

# Civil Engineering, BSE

## Academic Plans

### Sample Plan of Study

Sample plans represent one way to complete a program of study. Actual course selection and sequence will vary and should be discussed with an academic advisor. For additional sample plans, see MyUI.

### Civil Engineering, BSE

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
RHET:1030	Rhetoric <sup>a</sup>	4
MATH:1550	Engineering Mathematics I: Single Variable Calculus <sup>b, c</sup>	4
CHEM:1110	Principles of Chemistry I <sup>a, d</sup>	4
ENGR:1100	Introduction to Engineering Problem Solving <sup>e</sup>	3
ENGR:1000	Engineering Success for First-Year Students <sup>e</sup>	1
CSI:1600	Success at Iowa	0
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
GE: Approved Course Subjects <sup>f</sup>		
MATH:1560	Engineering Mathematics II: Multivariable Calculus <sup>b</sup>	4
MATH:2550	Engineering Mathematics III: Matrix Algebra <sup>a</sup>	2
PHYS:1611	Introductory Physics I <sup>b</sup>	4
ENGR:1300	Introduction to Engineering Computing <sup>b</sup>	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
MATH:2560	Engineering Mathematics IV: Differential Equations <sup>a</sup>	3
PHYS:1612 or CHEM:1120	Introductory Physics II <sup>a</sup> or Principles of Chemistry II	4
ENGR:2110	Statics <sup>a</sup>	2
ENGR:2130	Thermodynamics <sup>a</sup>	3
CEE:1030	Introduction to Earth Science <sup>b</sup>	3
CEE:2015	Civil Engineering Tools <sup>e</sup>	2
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
GE: Diversity, Equity, and Inclusion <sup>g</sup>		
STAT:2020	Probability and Statistics for the Engineering and Physical Sciences <sup>a</sup>	3
ENGR:2710	Dynamics <sup>a</sup>	3
ENGR:2750	Mechanics of Deformable Bodies <sup>a</sup>	3
CEE:3763	Principles of Transportation Engineering <sup>h</sup>	3

CEE:2010	Civil and Environmental Engineering Professional Practice and Ethics <sup>h</sup>	1
CEE:3002	Technical Communication in Civil and Environmental Engineering <sup>h</sup>	1
<b>Hours</b>		<b>17</b>

### Third Year

#### Fall

CEE:3530	Geomechanics <sup>e</sup>	4
CEE:3533	Principles of Structural Engineering <sup>e</sup>	4
ENGR:2510	Fluid Mechanics <sup>b</sup>	4
Focus Area: required or elective course <sup>i</sup>		3
CEE:3001	Leadership Skills for Engineers <sup>e</sup>	1
<b>Hours</b>		<b>16</b>

#### Spring

GE: Engineering Be Creative <sup>j</sup>		3
CEE:3155	Principles of Environmental Engineering <sup>h</sup>	4
CEE:3371	Principles of Hydraulics and Hydrology <sup>h</sup>	3
CEE:3586	Civil Engineering Materials <sup>h</sup>	3
Focus Area: required or elective course <sup>i</sup>		3
<b>Hours</b>		<b>16</b>

### Fourth Year

#### Fall

GE: Approved Course Subjects <sup>f</sup>		3
Major: design course <sup>k</sup>		3
Major: design course <sup>k</sup>		3
Focus Area: required or elective course <sup>i</sup>		3
Focus Area: elective course <sup>i</sup>		3
CEE:3003	Project Management Skills <sup>e</sup>	1
<b>Hours</b>		<b>16</b>

#### Spring

GE: Approved Course Subjects <sup>f</sup>		3
CEE:4850	Project Design and Management in Civil Engineering <sup>b</sup>	3
Focus Area: required or elective course <sup>i</sup>		3
Focus Area: elective course <sup>i</sup>		3
Focus Area: elective course <sup>i</sup>		3
Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall) <sup>l</sup>		
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>129</b>

a Typically this course is offered in fall, spring, and summer sessions. Check MyUI for course availability since offerings are subject to change.

b Typically this course is offered in fall and spring semesters. Check MyUI for course availability since offerings are subject to change.

c Enrollment in math courses requires completion of a placement exam.

d Enrollment in chemistry courses requires completion of a placement exam.

e Typically this course is offered in fall semesters only. Check MyUI for course availability since offerings are subject to change.

f See General Catalog for list of approved course subjects.

- g Students select a course from one of two GE CLAS Core areas: Diversity and Inclusion or Values and Culture.
- h Typically this course is offered in spring semesters only. Check MyUI for course availability since offerings are subject to change.
- i Students select one of several standard focus areas developed by the department or create an individual focus area tailored to their interests. Focus areas in civil engineering include at least 21 s.h. in content area courses and electives; carefully selected elective courses may contribute to earning a minor and/or certificate. See General Catalog or consult an advisor for more information.
- j See General Catalog for list of approved courses. Students who intend to enroll in a Be Creative course with prerequisites must request a waiver by completing the Request Prerequisite Special Permission form on MyUI.
- k Students are required to complete two design courses (6 s.h.). Some focus areas require specific design courses; refer to General Catalog or consult an advisor for more information.
- l Please see Academic Calendar, Office of the Registrar website for current degree application deadlines. Students should apply for a degree for the session in which all requirements will be met. For any questions on appropriate timing, contact your academic advisor or Graduation Services.