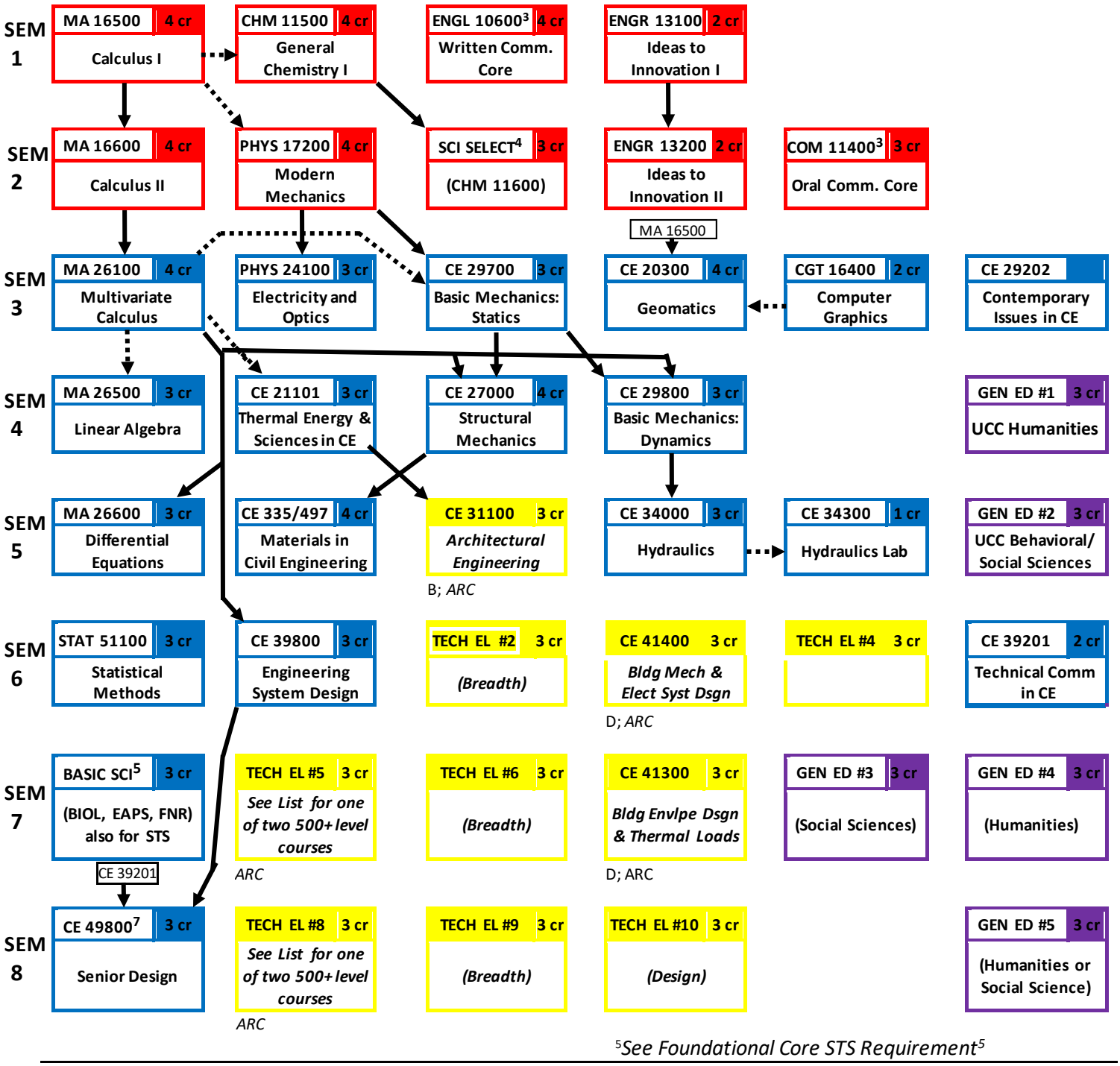
# Civil Engineering Curriculum Flowchart [1,2]

## ARCHITECTURAL ENGINEERING Concentration

**Beginning Fall 2021**




[5]*See Foundational Core STS Requirement*[5]

## Legend:

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

Pre-requisite

Co-requisite

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

***Italics: suggested Technical Electives listed on next page; total of 30 cr. required.***

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# ARCHITECTURAL ENGINEERING Concentration

**Beginning Fall 2021**

## 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

   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. **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 (OC) 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 http://www.purdue.edu/provost/students/s-initiatives/curriculum/courses.html
4. The Science Selective strongly recommended by the School of Civil Engineering is CHM 11600. Other choices for the Science Selective will be accepted for meeting graduation requirements, but students may find themselves at a disadvantage when 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. Choose starred * courses to meet the Foundational Core STS (Science Technology & Society) if not satisfied by other general education courses. Also refer to http://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 class.
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.

***Excerpt from Technical Elective Policy**

## Required for the Concentration *(B = Breadth courses; D = Design courses)*:

- CE 31100: Architectural Engineering (B; *ARC*)
- CE 41300: Building Envelope Design & Thermal Loads (D; *ARC*)
- CE 41400: Building Mechanical & Electrical System Design (D; *ARC*)

***Select two of the following choices:***

CE 51300: Lighting in Buildings (*ARC*)
CE 51401: Building Controls (*ARC*)
CE 51501: Building Energy Audits (*ARC*)

## Other Suggested Technical Electives *(B = Breadth courses; D = Design courses)*:

- CE 22200: Life Cycle Engineering and Management of Constructed Facilities (B; *CON*)
- CE/EEE 35500: Environmental Sustainability (*ENV*)
- CE 37100: Structural Analysis (B; *STR*)
- CE 38300: Geotechnical Engineering I (B; *GEO*)
- CE 44000: Urban Hydraulics (B & D; *HYD*)
- CE 47000: Structural Steel Design (D; *STR*)
- CE 47300: Reinforced Concrete Design (D; *STR*)
- CE 49700[8]: Civil Engineering Projects - Building Information Modeling (*CON*)
- CE 59700[8]: Civil Engineering Projects - Sustainable Building Design, Construction and Operation (*ARC*)
- ME 31500: Heat and Mass Transfer
- ME 41300: Noise Control (typically Spring)
- ME 41800: Engineering of Environmental Systems & Equipment (typically Spring)
- ME 50200: Indoor Environment
- ME 51800 - Analysis of Thermal Systems
- ME 59700[8]: Civil Engineering Projects - Sustainable Energy Options and Analysis
- ME 59700[8]: Civil Engineering Projects - Solar Energy Engineering
- ECE 48300: Digital Control Systems
- ECE 58000: Optimization Methods for Systems and Controls
- EAPS 59100: Solar and Thermal Radiation