

# 4 + 1 program | Construction Engineering and Management

Want to earn your Master of Engineering in civil engineering in one year of full-time study beyond your Bachelor of Science in civil engineering? Then take a look at our 4 + 1 program.

There are many reasons to consider a master's degree:

- Gain top-notch training in your chosen civil engineering specialty.
- Become an expert in your chosen thesis (or report) research.
- Position yourself in a competitive employment market.
- Earn 9-13% more than those with only a bachelor's degree.



The Master of Engineering program in **construction engineering and management** provides the necessary decision-making skills to support complex construction projects and subsequent management throughout their useful life. Construction engineering and management concerns the design, planning and management of the construction, maintenance and disposal of structures, infrastructure, transportation systems, site work, and commercial, industrial, residential and environmental projects (for example: highways, bridges, airports, buildings, dams, reservoirs, light and high-speed rail systems, hospitals, laboratories, residential communities, utilities and environmental restoration projects).

JUNIOR YEAR		SENIOR YEAR		GRADUATE YEAR		GRADUATE YEAR	
Fall Semester		Spring Semester		Fall Semester		Spring Semester	
CVEN 3111	Analytical Mechanics II	CVEN 4067	Senior Design	CVEN 5800 <sup>2</sup>	Building Information Modeling	CVEN 5233	Construction Cost Estimating
CVEN 4728	Geotechnical Engineering II	CVEN 4xxx	Design Elective (4 of 4)	CVEN 5236 <sup>2</sup>	Project Management Systems	CVEN 5800 <sup>2</sup>	Construction Safety
CVEN 5231 <sup>1</sup>	Construction Materials and Methods	CVEN 4738	Intermediate Foundation Engineering	ARCH 5xxx <sup>3</sup>	General Elective (Architecture)	ENGR 5xxx <sup>3</sup>	Graduate Elective (Engineering)
MATH 3195	Linear Algebra/Differential Equations	CVEN 5232 <sup>1</sup>	Construction Planning and Controls	MGMT 5xxx <sup>3</sup>	General Elective (Business)	CVEN 5960	Master's Report
Varies	Core Curriculum	Varies	Core Curriculum		Research Seminar	<b>TOTAL CREDITS 12</b>	
<b>TOTAL CREDITS 16</b>		<b>TOTAL CREDITS 15</b>		<b>TOTAL CREDITS 12</b>			

**Ready to apply? Visit <http://engineering.ucdenver.edu/civil/admission-MEng>.**

1. Courses count toward bachelor's and master's degrees.
2. See program curriculum for all CEM electives.
3. See program curriculum for general elective requirements.

