

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

- Students must maintain a minimum 2.0 GPA in all courses applying to major requirements.
- All CEMENT courses require a grade of C- or better.
- Students should consider pursuing a Business Fundamentals or Entrepreneurship minor.

| 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 |
| BMIN 3001 | Fundamentals of Management and Marketing | |
| BMIN 3002 | Fundamentals of Accounting and Finance | |
| BMIN 3004 | Principles of Strategic Management | |
| ENTP 3200 | The Fundamentals of Entrepreneurship | |
| ENTP 3230 | Small Business Accounting and Finance | |
| ENTP 3299 | Build Your Business: Plan, Pitch, Launch | |
| ACCT 2200 | Financial Accounting and Financial Statement Analysis | |
| BANA 3000 | Operations Management | |
| ISMG 2050 | Business Problem Solving Tools | |
| INTB 3000 | Global Perspectives | |
| 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 2214 & CVEN 2215 | Surveying for Engineering and Surveying Lab | 2 |
| or CVEN 2212 | Surveying for Construction and Engineering | |
| ENGR 1200 | Fundamentals of Engineering Design Innovation | 3 |
| or ARCH 1110 | Introduction to Architecture | |
| ENGR 1100 | Fundamentals of Computational Innovation | 3 |
| 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 3231 | Construction Materials and Methods | 3 |
| CEMT 4067 | Construction Senior Capstone | 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 | | |

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|---|-----|
| Select one of the following math courses: | 4-6 |
| MATH 1130 Precalculus Mathematics | |
| MATH 1401 Calculus I | |
| MATH 1110 College Algebra & MATH 1120 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 | |
| BIOL 2010 Organisms to Ecosystems (Gen Bio) & BIOL 2011 and Organisms to Ecosystems Lab (Gen Bio) | |
| BIOL 2020 Molecules to Cells (Gen Bio) & BIOL 2021 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 Physical Geology: Surface Processes & GEOL 1074 and Physical Geology: Surface Processes Laboratory | |
| ISMG 2050 Business Problem Solving Tools | |
| 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 4000 Planning History and Theory

Total Hours**120-122****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/>).