Civil Engineering Curriculum Flowchart
STRUCTURAL ENGINEERING Concentration

Beginning
Fall 2014

Legend:
- Red: Required by First Year Engineering
- Blue: Civil Engineering Core Course
- Yellow: Technical Elective
- Purple: General Education Course

Pre-requisite
Co-requisite

Italics: suggested Technical Elective; others listed on next page; total of 30 cr. required

B = Breadth course; D = Design course

Purdue University Lyles School of Civil Engineering
Curriculum Notes:

1. This flowchart shows 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 limitation on transfer credit: [https://engineering.purdue.edu/CE/Academics/Undergraduate/Current](https://engineering.purdue.edu/CE/Academics/Undergraduate/Current)

   Click on the "Technical Elective Policy", the "General Education Electives" or the “Transfer Credit Policy” on the rightside 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 and General Education courses is a suggestion and can be modified as needed. Suggested Technical Electives are listed below.

3. COM 11400 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.

4. The Science Selective strongly recommended by the School of Civil Engineering is CHM 11600. CS 15900 will be accepted for meeting graduation requirements, but students may find themselves at a disadvantage when choosing technical electives if they have not taken CHM 11600.

5. The Basic Science Requirement courses are chosen from an approved list. Examples include: BIOL 11000, 12100 & 28600, 14600, 23000 or EAPS 10000, 10400, 11100, 12000, 22100. See advisor for current approved list.

6. The School of Civil Engineering strongly recommends ECON 25100 as a social science general education course.

7. CE 49800 must be taken in a student’s final semester before graduation. The only exception to this rule is that students planning on graduating during a summer session may take CE 49800 during the prior spring semester.

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

- CE 22200: Life Cycle Engineering and Management of Constructed Facilities (*B; CON*)
- CE 32201: Project Control and Life Cycle Execution of Constructed Facilities (*CON*)
- CE 31100: Architectural Engineering (*B; ARC*)
- CE 35000: Environmental Engineering (*B; ENV*)
- CE 36100: Transportation Engineering (*B & D; TRA*)
- CE 44000: Urban Hydraulics (*B & D; HYD*)
- CE 47900: Design of Building Components and Systems (*D; STR*)
- CE 57000: Advanced Structural Mechanics (*STR*)
- CE 57100: Earthquake Engineering (*STR*)
- CE 57200: Prestressed Concrete Design (*STR*)
- CE 57300: Structural Dynamics (*STR*)
- CE 57600: Advanced Reinforced Concrete Design (*STR*)
- CE 57900: Structural Stability (*STR*)
- CE 59100: Advanced Structural Steel Design (*STR*)
- CE 59500: Finite Elements in Elasticity (*STR*)