Civil Engineering Curriculum Flowchart

CONSTRUCTION ENGINEERING Concentration

Beginning Fall 2011

MA 16500 4 cr  
Calculus I

MA 16600 4 cr  
Calculus II

MA 26100 4 cr  
Multivariate Calculus

MA 26500 3 cr  
Linear Algebra

MA 26600 3 cr  
Differential Equations

PHYS 17200 4 cr  
Modern Mechanics

CHM 11500 4 cr  
General Chemistry I

PHYS 24100 3 cr  
Electricity and Optics

ENGL 10600 4 cr  
Composition

SCI SELECT 3  
(CHM 11600)

ENGR 13100 2 cr  
Ideas to Innovation I

ENGR 13200 2 cr  
Ideas to Innovation II

ENGR 23100 3 cr  
Civil Engineering Materials I

ENGR 27000 4 cr  
Structural Mechanics

ENGR 29800 3 cr  
Basic Mechanics: Dynamics

CE 29700 3 cr  
Geomatics

CE 33100 3 cr  
Civil Engineering Materials II

CE 34000 3 cr  
Hydraulics

CE 34300 1 cr  
Computer Graphics

CE 29201 1 cr  
Contemporary Issues in CE

CE 35000 3 cr  
Environmental Engineering

CE 35200 3 cr  
Transportation Engineering

CE 36100 3 cr  
Reinforced Concrete Design

CE 36400 3 cr  
Environmental Engineering

CE 36600 3 cr  
Senior Design

CE 37100 3 cr  
Structural Analysis I

CE 37200 3 cr  
Structural Analysis II

CE 37300 3 cr  
Structural Analysis III

GEN ED #1 3 cr

GEN ED #2 3 cr

GEN ED #3 3 cr

GEN ED #4 3 cr

GEN ED #5 3 cr

GEN ED #6 3 cr

Pre-requisite

Co-requisite

Legend:

Red  
Required by First Year Engineering

Blue  
Civil Engineering Core Course

Yellow  
Technical Elective

Purple  
General Education Course

See the other side of this document for Curriculum Notes and other information

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

B = Breadth courses; D = Design courses

Purdue University Lyles School of Civil Engineering

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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 advisor(s) 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 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 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 requirement for a general education course. The School of Civil Engineering, however, requires this course for graduation 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 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 35000: Environmental Engineering (B; ENV)
- CE 36100: Transportation Engineering (B & D; TRA)
- CE 44000: Urban Hydraulics (B & D; HYD)
- CE 47000: Structural Steel Design (D; STR)
- CE 47900: Design of Building Components and Systems (D; STR)
- CE 52100: Construction Business Management (CON)
- CE 52200: Computer Applications in Construction (D; CON)
- CE 52300: Selection and Utilization of Construction Equipment (D; CON)
- CE 52700: Analytic Methods for the Design of Construction Operations (D; CON)
- CEM 32400: Human Resource Management in Construction
- MGMT 30400: Intro to Financial Management (prereq. MGMT 201 Managerial ACCT and ECON 25200)