

# 2015-2016 Bulletin

## Bachelor of Science in Civil Engineering

To verify whether or not this document applies to you, go to Trailhead, run a Degree Evaluation and take note of which Catalog Term is specified. This document applies to a Catalog Term of [Fall 2015](#).

### LEGEND

	Required by the CSM Core Curriculum
	Distributed Science Courses
	Assessed for ABET Accreditation

‡ indicates a course that applies to the in-major GPA. In addition to a 2.0 minimum overall GPA, students must maintain a 2.0 minimum in-major GPA for graduation.

FRESHMAN YEAR	FALL	4.0 hr. <b>MATH 111</b> Calculus for Scientists and Engineers I	4.0 hr. <b>GEGN 101</b> Earth and Environmental Systems	4.0 hr. <b>CHGN 121</b> Principles of Chemistry I	0.5 hr. <b>CSM 101</b> Freshman Success Seminar	4.0 hr. <b>LAIS 100</b> Nature and Human Values	0.5 hr. <b>PAGN 101</b> Physical Education
	SPRING	4.0 hr. <b>MATH 112</b> Calculus for Scientists and Engineers II <i>Pre-req: C or better in MATH 111</i>	4.5 hr. <b>PHGN 100</b> Physics I - Mechanics <i>Co-req: MATH 112</i>	4.0 hr. <b>CHGN 122</b> Principles of Chemistry II <i>Pre-req: C- or better in CHGN 121</i>	3.0 hr. <b>EPIC 151</b> Design (EPICS) I		0.5 hr. <b>PAGN 102</b> Physical Education <i>Pre-req: PAGN 101</i>
SOPHOMORE YEAR	FALL	4.0 hr. <b>MATH 213</b> Calculus for Scientists and Engineers III <i>Pre-req: C or better in MATH 112</i>	4.5 hr. <b>PHGN 200</b> Physics II - Electromagnetism & Optics <i>Pre-req: C- in PHGN 100; Co-req MATH 213</i>	3.0 hr. <b>CEEN 241</b> Statics <i>Pre-req: PHGN 100 and co-req: MATH 112</i>	2.0 hr. <b>EGGN 205 (Matlab), CSCI 260 (Fortran), or CSCI 261 (C++)</b>	3.0 hr. <b>CEEN 310</b> Fluid Mechanics for Civil & Env. Eng. <i>Co-req: CEEN 241</i>	0.5 hr. <b>PAGN 2xx</b> Physical Education <i>Pre-req: PAGN 102</i>
	SPRING	3.0 hr. <b>MATH 201</b> Probability and Statistics for Engineers <i>Pre-req: MATH 213</i>	3.0 hr. <b>EBGN 201</b> Principles of Economics	3.0 hr. <b>CEEN 311‡</b> Mechanics of Materials <i>Pre-req: CEEN 241</i>	3.0 hr. <b>EPIC 251*</b> Design (EPICS) II <i>Pre-req: EPIC 151</i>	1.5 hr. <b>EGGN 250</b> MEL I <i>Pre-req: PHGN 200</i>	3.0 hr. <b>LAIS 200</b> Human Systems <i>Pre-req: LAIS 100</i>
SUMMER		3.0 hr. <b>CEEN 331‡</b> Civil Engineering Field Session <i>Pre-req: EPIC 251</i>					
JUNIOR YEAR	FALL	3.0 hr. <b>MATH 225</b> Differential Equations <i>Pre-req: C or better in MATH 112</i>	3.0 hr. <b>MEGN 424</b> Computer Aided Engineering (CAE) <i>Pre-req: CEEN 311</i>	3.0 hr. <b>CEEN 314‡</b> Structural Theory <i>Pre-req: CEEN 311</i>	3.0 hr. <b>CEEN 312‡</b> Soil Mechanics <i>Pre-req: CEEN 311</i>	1.0 hr. <b>CEEN 312L‡</b> Soil Mechanics Lab <i>Co-req: CEEN 312</i>	3.0 hr. <b>LAIS/EBGN*****</b> H&SS Restricted Elective I <i>Co-req: LAIS 200</i>
	SPRING	3.0 hr. <b>CE ELECT</b> Civil Engineering Elective ****	3.0 hr. <b>Environmental Engineering Breadth Elective‡**</b> <i>Pre-req: CHGN 122, PHGN 100, &amp; MATH 213</i>	3.0 hr. <b>Structural Design Elective‡***</b> <i>Pre-req: CEEN 314</i>	3.0 hr. <b>CEEN 415‡</b> Foundation Engineering <i>Pre-req: CEEN 312</i>	3.0 hr. <b>FREE</b> Free Elective <i>Pre-req:</i>	
SENIOR YEAR	FALL	3.0 hr. <b>CE ELECT</b> Civil Engineering Elective ****	3.0 hr. <b>CE ELECT</b> Civil Engineering Elective ****	3.0 hr. <b>EGGN 491</b> Senior Design I <i>Pre-req: CEEN 331; Co-req: CEEN 443 or CEEN 445 or CEEN 440 or CEEN 415</i>	3.0 hr. <b>MEGN 315</b> Dynamics <i>Pre-req: CEEN 241, MATH 225</i>	1.5 hr. <b>EGGN 350</b> MEL II <i>Pre-req: MEL I; Co-Req: CEEN 310 &amp; CEEN 311</i>	3.0 hr. <b>LAIS/EBGN*****</b> H&SS Restricted Elective II <i>Co-req: LAIS 200</i>
	SPRING	3.0 hr. <b>CE ELECT</b> Civil Engineering Elective ****	3.0 hr. <b>FREE</b> Free Elective	3.0 hr. <b>EGGN 492</b> Senior Design II <i>Pre-req: EGGN 491</i>	3.0 hr. <b>FREE</b> Free Elective	3.0 hr. <b>FREE</b> Free Elective	3.0 hr. <b>LAIS/EBGN*****</b> H&SS Restricted Elective III <i>Co-req: LAIS 200</i>

### Notes:

\* You may substitute EPIC 262 (AutoCAD) or EPIC 261 (GIS) or EPIC 267 (Civil Engineering) for EPIC 251. A course substitution form will be required.

\*\* Select either CEEN 301 ‡(Fundamentals of Environmental Science and Engineering I) or CEEN 302 ‡(Fundamentals of Environmental Science and Engineering II).

\*\*\* Select either CEEN 443‡ (Design of Steel Structures) or CEEN 445‡ (Design of Reinforced Concrete Structures)

\*\*\*\* The list of courses that can be used as Civil Engineering Electives is on the reverse side of this document. You may select a maximum of 2 "List B" electives to fulfill this requirement.

\*\*\*\*\* The list of classes that qualify for this requirement are revised yearly and posted on the CSM website. At least one of the 3 courses must be at the 400-level; at least one must have an LAIS prefix.

## 135.5 Credit Hours

