### BS in Civil Engineering/Civil Engineering Major Curriculum Flow Chart - Major declared Fall 2020 or later

**Term 1**
- **Pre-engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 (3)</td>
<td>or ENC 1121 (FAMU only)</td>
</tr>
<tr>
<td><strong>Liberal Studies Course (3)</strong></td>
<td>Pred: CHECK GENERAL BULLETIN</td>
</tr>
<tr>
<td>CHM 1045L (4)</td>
<td>General Chem I &amp; Lab</td>
</tr>
<tr>
<td>MAC 2311</td>
<td>Req: MAC 1105 Co-req: CHM 1045L</td>
</tr>
<tr>
<td>MAC 2311L</td>
<td>Req to Declare Major</td>
</tr>
<tr>
<td>MAC 2311 (4)</td>
<td>Req to Declare Major</td>
</tr>
<tr>
<td>MAC 1114 &amp; MAC 1140 or 1147</td>
<td>Pred: MAC 2311</td>
</tr>
<tr>
<td>EGN 1004L (1)</td>
<td>First Year Eng. Lab</td>
</tr>
<tr>
<td></td>
<td>Req: Must be in Pre-Eng. Major</td>
</tr>
</tbody>
</table>

*Capstone senior design sequence must be taken sequentially. In addition:
- CGN 4800 meets FSU's UDW & SIP requirements
- CGN 4802 meets FSU's FE (Formative Experience) requirement
- CGN 4800 & CGN 4802 together meet FSU's OCC (Oral Communications Competency) req.

This flowchart is a suggested academic map; Students may take any course if pre-requisite requirements are met. See [http://eng.famu.fsu.edu/cee/undergraduate/resources](http://eng.famu.fsu.edu/cee/undergraduate/resources) for additional pre-req and advising information. Updated: 06/2021
### BS in Civil Engineering/Environmental Engineering Major Curriculum Flow Chart - Major declared Fall 2020 or later

**Term 1**
- **Total hours = 15**
  - **ENC1101 (3)** or ENC 1121 (FAMU only)
  - Pre-req: CHECK GENERAL BULLETIN
  - **MAC 2311 (4)** Calculus I
  - Pre-req: MAC 1114 & MAC 1140 or 1147

**Term 2**
- **Total hours = 15**
  - **CHM 1045L (4)** General Chem I & Lab
  - Pre-req: MAC 1105
  - Co-req: CHM 1045L
  - **EGN 1004L (1)** Eng. Major req: MAC 2311

**Summer**
- **Total hours = 12**
  - **EN 1101 (3)** First Year Eng. Lab
  - Pre-req: Must be in Pre-Eng. Major

**Term 3**
- **Total hours = 16**
  - **PHY2048C (5)** Physics I
    - Req. to Declare Major
    - Pre-req: CHECK GENERAL BULLETIN
  - **MAC 2313 (4)** Calculus II
    - Pre-req: MAC 2311 & MAC 2111

**Term 4**
- **Total hours = 13**
  - **MAC 2315 (3)** Calculus III
    - Pre-req: MAC 2312
  - **MAF 3040 (3)** Intro to Environmental Engineering
    - Pre-req: CHM 1045L, MAC 2311

**Term 5**
- **Total hours = 16**
  - **EGN 3313 (3)** Engineering Mechanics
    - Pre-req: EGN 3311
  - **CWR 3201 (3)** Const. Materials
    - Pre-req: EGN 3311

**Term 6**
- **Total hours = 13**
  - **CGN 4800 (3)** Senior Design Project I
    - Co-preq: CEG 2202L
  - **CWR 3200L (1)** Env/ Hyd Lab
    - Pre-req: CGN 4800

**Term 7**
- **Total hours = 16**
  - **CGN 4800 (3)** Senior Design Project II
    - Pre-req: CGN 4800
  - **CWR 4800L (1)** Group B Eng/Math/Sci
    - See approved course list on back page

**Term 8**
- **Total hours = 12**
  - **TTE 4XXX (3)** Trans. Eng.
  - Pre-req: OE 3040

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GROUP A: Science Elective Courses (select ONE)
- FAMU:
  - BSC 1010C General Biology I (4)
  - EVR 3235 Atmospheric Processes (3)
  - GLY 2010 Principles of Geology (3)
  - PCB 2033 General Ecology (3)
  - EVR 3023 Introduction to Marine Environment (3)
- FSU:
  - BSC 2010 Biological Science (3)
  - MET 2700 General Meteorology (3)
  - GLY 2010C Physical Geology (4)
  - GLY 1030 Environmental Issues in Geology (3)
  - PCB 3043 General Ecology (3)
  - OCE 4008 Principles of Oceanography (3)

GROUP B: Math/Engineering/Science Elective Courses (select THREE)
ALL Group B courses MAY be from the CEE Dept. but at least TWO Group B courses MUST be from the CEE Dept.:
- CEE Department (at least two Group B courses must come from this list):
  - CCE 4xxx Any 4000-level CCE course not meeting another requirement
  - CEG 4xxx Any 4000-level CEG course not meeting another requirement
  - CES 4xxx Any 4000-level CES course not meeting another requirement
  - CWR 4xxx Any 4000-level CWR course not meeting another requirement
  - ENV 4xxx Any 4000-level ENV course not meeting another requirement
  - TTE 4xxx Any 4000-level TTE course not meeting another requirement
  - CGN 4930* Select 4000-level Special Topics (see Academic Coord for info)
    It is recommended that students interested in M.Eng. w/Structures take both CES 4605 and CES 4702
- FSU:
  - GLY 4730 Marine Geology (3)
  - GLY 4884 Environmental Geology I (3)
  - GLY 4820 Principles of Hydrology (3)
  - OCC 4060 Environmental Science Modeling (3)
  - OCE 4631 Aquatic Pollution (3)
  - URP 4936* International Transportation Planning (3)
- FAMU:
  - EVR 3028: Environmental Modeling Principles (3)
  - EVR 3867: Environmental Risk Analysis (3)

GROUP C: Professional/Technical Elective Courses (select ONE)
A course outside of the CEE department emphasizing professional development, computing, and other professional/technical skills.
- COE:
  - CGN 3145 Blending STEM and Public Policy (3)
  - EIN 4445 Technology Entrepreneurship and Commercialization (3)
- FSU:
  - CGS 3406 Object-Oriented Programming in C++ (3)
  - COP 3014 Programming I (3)
  - ENC 4212 Editing: Manuscripts, Documents, Reports (3)
  - GIS 2040 Essentials of Geographic Information Systems (3)
  - GIS 4043 & Lab Geographic Info Processing & Systems (3+1)
  - PAD 4380 Disasters: From Shock to Recovery (3)
  - URP 4710 Intro to Transportation Issues and Transportation Planning (3)
- FAMU:
  - COP 3014 Fundamentals of Programming (3)
  - ENC 3243 Technical Report Writing (3)
  - GIS 1040 Intro to GIS (3)
  - AGR 4430C Geographic Info Systems (4)

*NOTE: Multiple special topics (4930/4936) courses may share the same course number. Make sure that you are enrolling in the correct section.

GROUP D: Statistics Courses (select ONE)
- FAMU:
  - STA 3034 Mathematical Statistics (3)
- FSU:
  - STA 2122 Introduction to Applied Statistics (3)
  - STA 3032 Applied Statistics for Engineers and Scientists (3)
  - STA 2023 Fundamental Statistics (3)

Updated: 06/2021