

Civil Engineering Sample Plan: Structures 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/>

<p>Year 1 Fall Semester: 14 cr</p> <p>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 CS 1121 - Intro to Programming in Visual Basic 3.0 cr</p>	<p>Year 1 Spring Semester: 16 cr</p> <p>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 (*If already met, replace with Lib Ed requirement)</p>
<p>Year 2 Fall Semester: 16 cr</p> <p>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 CE 2020 - Computational Tools for Civil Engineers 4.0 cr.</p>	<p>Year 2 Spring Semester: 16 cr</p> <p>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 3115 - Structural Analysis 3.0 cr CE 3015 - CAD & Engineering Drawing 3.0 cr</p>
<p>Year 3 Fall Semester: 17 cr</p> <p>CE 3221 - Fluid Mechanics 3.0 cr CE 3027 - Infrastructure Materials 4.0 cr CE 4126 - Design of Concrete Structures 3.0 cr CE 3316 - Transportation Engineering 4.0 cr ECON 1022 or 1023 - Macro or Micro Econ 3.0 cr: SOC SCI</p> <p>Year 3 Summer Semester: 5.0 cr</p> <p>CE 3016 - Surveying 2.0 cr (May term) WRIT 31xx - Advanced Writing 3.0 cr (online options)</p>	<p>Year 3 Spring Semester: 17 cr</p> <p>CE 3225 - Hydraulics and Hydrology 4.0 cr CE 3426 - Soil Mechanics 4.0 cr CE 4115 - Design of Steel Structures 3.0 cr CE 3025 - Environmental Engineering 3.0 cr: SUSTAIN Liberal Education Course 3.0 cr</p>
<p>Year 4 Fall Semester: 15 cr</p> <p>CE 4136 - Structural Systems 3.0 cr CE 3026 - Project Management 3.0 cr CE 4128 - Prestressed Concrete Design 3.0 cr Technical Elective* 3.0 cr Liberal Education Course 3.0 cr</p>	<p>Year 4 Spring Semester: 16 cr</p> <p>CE 4255 - Senior Design Capstone 4.0 cr CE 4135 - Advanced Concrete and Steel Design 3.0 cr Technical Elective* 3.0 cr Liberal Education Course 3.0 cr Liberal Education Course 3.0 cr</p>

**Technical Electives*: Related choices for the structures path include CE 4415 (Geotechnical Design), CE 4316 (Pavement Analysis & Design), CE 4213 (Open Channel Hydraulics), CE 4228 (Watershed Engineering), or structures related graduate courses (CE 5027-Advanced Concrete Materials & Repair, ME 5335-Introduction to Finite Element Analysis, or any CE 51xx course not already taken).

IUG Students: If you are accepted to the Integrated Undergraduate/Graduate program, you may wish to take some of the 4xxx/5xxx at the 5xxx level. Fill out a graduate planning sheet upon admission to the IUG program to determine which 9 credits to count toward both BS & MS degrees.

Effective Fall 2017

Department of Civil Engineering
221 Swenson Civil Engineering Building
civileng@d.umn.edu, 218 726-6444