



4 + 1 program Transportation

Want to earn your Master of Science 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 Science program in transportation places an emphasis for courses and research on transportation engineering, planning, operations and management. Our studies address local, state, national and international issues with funding from federal, state, local and private sources. We develop and investigate new methods and technologies to analyze the performance and safety of alternative transportation operations and designs. See below for an outline of the curriculum.



SENIOR YEAR	
Fall Semester	
CVEN 4000	Senior Seminar
CVEN 4230	Construction Engineering Systems
CVEN 4xxx	Design Elective (1 of 3)
CVEN 4xxx	Design Elective (2 of 3)
CVEN 5621 ¹	Highway Capacity Analysis
TOTAL CREDITS 12	

SENIOR YEAR	
Spring Semester	
CVEN 4067	Senior Design
CVEN 4xxx	Design Elective (3 of 3)
CVEN 4xxx	Technical Elective
CVEN 5602 ¹	Advanced Highway Design
Varies	Core Curriculum
TOTAL CREDITS 15	

GRADUATE YEAR	
Fall Semester	
CVEN 5662	Transportation Systems Safety
CVEN 5xxx	Graduate Elective (1 of 2)
CVEN 5xxx	Graduate Elective (2 of 2)
CVEN 5950 ³	Master's Thesis (1 of 2)
TOTAL CREDITS 12	

GRADUATE YEAR	
Spring Semester	
CVEN 5611	Traffic and Safety Data Analysis
CVEN 5612	Traffic Impact Assessment
CVEN 5633	Case Studies in Sustainable Transport
CVEN 5950 ³	Master's Thesis (2 of 2)
TOTAL CREDITS 12	

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

1. Courses count toward bachelor's and master's degrees.
2. CVEN-5960 Master Report and a third Graduate Elective may substitute for 2x(CVEN-5950).

