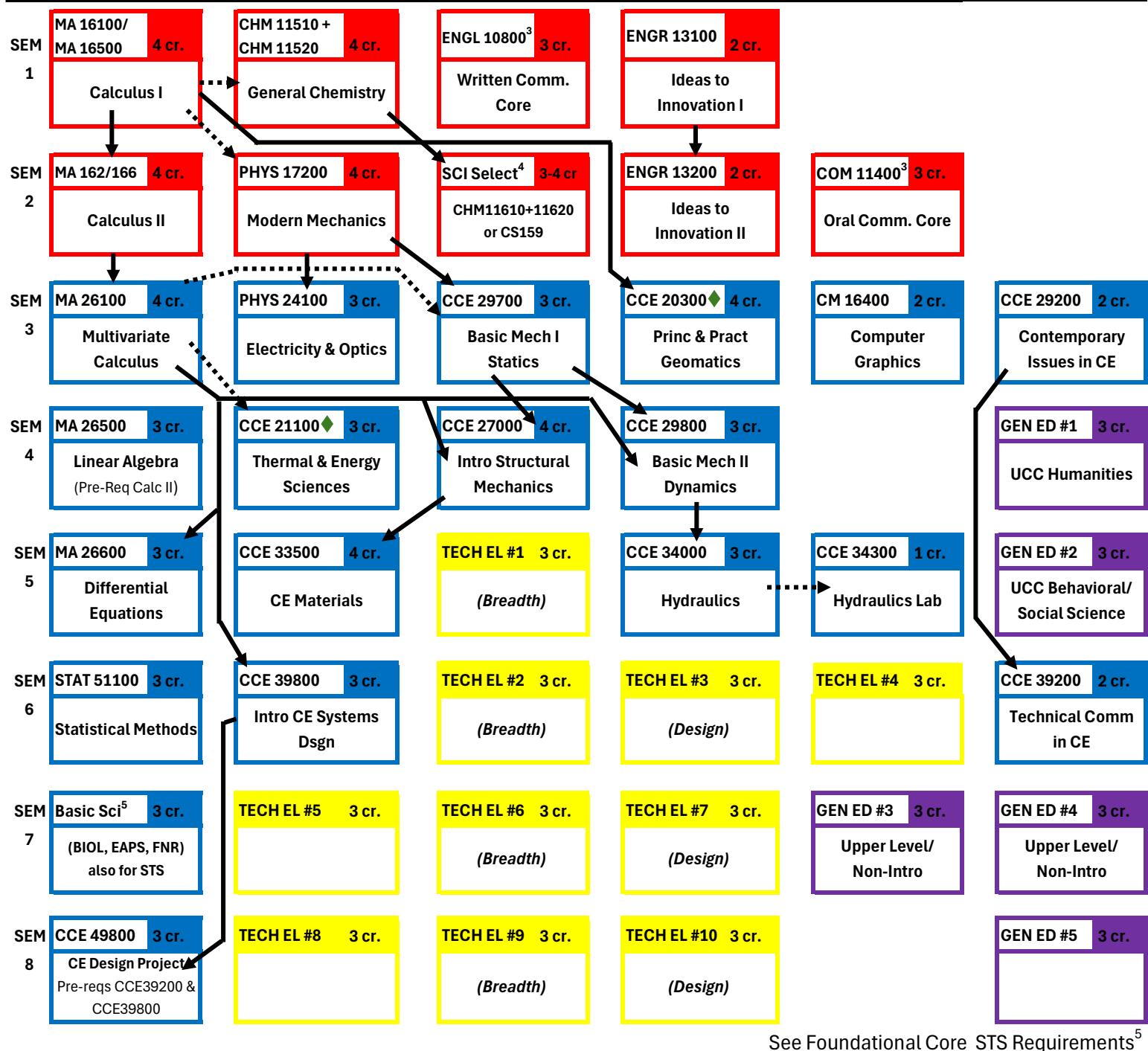


# Basic Civil Engineering Curriculum Flowchart<sup>1,2</sup> (BSCE)

Beginning  
Fall 2026



## Legend:

Red

Required by First  
Year Engineering

Blue

Civil Engineering  
Core Courses

Yellow

Technical Electives

Purple

General Education  
Courses

See the other side of this document  
for Curriculum Notes & other  
information.

◆ CE 20300 & 21100 can be interchanged between semesters 3 & 4 of sophomore year  
*Italics: suggested Technical Electives listed on next page; total of 30 cr. Required*

130 credit hours required for BSCE degree

## Curriculum Notes:

- 1 This flowchart shows the standard BSCE course requirements and the typical sequencing of such courses. Some deviations, both in courses and sequencing, can occur; students should speak to their advisors in the CE Undergraduate Office for further information.
- 2 Students should consult the following LSCCE website for guidance on the requirements for Technical Electives and General Education Elective courses, respectively and the limitations on transfer credits: <https://engineering.purdue.edu/CCE/Academics/Undergraduate/Policies> **The student is ultimately responsible for knowing and completing all BSCE degree requirements.**
- 3 Communication Courses - Written Communication (WCC) and Oral Communication (OCC) required for First Year engineering are BSCE degree requirements that are separate from BSCE general education elective requirements.
- 4 The Science Selective strongly recommended by Civil Engr faculty is **CHM 11600**. Either CHM 11610/11620 or CS 15900 is accepted. However, we prefer **CHM 11610/11620**, especially if you are interested in the environmental or water resources side of civil engineering, because CCE 35000 Intro to Environmental & Ecological Engr, a technical elective, requires CHM 11610 as a pre-requisite. Students using another Science Selective such as BIOL 11000 to meet FYE requirements will still be required to take CHM 11610/11620 or CS 15900 to graduate in BSCE but can use BIOL 11000 for the Basic Science Elective.
- 5 The Basic Science Requirement courses are chosen from an approved list. Examples include: BIOL 11000 or EAPS 10000\*, 10400\*, 11100, 12000\*, 12500\* & 22100. See advisor for current approved list. Choose starred \* courses to meet the Foundational Core STS (Science, Technology, & Society) if not satisfied by other general education courses. <https://www.purdue.edu/provost/students/s-initiatives/curriculum/courses.html>
- 6 The Civil Engr faculty recommend ECON 25100 as a Foundational Behavioral/Social Science (BSS) general education course.
- 7 CCE 49800 CE Design Project must be taken in a student's final semester before graduation. The only exception to this rule are students who plan to graduate during a summer session may take CCE 49800 during the prior spring semester.
- 8 To graduate all students are required to complete 30 technical credits, including four (4) breadth and three (3) design, a minimum of 21 credits in Civil Engineering, and at least a minimum of two (2) technical elective sequences.
- 9 Sequence Requirement: A sequence is defined as a minimum of two (2) technical elective courses from a given BSCE emphasis area. Each student must complete at least two (2) such sequences of technical electives. Note that completing four courses from a single BSCE area of emphasis does not meet this requirement; the emphasis areas must be distinct. Certain non-BSCE designated courses may be used in satisfying this requirement.

**Breadth Requirement:** At least four(4) courses must be completed from the following list, guaranteeing breadth of study in at least four of the emphasis areas:

ARC: CCE 31100 - Architectural Engineering (*prereq CCE 211*)

GEO: CCE 38300 - Geotechnical Engr I (*co-req CCE 340*)

CON: CCE 22200 - Life Cycle Engr Construct Fac

HYD: CCE 44000 - Urban Hydraulics (*prereq CCE 340*)

ENV: CCE 35000 - Intro Env And Ecol Engr (*prereq CHM 116*)

STR: CCE 37100 - Structural Analysis I (*prereq CCE 270*)

GEM: CCE 50800 - Geographic Information Systems

TRA: CCE 36100 - Transportation Engineering

**Design Content Requirement:** At least three (3) courses must be completed from the following list, guaranteeing sufficient design:

ARC: CCE 41300, 41400

HYD: CCE 44000, 54300, 54900

CON: CCE 52200, 52300

MAT: CCE 53000, 53500

ENV: CCE 45600, 45700

STR: CCE 47000, 47300, 47900

GEO: CCE 48300

TRA: CCE 36100, 46100, 56300, 56500, CCE56700