

Civil Engineering Plan: Transportation Engineering Focus

The sample plan below shows you **one** of several possible ways to complete this degree. Your academic plan may look different if you have already fulfilled some requirements, if you have multiple course options to choose from in your major, or if courses do not fit your schedule in a given term. Work with your academic adviser to ensure that you are on track to graduate on time. Complete Program requirement information can be found within the UMD Catalog: <http://www.d.umn.edu/catalogs/current/>

Year 1 Fall Semester: 14 cr

CE 1025 - Introduction to Civil Engineering 1.0 cr
MATH 1296 - Calculus I 5.0 cr: LOGIC & QR
CHEM 1153 - General Chemistry I 4.0 cr: NAT SCI
CHEM 1154 - General Chemistry Lab I 1.0 cr: NAT SCI
Liberal Education Course 3.0 cr

Year 1 Spring Semester: 16 cr

WRIT 1120 - College Writing 3.0 cr: WRITING & INFO LITERACY
COMM 1112 - Public Speaking 3.0 cr: COMM & LAN
MATH 1297 - Calculus II 5.0 cr: LOGIC & QR
PHYS 2013 - General Physics I 4.0 cr: NAT SCI
PHYS 2014 - General Physics Lab I 1.0 cr: NAT SCI

Year 2 Fall Semester: 16 cr

CE 2017 - Engineering Mechanics (Statics and Strength) 5.0 cr
MATH 3280 - Differential Equations w/Linear Algebra 4.0 cr
STAT 3411 - Engineering Statistics 3.0 cr
CS 1411 - Intro to Programming in Matlab 4.0 cr

Year 2 Spring Semester: 17 cr

MATH 3298 - Calculus III 4.0 cr
PHYS 2015 - General Physics II 4.0 cr
PHYS 2016 - General Physics Lab II 1.0 cr
CE 2020 - Computational Tools for Civil Engineers 4.0 cr
CE 3221 - Fluid Mechanics 4.0 cr

Year 3 Fall Semester: 17 cr

CE 3027 - Infrastructure Materials 4.0 cr
CE 3015 - CAD & Engineering Drawing 3.0 cr
CE 3115 - Structural Analysis 3.0 cr
CE 3316 - Transportation Engineering 4.0 cr
ECON 1022 or 1023 - Macro or Micro Econ 3.0 cr: SOC SCI

Year 3 Spring Semester: 17 cr

CE 3025 - Environmental Engineering [SUSTAIN] 4.0 cr
CE 3026 - Project Management 3.0 cr
CE 3225 - Hydraulics and Hydrology 3.0 cr
CE 3426 - Soil Mechanics 4.0 cr
Liberal Education Course 3.0 cr

Year 3 Summer Semester: 5.0 cr

CE 3016 - Surveying 2.0 cr
WRIT 31xx - Advanced Writing 3.0 cr

Year 4 Fall Semester: 15 cr

CE 4316/5316 - Pavement Analysis and Design 3.0 cr
CE 4326/5326 - Highway Planning and Design 3.0 cr
CE5317 - Traffic Flow Theory 3.0 cr
Civil Engineering or Technical Elective 3.0 cr
Liberal Education Course 3.0 cr

Year 4 Spring Semester: 16 cr

CE 4255 - Senior Design 4.0 cr
CE 4315/5315 - Design of Traffic Systems 3.0 cr
CE 4318/5318 - Pavement Rehabilitation and Management 3.0 cr
CE 4126 - Design of Concrete Structures 3.0 cr
Liberal Education Course 3.0 cr

