

Student Information

First Name: _____ Last Name.# _____

Suggested Curriculum

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

Year	Autumn	Spring
1	___ MATH 1151 (<i>Calculus 1</i>) _____ 5 hr ___ ENGR 1181 (<i>Fundamentals of Engr 1</i>) _____ 2 hr ___ PHYSICS 1250 (<i>Mechanics, Thermal, Waves</i>) ___ 5hr ___ ENGR 1100 (<i>Engineering Survey</i>) _____ 1 hr ___ General Education _____ 3 hr	___ MATH 1172 (<i>Engineering Math A</i>) _____ 5 hr ___ MECHENG 2010 (<i>Statics</i>) _____ 2 hr ___ ENGR 1182 (<i>Fundamentals of Engr 2</i>) _____ 2 hr ___ CIVILEN 2405 (<i>Graphics for CE</i>) _____ 1 hr ___ ENGR 1221 ¹ (<i>Programming</i>) _____ 2 hr ___ General Education _____ 3 hr
2	___ MATH 2177 ² (<i>Math Topics for Engineers</i>) _____ 4 hr ___ MECHENG 2020 (<i>Mech of Materials</i>) _____ 3 hr ___ CIVILEN 2050 ³ (<i>Prob & Data Interpretation</i>) ___ 3 hr ___ CIVILEN 2810 (<i>Constr Engr & Mgmt</i>) _____ 3 hr ___ CHEM 1250 ⁴ (<i>Gen Chemistry for Engineers</i>) _____ 4 hr ___ CIVILEN 2090 (<i>Professional Aspects</i>) _____ 1 hr	___ CIVILEN 2060 (<i>Numerical Analysis Methods</i>) ___ 4 hr ___ CIVILEN 3510 (<i>Civil Engineering, Materials</i>) ___ 3 hr ___ CIVILEN 3310 (<i>Struct Engr. Principles</i>) _____ 3 hr ___ CIVILEN 3540 (<i>Geotech. Engineering</i>) AND ___ CIVILEN 3541 (<i>Geotechnical Engineering Lab</i>) 3 hr ___ MECHENG 2030 (<i>Dynamics</i>) _____ 3 hr
3	___ CIVILEN 3700 (<i>Transp Engr & Analysis</i>) _____ 3 hr ___ CIVILEN 3130 (<i>Fluid Mechanics</i>) _____ 3 hr ___ CIVILEN 2410 (<i>Intro to Geomatics/Surveying</i>) ___ 3hr ___ CIVILEN 4320 (<i>Structural Steel Design</i>) OR ___ CIVILEN 4350 (<i>Reinforced Concrete Design</i>) ___ 3 hr ___ ENVEN 3200 (<i>Fundamentals of Envir Engr</i>) _____ 3 hr	___ CIVILEN 3160 (<i>Water Resources Engr.</i>) _____ 3 hr ___ CIVILEN 3080 (<i>Economics & Optimization</i>) ___ 3 hr ___ Additional Science Elective 1 _____ 4 hr ___ Technical Elective 1 _____ 3 hr ___ Technical Elective 2 _____ 3 hr
4	___ CIVILEN 4001 (<i>CE Capstone 1</i>) _____ 2 hr ___ Additional Science Elective 2 _____ 3 hr ___ Technical Elective 3 _____ 3 hr ___ General Education _____ 3 hr ___ General Education _____ 3 hr ___ General Education _____ 3 hr	___ CIVILEN 4002 (<i>CE Capstone 2</i>) _____ 2 hr ___ Technical Elective 4 _____ 3 hr ___ Technical Elective 5 _____ 3 hr ___ General Education _____ 3 hr ___ General Education _____ 3 hr ___ General Education _____ 3 hr

Total Hours to complete the degree program = 131. Please note, course schedules may not follow this plan exactly. This is a reference guide for students. Students should contact their advisor for academic guidance. **Courses in BOLD are only offered once per year.**

¹ CSE 1222 is an acceptable substitution for ENGR 1221

² MATH 2173+2174 or MATH 2568+2415 are acceptable substitutions for MATH 2177.

³ STATISTICS 3460 or 3470 are acceptable substitutions for CIVILEN 2050.

⁴ CHEM 1210 is an acceptable substitution for CHEM 1250.

Please contact a CEGE advisor if you have questions or concerns about any of the listed substitutions.

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 course catalog for prerequisite requirements and course availability.

Acceptance Criteria

Acceptance into the Civil Engineering major is based on a holistic review of a written application and academic performance. Applications are accepted during Autumn and Spring terms. **For AU20 applicants**, both cumulative point hour ratio (CPHR) and eligibility point hour ratio (EPHR) will be reviewed. Students with at least a 3.0 EPHR and 2.0 CPHR are guaranteed admission. Applications can be submitted upon completion of or enrollment in Engineering 1100 and English 1110 and completion of or enrollment in all EPHR courses or their equivalent, which include Engineering 1181 and 1182, Math 1151 and 1172, Physics 1250 and Mechanical Engineering 2010. **For SP21 applicants**, only CPHR will be reviewed. Applications can be submitted upon completion of or enrollment in Engineering 1181 and 1182, Math 1151 and 1172, and either Physics 1250, Chemistry 1210 or Chemistry 1250.

Technical and Science Electives

Technical Electives: Students are required to complete 15 hours of technical electives from the approved Technical Elective List. 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:	_____	Cr. Hrs.	_____
Area 2 Technical Elective:	_____	Cr. Hrs.	_____
Area 3 Technical Elective:	_____	Cr. Hrs.	_____
Technical Elective:	_____	Cr. Hrs.	_____
Technical Elective:	_____	Cr. Hrs.	_____

Additional Science Electives: Civil Engineering students are required to complete a minimum of 8 semester credit hours of science elective credit hours from the approved Science Elective List. At least one course must be taken from Group A. Science Elective course options can be found at <https://ceg.osu.edu/undergraduate-degrees/curriculum-and-bingo-sheets>

Additional Science Elective 1:	_____	Cr. Hrs.	_____
Additional Science Elective 2:	_____	Cr. Hrs.	_____

General Education Requirement

Writing and Communication

<u>English 1110.xx</u>	<u>3 hr</u>
<u>Second Writing Course</u>	<u>3 hr</u>

Social Science

Only one course per Social Science group may count.

<u>Economics 2001.xx</u>	<u>3 hr</u>
_____	<u>3 hr</u>

Literature

_____	<u>3 hr</u>
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Visual and Performing Arts

_____	<u>3 hr</u>
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Historical Study

_____	<u>3 hr</u>
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Second Historical Study or Cultures and Ideas

_____	<u>3 hr</u>
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Social Diversity in the U.S. or Global Diversity

Course may overlap with another general education category.

_____	<u>0 / 3 hr</u>
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Ethics

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

Social Science, Individual & Groups sub-category: Economics 3048.

Social Science, any sub-category: Sociology 3302, Sociology 3464.

Cultures & Ideas: Bioethics 2010, Comparative Studies 2341,

Philosophy 1332, Philosophy 1337, Philosophy 1338.

_____	<u>0 / 3 hr</u>
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Foreign Language

Pre-approved substitutions

- Credit (including EM) for a foreign language sequence through 1103, or credit for a foreign language course with a prerequisite of 1103, can be substituted for one Gen Ed course requirement as a Cultures & Ideas.
- 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.