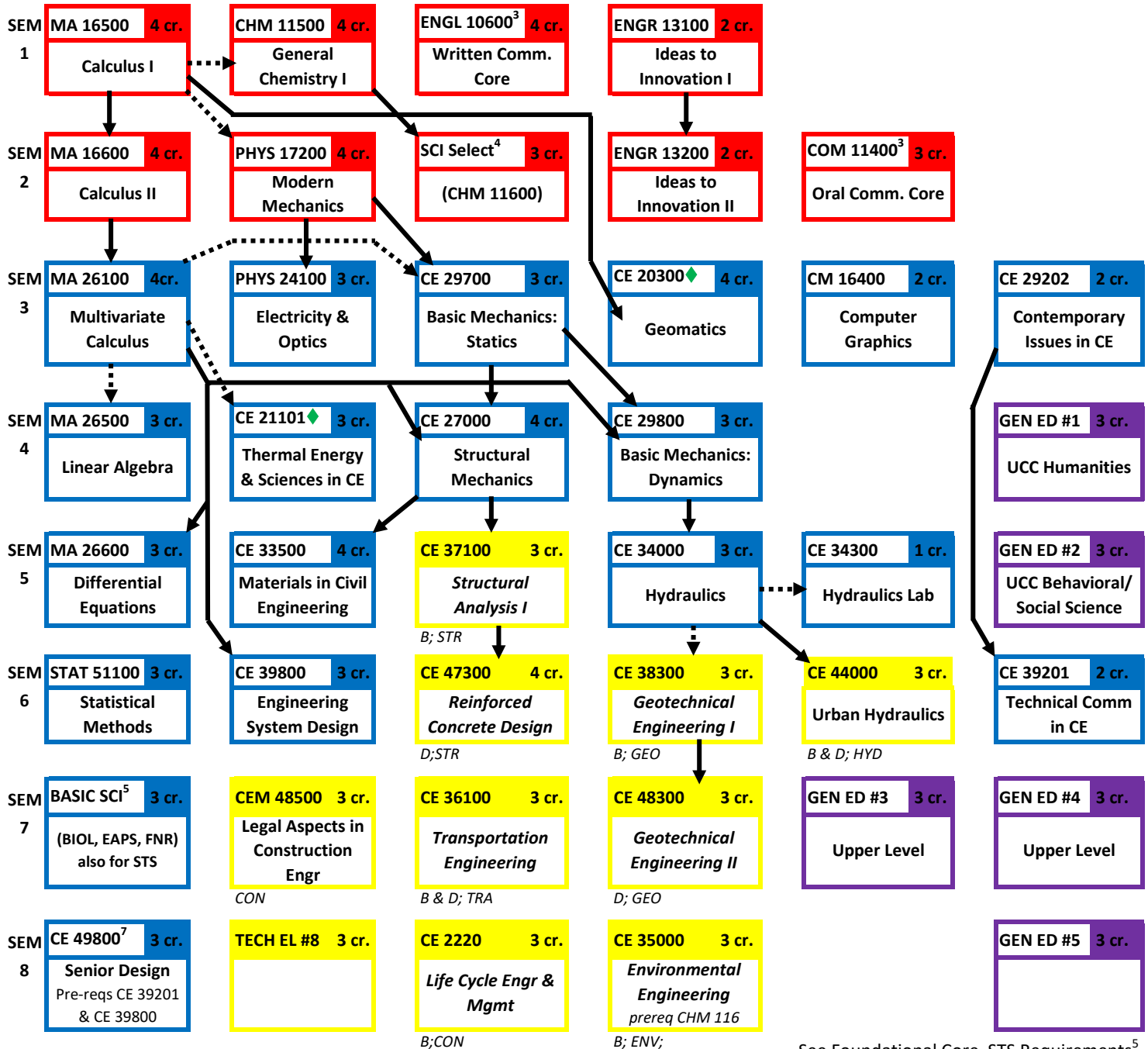


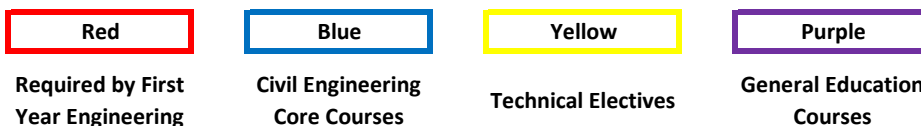
# Civil Engineering Curriculum Flowchart GENERAL<sup>1,2</sup>

Beginning  
Fall 2023



See Foundational Core STS Requirements<sup>5</sup>

## Legend:



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

◆ CE 20300 & 21101 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 show the standard CE course requirements and the typical sequencing of such courses. **Some deviations, both in courses and sequencing, can occur; students should speak to their advisors or the CE Undergraduate Office for further information.**
- 2 Students should consult the following CE 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/CE/Academics/Undergraduate/Current>  
\*Click on the "Technical Elective Policy", the "General Education Policy", or the "Transfer Credit Policy" on the right side bar to see the .pdf documents. Students may also contact their faculty advisor or the CE Undergraduate Office for further information. In particular, it should be understood that the sequence shown for Technical Electives are listed below. **The student is ultimately responsible for knowing and completing all degree requirements.**
- 3 **Communication Courses** - for Written Communication (WC) ENGL 10600 or ENGL 10800 or SCLA 10100 or other from Written Communication Core list. For Oral Communication (CO) COM 11400 or SCLA 10200 or other from Oral Communication Core list satisfies the First Year Engineering general education requirement as well as the Oral Communication Foundational Outcome. The Lyles School of Civil Engineering, however, requires this course for graduation (subject to core policy rules) and does not consider it to be a general education course. Also refer to:  
<https://www.purdue.edu/provost/students/s-initiatives/curriculum/courses.html>
- 4 The **Science Selective** strongly recommend by the School of Civil Engineering is CHM 11600. **Either CHM 11600 or CS 15900 is suggested.** However, we prefer CHM 11600, especially if you are interested in the environmental or water resources side of civil engineering, because CE 35000 Intro to Environmental & Ecological Engr., a technical elective, requires CHM 11600 as a pre-requisite. Students using another Science Selective such as BIOL 11000 to meet FYE requirements will still be required to take CHM 11600 or CS 15900 to graduate in Civil Engineering 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. Also refer to:  
<https://www.purdue.edu/provost/students/s-initiatives/curriculum/courses.html>
- 6 The Lyles School of Civil Engineering faculty recommend ECON 25100 as a Foundational Behavioral/Social Science (BSS) general education course.
- 7 **CE 49800 Senior Design** must be taken in a student's final semester before graduation. The only exception to this rule is that students who plan to graduate during a summer session may take CE 49800 during the prior spring semester.

**Suggestions for Technical Electives:** (B = Breadth Courses; D = Design Courses)

|   |  |
|---|--|
| CE 22200: Life Cyc Engr & Mngt Const Fac (B; CON)       | CE 45600 Wastewater Treatment Process (D; ENV)             |
| CE 32201: Proj Cntrl Life Cyc Const Fac (CON)           | CE 46100: Roadway and Pavement Design (D; TRA)             |
| CE 35000: Environmental Engineering (B; ENV)            | CE 46300: Highway Transportation Characteristics (TRA)     |
| CE 35500: Environmental Sustainability (ENV)            | CE 47000: Structural Steel Design (D; STR)                 |
| CE 36100: Transportation Engineering (B & D; TRA)       | CE 47300: Reinforced Concrete Design (D; STR)              |
| CE 37100: Structural Analysis I (B; STR)                | CE 48300: Geotechnical Engineering II (D; GEO)             |
| CE 38300: Geotechnical Engineering I (B; GEO)           | CE 51200: The Comprehensive Urban Planning Process (TRA)   |
| CE 40800/59700: Geographic Information Systems (B; GEM) | CE 54100: Design of Hydraulic Structures (D; HYD)          |
| CE 44000: Urban Hydraulics (B & D; HYD)                 | CEM 48500: Legal Aspects in Construction Engineering (CON) |
| CE 44200: Introductory Hydrology (HYD)                  |  |

**Sequence Requirement:** A sequence is defined as a minimum of two (2) technical elective courses from a given CE emphasis area. Each student must complete at least two (2) such sequences of technical electives. Note that completing four courses from a single CE area of emphasis does not meet this requirement; the emphasis areas must be distinct. Certain non-CE designated courses may be used in satisfying this requirement.