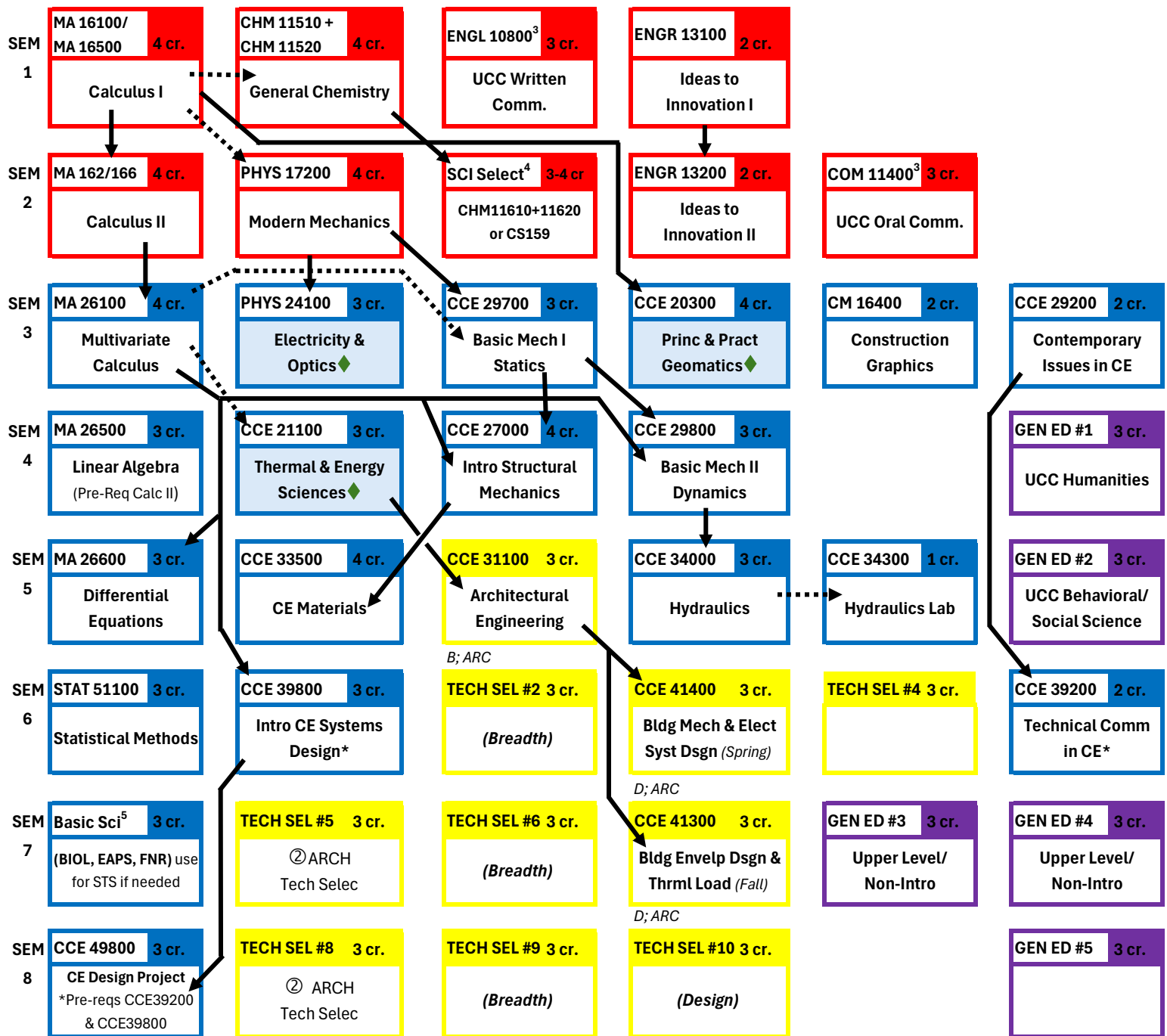


Civil Engineering Curriculum Flowchart^{1,2}

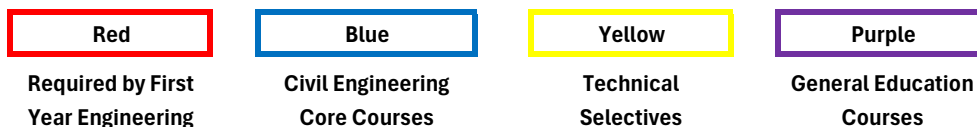
ARCHITECTURAL Engineering Concentration (BSCE)

Beginning
Fall 2026



See Foundational Core STS Requirements⁵

Legend:



Pre-requisite →

Co-requisite→

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

♦ CE 20300/PHYS 24100 & 21100 can be interchanged between semesters 3 & 4 of sophomore year; PHYS 24100 available in summer

Italics: suggested Technical Selectives 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, with area-specific guidance. **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 Selectives 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 11610 plus lab. Either CHM 11610 and 11620/30 or CS 15900 is accepted.** However, we prefer **CHM 11610 and 11620/30**, 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 selective, requires CHM 11610 and lab 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 and 11620/30 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 thirty (30) technical credits, including four (4) breadth and three (3) design, a minimum of twenty-one (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 selective courses from a given BSCE emphasis area. Each student must complete at least two (2) such sequences of technical selectives. Note that completing four (4) 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.

Required for the Concentration: (B=Breadth Courses; D=Design Courses)

CCE 31100: Architectural Engineering (B; ARC)

CCE 41300: Building Envelope Design And Thermal Loads (D; ARC)

CCE 41400: Building Mechanical And Electrical System Design (D; ARC)

Ⓢ Arch Tech Selective Choose Two (6 cr.):

CCE 51300: Lighting in Buildings (ARC)

CCE 51400: Building Controls (ARC)

CCE 51500: Building Energy Audits (ARC)

Other Suggested Technical Selectives: (B = Breadth Courses; D = Design Courses)

CCE 22200: Life Cycle Engineering And Management Of Constructed Facilities (B; CON)

CCE/EEE 35500: Engineering Environmental Sustainability (ENV)

CCE 37100: Structural Analysis I (B; STR)

CCE 38300: Geotechnical Engineering I (B; GEO)

CCE 44000: Urban Hydraulics (B & D; HYD)

CCE 47000: Structural Steel Design (D; STR)

CCE 47300: Reinforced Concrete Design (D; STR)

CCE 49700: Civil And Construction Engineering Projects (CON)

CCE 59700: Civil Engineering Projects (ARC)

ME 31500: Heat and Mass Transfer

ME 41800: Engr of Envir Systems & Equip (typically Spring)

ME 51800 - Analysis of Thermal Systems

ME 52200 - Indoor Environmental Analysis & Design

ME 52900: Sustainable Energy Options and Analysis

ME 59700: ME Projects - Solar Energy Engr

ECE 48300: Digital Control Systems