## **B.S. Civil Engineering**

Student Information		
Name:	OSU ID:	OSU Admit Term:
Phone:	Email (name.number@osu.edu):	

## **Suggested Curriculum**

This should be used as a **guide** only. Semester offerings are subject to change.

Year	Autumn	Spring	
1	MATH 1151 (Calculus 1) 5 hr ENGR 1181 (Fundamentals of Engr 1) 2 hr PHYSICS 1250 (Mechanics, Thermal, Waves) 5 hr ENGR 1100 (Engineering Survey) 1 hr General Education 3 hr	MATH 1172 (Engineering Math A)       5 hr        ENGR 1182 (Fundamentals of Engr 2)       2 hr        CHEM 1210¹ (Gen Chemistry I)       4 hr        ENGR 1221 (Programming)       2 hr        General Education       3 hr	
2	MATH 2177 (Math Topics for Engineers) 4 hr PHYSICS 1251 (E&M, Optics, Modern Phys) 5 hr MECHENG 2010 (Statics) 2 hr CIVILEN 2050 (Prob & Data Interpretation) 3 hr CIVILEN 2090 (Professional Aspects) 1 hr CIVILEN Core Elective 1 3 hr	MECHENG 2020 (Mech of Materials) 3 hr CIVILEN 2060 (Numerical Analysis Methods) 4 hr CIVILEN Core Elective 2 3 hr CIVILEN Core Elective 3 3 hr General Education 3 hr	
3	MECHENG 2030 (Dynamics) 3 hr CIVILEN 3510 (Civil Eng Materials) 3 hr CIVILEN 3310 (Structural Eng. Principles) 3 hr CIVILEN Core Elective 4 3 hr General Education 3 hr	CIVILEN 3130 (Fluid Mechanics) 3 hr CIVILEN Core Elective 5 3 hr CIVILEN Core Elective 6 3 hr CIVILEN 3080 <sup>2</sup> (Economics & Optimization) 3 hr Additional Science Elective 4 hr	
4	CIVILEN 4000.01 (Capstone Design 1)         2 hr           Technical Elective         3 hr           Technical Elective         3 hr           Technical Elective         3 hr           General Education         3 hr           General Education         3 hr	CIVILEN 4000.02 (Capstone Design 2) 2 hr Technical Elective 3 hr Technical Elective 3 hr Technical Elective 3 hr General Education 3 hr General Education 3 hr	

Total Hours to complete the degree program = 131. Please note, <u>course schedules may not follow this plan exactly.</u> This is a reference guide for students. Students should contact their advisor for academic guidance.

<sup>1</sup>CHEM 1250 is an acceptable substitute for CHEM 1210. Please contact a CEGE advisor if you have questions or concerns. <sub>2</sub>CE 3080 is only offered in SP semester

Please note that students who need preparatory work before beginning Math 1151 will need additional time to complete this curriculum. The outlined curriculum is not a prescribed plan and is intended to be used as a guide to assist students in progressing through the curriculum with respect to prerequisite courses. Course offerings are subject to change. Please check the on-line course bulletin and master schedule for prerequisite requirements and course availability.

## **Acceptance Criteria**

Admission to the Civil Engineering program requires a formal application, minimum cumulative point-hour ratio (CPHR) of 2.0 at OSU, as well as a minimum eligibility point-hour ratio (EPHR) including transfer credit of 2.5 (effective SU 2015) for consideration. EPHR is calculated from the courses required for admission to the major, excluding Engineering 1100 and English 1110. Students must have completed Engineer 1100, 1181 and 1182, Math 1151 and 1172, two sciences (Physics 1250; and either Physics 1251, Chemistry 1210, or 1250), and English 1110, or their equivalents. Please refer to the department website for major admission details and deadlines. Meeting minimum qualifications does not guarantee admission to major.

<b>Technical and Other electives</b>			
Additional Science Elective: Students must se	elect <u>one</u> of t	he following courses to complete the Additi	onal Science
Elective requirement:			
Earth Science 1121 4 hr		_ ENR 3000 and 3001	4 hr
Geography 2960 4 hr	_	_ Biology 1113	4 hr
Core Electives: Students are to select 6 of the may select <i>either</i> CE 4320 <b>OR</b> CE 4350, but be			
CE 2410 (Intro to Geomatics) 3 hr		_ CE 2810 (Construction Eng. & Manage	<i>ment</i> )3 hr
<b>CE 3540</b> ( <i>Geotechnical Eng.</i> ) 3 hr		_ CE 3700 (Transportation Eng. & Analys	
CE 3160 (Water Resources Eng.) 3 hr		_ ENV 3200 (Fundamentals of Env. Eng.,	
CE 4320 (Structural Steel Design) 3 hr	OR _	_ CE 4350 (Reinforced Concrete Design)	3 hr
each <i>Area</i> , with the remaining coursework con Transportation & Geodetic Engineering, Area Area 1 Technical Elective:	3: Water Res	ources & Environmental Engineering)	
Area 2 Technical Elective:	echnical Elective:	<del></del>	
Area 3 Technical Elective:	Te	echnical Elective:	
	DI 4		015 2016)
Courses is BOLD are only offered once per y more information.	year. Please ref	er to the <u>Civil Engineering Core Course Offerings (2</u>	<u>015-2016)</u> page for
more information.			
<b>General Education Requirement</b>			
Writing and Communication		Cultures & Ideas: Comparative Studies 2341, Philosophy 1337.	Philosophy 1332,
English 1110.xx	3 hr	Philosophy 1557.	0 / 3 hr
Second Writing Course	3 hr		0 / 3 III
•		Foreign Language	
Social Science		Pre-approved substitutions	
Only one course per Social Science group may count.	2 h	A. Credit (including EM) for a fore	ign language
Economics 2001.xx	3 hr	sequence through 1103, or credi	t for a foreign
	3 hr	language course with a prerequi-	site of 1103, can be
Literature		substituted for one Gen Ed cours	se requirement as a
	3 hr	Cultures & Ideas.	
		B. Completion of a foreign language	ge minor can be
Visual and Performing Arts		substituted for two Gen Ed cour	ses: one course as a
	3 hr	Social Science, (Individuals & C	Groups or
Historical Study		Organizations & Polities subgro	ups only) and one
Historical Study	2 h.	course as either a Literature or a	Cultures & Ideas.
	3 hr	University Constant (Cross Dissipl	inary Saminar)
Second Historical Study or Cultures and Ideas		University Capstone (Cross-Discipl Pre-approved substitutions	mary Schillar)
	3 hr	Completion of a Social Science 3597 or 4	1597 can be
Cooled Dimension in the U.C Clabel D'		substituted for a Social Science general e	
Social Diversity in the U.S. or Global Divers	πιγ		

 $0/3 \, hr$ 

## Ethics

Ethics courses listed below may overlap with their corresponding general education category.

Course may overlap with another general education category.

Social Science, Individual & Groups sub-category: Economics 3048. Social Science, any sub-category: Sociology 3302, Sociology 3464.

Completion of a Social Science 3597 or 4597 can be substituted for a Social Science general education course in any group. Completion of an Arts & Humanities 3597 or 4597 can be substituted for a Visual/Performing Arts general education course.

A list of approved general education courses can be found at engineering.osu.edu/major.