**Suggested Curriculum**

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Autumn</th>
<th>Spring</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td><em>MATH 1151 (Calculus I)</em> ................................. 5 hr</td>
<td><em>MATH 1172 (Engineering Math A)</em> .............. 5 hr</td>
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<tr>
<td></td>
<td>__ ENGR 1181 (Fundamentals of Engr 1) .......... 2 hr</td>
<td>__ ENGR 1182 (Fundamentals of Engr 2) .......... 2 hr</td>
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<td></td>
<td>__ PHYSICS 1250 (Mechanics, Thermal, Waves) .... 5 hr</td>
<td>__ PHYSICS 1251 (E&amp;M, Optics, Modern Phys) ... 5 hr</td>
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<td>__ ENGR 1100 (Engineering Survey) ............. 1 hr</td>
<td>__ General Education ................................ 3 hr</td>
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<td>__ General Education ................................. 3 hr</td>
<td>__ General Education ................................ 3 hr</td>
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<tr>
<td>2</td>
<td>__ MATH 2177 (Math Topics for Engineers) ........ 4 hr</td>
<td>__ MECHENG 2030 (Mech of Materials) .......... 3 hr</td>
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<td></td>
<td>__ CHEM 1210 or 1250¹ (Chemistry I) ............... 5-4 hr</td>
<td>__ CIVILEN 2060 (Numerical Analysis Methods) ... 4 hr</td>
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<td>__ MECHENG 2010 (Statics) ............................ 2 hr</td>
<td>__ Additional Science Elective .................. 4 hr</td>
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<td>__ CIVILEN 2050 (Prob &amp; Data Interpretation) ..... 3 hr</td>
<td>__ ENGR 1221 (Programming) ....................... 2 hr</td>
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<td>__ CIVILEN 2090 (Professional Aspects) ........... 1 hr</td>
<td>__ General Education ................................ 3 hr</td>
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<td>3</td>
<td>__ MECHENG 2030 (Dynamics) ........................... 3 hr</td>
<td>__ CIVILEN 3130 (Fluid Mechanics) .............. 3 hr</td>
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<td>__ CIVILEN 3510 (Civil Eng Materials) ............... 3 hr</td>
<td>__ CIVILEN Core Elective 4 ....................... 3 hr</td>
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<td>__ CIVILEN 3310 (Structural Eng. Principles) .... 3 hr</td>
<td>__ CIVILEN Core Elective 5 ....................... 3 hr</td>
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<td>__ CIVILEN Core Elective 1 ............................ 3 hr</td>
<td>__ CIVILEN 3080 (Economics &amp; Optimization) ..... 3 hr</td>
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<td>__ CIVILEN Core Elective 2 ............................ 3 hr</td>
<td>__ General Education ................................ 3 hr</td>
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<td>__ CIVILEN Core Elective 3 ............................ 3 hr</td>
<td>__ General Education ................................ 3 hr</td>
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<tr>
<td>4</td>
<td>__ CIVILEN 4000.01 (Capstone Design 1) ............ 2 hr</td>
<td>__ CIVILEN 4000.02 (Capstone Design 2) ......... 2 hr</td>
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<td>__ CIVILEN Core Elective 6 ............................ 3 hr</td>
<td>__ Technical Elective ................................ 3 hr</td>
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<td>__ Technical Elective .................................. 3 hr</td>
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Total Hours to complete the degree program = 131

¹CHEM 1250 is an acceptable substitute for CHEM 1210. Please see a CEGE advisor for more details.

*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 and is based on a student’s eligibility point-hour ratio (EPHR), cumulative point-hour ratio (CPHR), and additional admission to major courses. Please refer to the department website (www.ceg.osu.edu) for major admission details and deadlines.

EPHR courses: ENGR 1181, 1182; MATH 1151, 1172; PHYSICS 1250; and one additional science (PHYSICS 1251, CHEM 1210, 1250), or course equivalents.

Additional admission to major courses not included in EPHR calculation: ENGR 1100, English 1110.
**Technical and Other electives**

**Additional Science Elective:** Students must select one of the following courses to complete the Additional Science Elective requirement:

- ___ Earth Science 1121 ........................................ 4 hr
- ___ Geography 2960 ........................................ 4 hr
- ___ ENR 3000 and 3001 ........................................ 4 hr
- ___ Biology 1113 ........................................ 4 hr

**Core Electives:** Students are to select 6 of the following courses towards the Civil Core Elective requirement. Students may select either CE 4320 OR CE 4350, but both courses cannot be used towards the Core Elective requirement.

- ___ CE 2410 (Intro to Geomatics) ........... 3 hr
- ___ CE 2810 (Construction Eng. & Management) .......... 3 hr
- ___ CE 3540 (Geotechnical Eng.) ........... 3 hr
- ___ CE 3700 (Transportation Eng. & Analysis) ........... 3 hr
- ___ CE 3160 (Water Resources Eng.) ........... 3 hr
- ___ ENV 3200 (Fundamentals of Environmental Eng.) ........... 3 hr
- ___ CE 4320 (Structural Steel Design) ........... 3 hr **OR**
- ___ CE 4350 (Reinforced Concrete Design) ........... 3 hr

**Technical Electives:** Students are required to complete 18 hours of technical electives chosen in consultation with a faculty advisor upon admission to the major. Students must complete one course from each Area, with the remaining coursework coming from any combination of Areas. (Area 1: Infrastructure, Area 2: Transportation & Geodetic Engineering, Area 3: Water Resources & Environmental Engineering)

- Area 1 Technical Elective: ______________________  
- Area 2 Technical Elective: ______________________  
- Area 3 Technical Elective: ______________________  

**General Education Requirement**

**Writing and Communication**

- English 1110.xx  3 hr

- Second Writing Course  3 hr

**Social Science**

*Only one course per Social Science group may count.*

- Economics 2001.xx  3 hr

- ___ 3 hr

**Literature**

- ___ 3 hr

**Visual and Performing Arts**

- ___ 3 hr

**Historical Study**

- ___ 3 hr

**Second Historical Study or Cultures and Ideas**

- ___ 3 hr

**Social Diversity in the U.S. or Global Diversity**

*Some courses may overlap with another GE category. See course list.*

- ___ 0 / 3 hr

**Ethics**

*Some courses may overlap with another GE category. See course list.*

- ___ 0 / 3 hr

**Foreign Language**

*Pre-approved substitutions*

**Foreign Language 1103 Course:** credit (including EM) for a foreign language sequence through 1103, or credit for a foreign language course with a prerequisite of 1103, can be used to satisfy the Cultures & Ideas Gen Ed category.

**Foreign Language Minor Courses:** completion of a foreign language minor permits a student to overlap up to 6 credit hours between the Gen Ed and minor. A curricular petition must be submitted to the student’s program, which will forward it to the college for review. The courses must meet the spirit of the Gen Ed category for which overlap is requested.

**University Capstone (Cross-Disciplinary Seminar)**

*Pre-approved substitutions*

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.

Revised 2/7/2018