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

<table>
<thead>
<tr>
<th>Term 1</th>
<th>Term 2</th>
<th>Summer</th>
<th>Term 3</th>
<th>Term 4</th>
<th>Term 5</th>
<th>Term 6</th>
<th>Term 7</th>
<th>Term 8</th>
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</thead>
<tbody>
<tr>
<td>Total hours = 15</td>
<td>Total hours = 15</td>
<td>Total hours = 12</td>
<td>Total hours = 16</td>
<td>Total hours = 13</td>
<td>Total hours = 16</td>
<td>Total hours = 14</td>
<td>Total hours = 15</td>
<td>Total hours = 12</td>
</tr>
<tr>
<td>ENC1101 (3) or ENC 1121 (FAMU only) Pre-req: CHECK GENERAL BULLETIN</td>
<td>ENC 1102 (FAMU) ENC 2135 (FSU) or other approved Second English Pre-req: ENC 1101</td>
<td>Liberal Studies Course (3) Pre-req: CHECK GENERAL BULLETIN</td>
<td>PHY2048C OR PHY 2048/L (5) Physics II &amp; Lab Pre-req: PHY 2048C MAC 2312</td>
<td>EGM 3512 (4) Eng. Mechanics Pre-req: PHY 2048C MAC 2312 Co/pre-req: MAC 2313</td>
<td>EGM 3331 (3) Strength of Materials Pre-req: EGM 3512</td>
<td>CES 3100 (4) Structural Analysis Pre-req: MAC2312, CHM 1045, PHY 2048</td>
<td>CGN 4800 (3) * Senior Design Project I Co/pre-req: CEG 2202L Senior Standing</td>
<td>CGN 4802 (3) * Senior Design Project II Pre-req: CGN 4800 Senior Standing</td>
</tr>
<tr>
<td>Liberal Studies Course (3) Pre-req: CHECK GENERAL BULLETIN</td>
<td>CHM 1045L (4) General Chem I &amp; Lab Pre-req: MAC 1105 Co-req: CHM 1045L</td>
<td>Liberal Studies Course (3) Pre-req: CHECK GENERAL BULLETIN</td>
<td>MAC 2313 (5) Calculus III Pre-req: MAC 2312</td>
<td>MAP 3305 (3) Eng. Math OR MAP 2302 (3) ODE Pre-req: MAC 2313 or “B” in MAC 2312</td>
<td>CEG 3011 (3) Soil Mechanics Co/pre-req: EGM 3331</td>
<td>EML 3100 (2) Thermo Dynamics Pre-req: MAC2312, CHM 1045, PHY 2048</td>
<td>CEG 4001(3) Geotech Design Pre-req: CEG 3011 Co/pre-req: CGN3508L</td>
<td>TTE 4XXX(3) Trans. Elec OR CCE 4XXX(3) Construction Elec Pre-req: CHECK GENERAL BULLETIN</td>
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<tr>
<td>MAC 2311 (4) Calculus I Req. to Declare Major Pre-req: MAC 1114 or MAC 1140 or 1147</td>
<td>MAC 2312 (4) Calculus II Req. to Declare Major Pre-req: MAC 2311</td>
<td>XXX XXXX (3) Science Elective GROUP A Pre-req: MAC 2311</td>
<td>EES 3040 (3) Intro to Environmental Engineering Pre-req: CHM 1045L, MAC 2311</td>
<td>EGN3013 (2) Eng. Economy Pre-req: MAC 2313</td>
<td>CCE 3101 (3) Const. Materials Pre-req: EGM 3331</td>
<td>ENV 4XXX(3) Env Elec OR CWR 4XXX Water Res Elec Pre-req: CHECK GENERAL BULLETIN</td>
<td>XXX XXXX (3) Group C Prof/Tech See approved course list on back page</td>
<td>XXX XXXX (3) Group D Prof/Tech See approved course list on back page</td>
</tr>
<tr>
<td>EGN 1004L (1) First Year Eng. Lab Req. to Declare Major Pre-req: Must be in Pre-Eng. Major</td>
<td>DECLARE YOUR MAJOR Go to: Student Services at COE</td>
<td>STA XXXX (3) Statistics Course GROUP D See approved course list on back page</td>
<td>ECE 3001 (3) Intro to Electrical Eng Pre-req: MAC 2311 or “B” in MAC 2312</td>
<td>CWR 3201 (3) Hydraulics Pre-req: EGR 3512</td>
<td>CWR 3200L (1) Env/Hyd Eng Lab Co/pre-req: CWR 3201 or EES 3040</td>
<td>CWR 3200L (1) Env/Hyd Eng Lab Co/pre-req: CWR 3201 or EES 3040</td>
<td>XXX XXXX (3) Group B Eng/Math/Sci See approved course list on back page</td>
<td>APPLY FOR GRADUATION ONLINE 2ND WEEK OF SEMESTER</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 for additional pre-req and advising information.

Updated: 10/2021
## BS in Civil Engineering/Environmental Engin. Major Curriculum Flow Chart - Major declared Fall 2020 or later

### Pre-engineering

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<th>Total hours = 15</th>
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<td>ENC 1102 (FAMU) ENC 2135 (FSU) or other approved Second English Pre-req: ENC 1101</td>
<td>Liberal Studies Course (3) Pre-req: CHECK GENERAL BULLETIN</td>
<td>PHY2046C OR PHY 2048/L (5) Physics I &amp; Lab Pre-req: PHY 2046C, MAC 2312</td>
<td>EGM 3512 (4) Eng. Mechanics Pre-req: PHY 2048C, MAC 2312 Co-pre req: MAC 2313</td>
<td>EGN 3331 (3) Strength of Materials Pre-req: EGN 3512</td>
<td>ENV 4001 OR 4500 (5) Env Engineering OR Env Unit Processes Pre req: CHECK GENERAL BULLETIN</td>
<td>CGN 4800 (3) * Senior Design Project I Pre-req: CEG 2202L Senior Standing</td>
</tr>
<tr>
<td>4</td>
<td>EGN 1004L (1) First Year Eng. Lab Req to Declare Major Pre-req: Must be in Pre-Eng. Major</td>
<td>XXX XXXX (3) Intro to Environmental Engineering Pre-req: MAC 2311</td>
<td>EES 3040 (3) Intro to Environmental Engineering Pre-req: CHM 1045L, MAC 2311</td>
<td>CWR 3201L (1) Env/Hyd Eng Lab Co-pre req: CWR 3201 or EES 3040</td>
<td>TTE 3004 (3) Trans. Eng. Pre req: STA XXXX, CEG 2202, CEG 2202L</td>
<td>XXX XXXX (3) Group B Eng/Math/Sci Pre req: CEE 3101 or CEG 3011</td>
<td>XXX XXXX (3) Group B Eng/Math/Sci Pre req: CEE 3101 or CEG 3011</td>
<td>APPLY FOR GRADUATION ONLINE 2ND WEEK OF SEMESTER</td>
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<td>5</td>
<td>EGN 1004L (1) First Year Eng. Lab Req to Declare Major Pre-req: Must be in Pre-Eng. Major</td>
<td>DECLARE YOUR MAJOR Go to: Student Services at COE</td>
<td>XXX XXXX (3) Intro to Environmental Engineering Pre-req: MAC 2311</td>
<td>CWR 3201L (1) Env/Hyd Eng Lab Co-pre req: CWR 3201 or EES 3040</td>
<td>TTE 3004 (3) Trans. Eng. Pre req: STA XXXX, CEG 2202, CEG 2202L</td>
<td>XXX XXXX (3) Group B Eng/Math/Sci Pre req: CEE 3101 or CEG 3011</td>
<td>SIGN UP FOR FE EXAM Go to: FBPE.ORG</td>
<td>COMPLETE DEPARTMENT &amp; UNIVERSITY GRAD CHECKS</td>
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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: 10/2021
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)
- COE:
  - ESI 3312C Operations Research I: Deterministic (3)
  - EML 4930 Experimental Methods in Nanoscale Science & Engineering (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)