	3
CEMT 4067	Construction Senior Capstone	3
CEMT 4231	Construction Materials and Methods	3
CEMT 4232	Construction Planning and Control	3
CEMT 4233	Construction Cost Estimating	3
CEMT 4234	Sustainable Construction	3
CEMT 4236	Project Management Systems	3
CEMT 4240	Building Information Modeling (BIM)	3
CEMT 4242	Construction Safety	3
CEMT 4939	Internship (At least 3 months)	1

Math and Science

Select one of the following math courses:		4-6
MATH 1130	Precalculus Mathematics	
MATH 1401	Calculus I	

MATH 1110 & MATH 1120	College Algebra and College Trigonometry	
PHYS 2010	College Physics I	4
PHYS 2321	Intro Experimental Phys Lab I	1
Statistics		
Select one of the following:		3
CVEN 3611	Engineering Statistics	
MATH 2830	Introductory Statistics	
MATH 3800	Probability and Statistics for Engineers	
ELEC 3817	Engineering Probability and Statistics	
BANA 2010	Business Statistics	
Electives		
Select 11 credits of elective courses in math, science, architecture, business, engineering, construction or technical communication.		11
Some example courses:		
ACCT 2200	Financial Accounting and Financial Statement Analysis	
ACCT 2220	Managerial Accounting and Professional Issues	
ARCH 1711	Architectural Visualization I	
ARCH 2230	Architectural History I	
ARCH 3340	Theory of Structures I	
ARCH 4340	Theory of Structures II	
BIOL 2010 & BIOL 2011	Organisms to Ecosystems (Gen Bio) and Organisms to Ecosystems Lab (Gen Bio)	
BIOL 2020 & BIOL 2021	Molecules to Cells (Gen Bio) and Molecules to Cells Lab (Gen Bio)	
COMM 2050	Professional Presentations	
CVEN 3401	Introduction to Environmental Engineering	
CVEN 3602	Transportation Engineering	
CVEN 4025	Autocad Civil 3d & Advanced Civil Engineering Graphics	
CVEN 4077	Engineering Economy	
ECON 3366	Managerial Economics	
ELEC 1510	Digital Logic	
ENGL 3154	Technical Writing	
ENGL 3170	Business Writing	
ENGR 1130	Chemistry for Engineers	
ENVS 3082	Energy and the Environment	
GEOG 1602	Urban Studies and Planning	
GEOG 4080	Introduction to GIS	
GEOL 1073 & GEOL 1074	Physical Geology: Surface Processes and Physical Geology: Surface Processes Laboratory	
IDST 4010	Foundations of STEM Communication	
LDAR 3601	Intro to Landscape Arch: Engaging Designed Landscape	
MECH 1045	Manufacturing Processes Design	
MECH 2024	Introduction to Materials Science	
SPAN 2110	Second Year Spanish I	
SPAN 2120	Second Year Spanish II	
SUST 3010	Sustainability: Past, Present, and Future	
URPL 3000	Planning the Built Environment	

URPL 4000	Planning History and Theory
Total Hours	120-122

¹ Could earn a minor in Entrepreneurship by taking 2 additional ENTP courses as technical electives

Note

Up to two 5000-level CEMT or CVEN courses may be applied to a civil engineering master's degree.

To review the Degree Map for this program, please visit our website (<https://www.ucdenver.edu/student/advising/undergraduate/degree-maps/cedc/>).