# Civil Engineering Curriculum Flow Chart

**Pre-engineering**

<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>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total hours = 15</strong></td>
<td><strong>Total hours = 15</strong></td>
<td><strong>Total hours = 12</strong></td>
<td><strong>Total hours = 15</strong></td>
<td><strong>Total hours = 16</strong></td>
<td><strong>Total hours = 15</strong></td>
<td><strong>Total hours = 14</strong></td>
<td><strong>Total hours = 14</strong></td>
<td><strong>Total hours = 12</strong></td>
</tr>
<tr>
<td>General Education Course (3)</td>
<td>General Education Course (3)</td>
<td>General Education Course (3)</td>
<td>PHY2049C (5) Physics II Pre-req: PH 2048C, MAC 2312</td>
<td>General Education Course (3) Pre-req: CHECK GENERAL BULLETIN</td>
<td>EGN 3331 (3) Strength of Materials Pre-req: EGM 3512 Co-req: EGN 3331, MAC 2312</td>
<td>CES 3100 (4) Structural Analysis Pre-req: EGM 3512 Co-pre-req: CEG 2202L</td>
<td>CGN 4800 (2) Pre-senior Design &amp; Professional Issues Co-pre-req: CEG 2202L Senior Standing</td>
<td>CGN 4802 (3) Senior Design Project Pre-req: CGN 4800 Senior Standing</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>STA.XXXX (3) Statistics Course See GROUP D</td>
<td>EGM 3512 (4) Eng. Mechanics Pre-req: PH 2048C MAC 2312 Co-pre-req: MAC 2313</td>
<td>EML 3100 (2) Thermo Dynamics Pre-req: MAC 2312, CHM 1045, PHY 2048</td>
<td>CEG 3011 (3) Soil Mechanics Co-pre-req: EGN 3331</td>
<td>CEG 4801(3) Geotech Des OR CEG 4111(3) Foundation Engn. 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>
<td></td>
</tr>
<tr>
<td>CHM 1045L (4) General Chem I &amp; Lab Pre-req: MAC 1105 Co-req: CHM 1045L</td>
<td>PHY2048C (5) Physics I Pre-req: DECLARE Major</td>
<td>General Education Course (4)</td>
<td>EGN 2123 (2) Engineering Graphics Co or Pre-req: MAC 2311</td>
<td>CEG 2202 (3+1) Intro to Geomat &amp; Lab Pre-req: MAC 2311 Co-pre-req: EGN 2123 Course &amp; lab must be taken same semester</td>
<td>EEL 3003 (3) Intro to Electrical Eng LAB NOT REQUIRED Pre-req: MAC 2312, PHY 2049C</td>
<td>TTE 3004 (3) Trans. Eng. Pre-req: STAXXXX, CEG 2202, CEG 2202L</td>
<td>CES 4702(3) Conc Des OR CEE 4605(3) Steel Design Pre-req: EGN 3331 CEE 3100 Co-pre-req: CGN 3508L</td>
<td>XXX XXXX (3) Group B EngMath/Sci Elec See GROUP B Pre-req: CHECK GENERAL BULLETIN</td>
</tr>
<tr>
<td>MAC 2311 (4) Calculus I Pre-req: DECLARE Major</td>
<td>MAC 2312 (4) Calculus II Pre-req: DECLARE Major</td>
<td>XXX XXXX (3) Science Elective See GROUP A</td>
<td>EGN 2123 (2) Engineering Graphics</td>
<td>CWR 2302 (3) Intro to Environmental Engineering Co-pre-req: CHM 1045L, MAC 2311, PHY 2048C</td>
<td>CWR 3201 (3) Hydraulics Pre-req: EGM 3512</td>
<td>CGN3508L (1) CE Materials Lab Pre-req: EGN 3331 Co-pre-req: CEG 3101 or CEG 3011</td>
<td>ENV 4001(3) Env Eng OR CEE XXXX Water Res Elec Pre-req: CHECK GENERAL BULLETIN</td>
<td>XXX XXXX (3) Group C ProfTech Elec See GROUP C Pre-req: CHECK GENERAL BULLETIN</td>
</tr>
<tr>
<td>EGN 1004L (1) First Year Eng Lab Pre-req: DECLARE Major</td>
<td>Pre-req: MAC 1114 &amp; MAC 1140 or 1141</td>
<td>Pre or Pre-req: CHECK GENERAL BULLETIN</td>
<td>Pre or Pre-req: MAC 2311</td>
<td>MAP 3305 (3) Eng, Math OR MAP 3203 (3) ODE Pre-req: MAC 2313 or B’ in MAC 2312</td>
<td>CCE 3101 (3) Constl. Materials Pre-req: EGN 3331</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Areas are major milestones**

**Group A, B, C, D courses are listed on back of this page**

**Required Electives**

---

**General Education courses include Humanities, Ethics, Social Science, History, Logical Thinking**

For FSU go to: [http://registrar.fsu.edu/bulletin/undergraduate/information/undergraduate_degree/](http://registrar.fsu.edu/bulletin/undergraduate/information/undergraduate_degree/)

For FAMU go to: [http://catalog.famu.edu/content.php?catoid=5&navoid=218](http://catalog.famu.edu/content.php?catoid=5&navoid=218)

---

**This is a suggested academic map; students make take any course if pre-req requirements are met**

---

Updated: 08/2018
## Environmental Engineering Curriculum Flow Chart

<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>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total hours = 15</strong></td>
<td><strong>Total hours = 15</strong></td>
<td><strong>Total hours = 12</strong></td>
<td><strong>Total hours = 15</strong></td>
<td><strong>Total hours = 16</strong></td>
<td><strong>Total hours = 15</strong></td>
<td><strong>Total hours = 13</strong></td>
<td><strong>Total hours = 15</strong></td>
<td><strong>Total hours = 12</strong></td>
</tr>
<tr>
<td>General Education Course (3)</td>
<td>General Education Course (3)</td>
<td>General Education Course (3)</td>
<td>PHY2049C (5) Physics II</td>
<td>General Education Course (3)</td>
<td>EGN 3331 (3) Strength of Materials</td>
<td>CHM 1046L Chem II(4) OR MCB 2004L/4 FSU OR MCB 3005C(4) FAMU</td>
<td>CGN 4800 (2) Pre-senior Design &amp; Professional Issues</td>
<td>CGN 4802 (3) Senior Design Project</td>
</tr>
<tr>
<td>Pre-req: CHECK GENERAL BULLETIN</td>
<td>Pre-req: CHECK GENERAL BULLETIN</td>
<td>Pre-req: CHECK GENERAL BULLETIN</td>
<td>Pre-req: PHY 2048C, MAC 2312</td>
<td>Pre-req: CHECK GENERAL BULLETIN</td>
<td>Pre-req: EGM 3512</td>
<td>Co/pre-req: CEG 2202L Senior Standing</td>
<td>Pre-req: CGN 4800 Senior Standing</td>
<td>Pre-req: CHECK GENERAL BULLETIN</td>
</tr>
<tr>
<td>ENC1101 (3) or ENC 1121 (FAMU only)</td>
<td>ENC 1102 (FAMU) or ENC 2135 (FSU) or other approved Second English</td>
<td>General Education Course (3)</td>
<td>STA XXXX (3) Statistics Course See GROUP D</td>
<td>EGM 3512 (4) Eng. Mechanics</td>
<td>EML 3100 (2) Thermo Dynamics</td>
<td>CEG 3011 (3) Soil Mechanics</td>
<td>CEG 4801(3) Geotech Des OR CEG 4111(3) Foundation Engr.</td>
<td>TTE 4XXX(3) Trans. Elect OR CCE 4XXX(3) Construction Elec</td>
</tr>
<tr>
<td>Pre-req: ENC 1101</td>
<td>Pre-req: CHECK GENERAL BULLETIN</td>
<td>Pre-req: CHECK GENERAL BULLETIN</td>
<td>Pre-req: PHY 2048C, MAC 2312</td>
<td>Co/pre-req: MAC 2313</td>
<td>Co-pre-req: MAC3212, CHM 1045, PHY 2048</td>
<td>Co-pre-req: EGN 3331</td>
<td>Pre-req: CGN3508L</td>
<td>Pre-req: CHECK GENERAL BULLETIN</td>
</tr>
<tr>
<td>CHM 1045L (4) General Chem I &amp; Lab</td>
<td>PHY2048C (5) Physics I Req. to Declare Major</td>
<td>EGN 2123 (2) Engineering Graphics</td>
<td>CEG 2202 (3+1) Intro to Geomat &amp; Lab Pre-Req: MAC 2311 Co/pre-req: EGN 2123 Course &amp; lab must be taken same semester</td>
<td>EEL 3003 (3) Intro to Electrical Eng Lab NOT REQUIRED</td>
<td>Pre-req: MAC 2312, PHY 2049C</td>
<td>Pre-req: CWR 3201, EES 3040, CWR 3200L</td>
<td>Env 4001 (3) Envir Eng</td>
<td>XXX XXXX (3) Group B Eng/Math/Sci Elec See GROUP B</td>
</tr>
<tr>
<td>Pre-req: MAC 1105 Co-req: CHM 1045L</td>
<td>Pre-req: MAC 2311</td>
<td>Co or Pre-req: MAC 2311</td>
<td>Pre-req: EGM 3512</td>
<td>Pre-req: PHY 2049C</td>
<td>Pre-req: EGN 3331</td>
<td>Pre-req: CWR 3201</td>
<td>Pre-req: CHECK GENERAL BULLETIN</td>
<td>Pre-req: CHECK GENERAL BULLETIN</td>
</tr>
<tr>
<td>Pre-req: MAC 1114 &amp; MAC 1140 or 1147</td>
<td>Pre-req: MAC 2311</td>
<td>Pre-req: MAC 2312</td>
<td>Pre-req: MAC 2313 or ‘B’ in MAC 2312</td>
<td>Pre-req: EGM 3512</td>
<td>Pre-req: EGM 3512</td>
<td>Pre-req: EGM 3512</td>
<td>Pre-req: CHECK GENERAL BULLETIN</td>
<td>XXX XXXX (3) Group C Prof/Tech Elec See GROUP C</td>
</tr>
<tr>
<td>EGN 104L (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>DECO XXXX (3) Pre-req: MAC 2312</td>
<td>MAP 3305 (3) Eng. Math OR MAP 2302 (3) ODE</td>
<td>EES 3040 (3) Intro to Environmental Engineering Pre-req: CHM 1045L, MAC 2311, PHY 2048C</td>
<td>CGN3508L (1) CE Materials Lab Pre-req: EGN3331</td>
<td>Pre-req: CHECK GENERAL BULLETIN</td>
<td>APPLY FOR GRADUATION ON LINE 1st WEEK OF SEMESTER</td>
<td></td>
</tr>
<tr>
<td>Pre-req: CHECK GENERAL BULLETIN</td>
<td>EGN3613 (2) Eng. Economy Pre-req: MAC 2313</td>
<td>EGS 3040 (3)</td>
<td>EES 3040 (3)</td>
<td>CWR 3200L (1) Env/Hyd Eng Lab Co/pre-req: CWR 3201 or EES 3040</td>
<td>Co/pre-req: CEG 3011 or CEG 3011</td>
<td>Complete Department &amp; University Grad Checks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC 2311 (4) Calculus I Req. to Declare Major</td>
<td>MAC 2312 (4) Calculus II Req. to Declare Major</td>
<td>XXX XXXX (3) Science Elective See GROUP A</td>
<td>MAP 3305 (3) Eng. Math OR MAP 2302 (3) ODE</td>
<td>EES 3040 (3) Intro to Environmental Engineering Pre-req: CHM 1045L, MAC 2311, PHY 2048C</td>
<td>CGN3508L (1) CE Materials Lab Pre-req: EGN3331</td>
<td>Pre-req: CHECK GENERAL BULLETIN</td>
<td>APPLY FOR GRADUATION ON LINE 1st WEEK OF SEMESTER</td>
<td></td>
</tr>
</tbody>
</table>

**Note:**
- **BLUE = GENERAL EDUCATION COURSES**
- **GREEN = REQUIRED ELECTIVES**
- **HIGHLIGHTED AREAS ARE MAJOR MILESTONES**

**General Education courses include Humanities, Ethics, Social Science, History, Logical Thinking**

For FSU go to: http://registrar.fsu.edu/bulletin/undergraduate/information/undergraduate_degree/  
For FAMU go to: http://catalog.famu.edu/content.php?catoid=5&navoid=218  

**GROUP A, B, C, AND D COURSE ARE ON BACK OF THIS PAGE**

**THIS IS A SUGGESTED ACADEMIC MAP; STUDENTS MAKE TAKE ANY COURSE IF PRE-REQ REQUIREMENTS ARE MET**

Updated: 08/2018
# Dual Major Civil & Environmental Curriculum Flow Chart

## Dual Major: Civil Engineering and Environmental Engineering

### Term 1
- **Total hours = 15**
  - General Education Course (3)
    - Pre-req: CHECK GENERAL BULLETIN
  - PHY2049C (5)
    - Pre-req: CHECK GENERAL BULLETIN
  - MAC 1140 or 1147
- **Pre-engineering**

### Term 2
- **Total hours = 15**
  - General Education Course (3)
    - Pre-req: CHECK GENERAL BULLETIN
  - PHY2049C (5)
    - Pre-req: CHECK GENERAL BULLETIN
  - MAC 1140 or 1147
- **Pre-engineering**

### Summer
- **Total hours = 12**
  - General Education Course (3)
    - Pre-req: CHECK GENERAL BULLETIN
  - MAC 2311
- **Pre-engineering**

### Term 3
- **Total hours = 16**
  - General Education Course (3)
    - Pre-req: CHECK GENERAL BULLETIN
  - MAC 2312
  - MAP 2302 (3)
  - MAP 3305 (3) Energy or MAP 2302 (3) ODE
- **Pre-engineering**

### Term 4
- **Total hours = 15**
  - General Education Course (3)
    - Pre-req: CHECK GENERAL BULLETIN
  - EGN 3313 (3)
    - Pre-req: EGM 3512
  - CES 3100 (4)
    - Pre-req: EGM 3512
  - EGM 3512 (3)
    - Pre-req: PH 2048C
  - MAC 2312
- **Pre-engineering**

### Term 5
- **Total hours = 15**
  - General Education Course (3)
    - Pre-req: EGM 3512
  - CES 4001 (3)
    - Pre-req: MAC 2312
    - PHY 2049C
  - EGM 3512 (3)
    - Pre-req: PH 2048C
  - MAC 2312
- **Pre-engineering**

### Term 6
- **Total hours = 14**
  - General Education Course (3)
    - Pre-req: EGM 3512
  - CES 4001 (3)
    - Pre-req: MAC 2312
    - PHY 2049C
  - EGM 3512 (3)
    - Pre-req: PH 2048C
  - MAC 2312
  - MAP 3305 (3) Energy or MAP 2302 (3) ODE
- **Pre-engineering**

### Term 7
- **Total hours = 15**
  - General Education Course (3)
    - Pre-req: CHECK GENERAL BULLETIN
  - EGM 3512 (3)
    - Pre-req: PH 2048C
  - MAC 2312
  - MAP 3305 (3) Energy or MAP 2302 (3) ODE
- **Pre-engineering**

### Term 8
- **Total hours = 15**
  - General Education Course (3)
    - Pre-req: CHECK GENERAL BULLETIN
  - EGM 3512 (3)
    - Pre-req: PH 2048C
  - MAC 2312
- **Pre-engineering**

### Term 9
- **Total hours = 12**
  - General Education Course (3)
    - Pre-req: CHECK GENERAL BULLETIN
  - EGM 3512 (3)
    - Pre-req: PH 2048C
  - MAC 2312
- **Pre-engineering**

---

**General Education courses include Humanities, Ethics, Social Science, History, Logical Thinking**

For FSU go to [http://registrar.fsu.edu/bulletin/undergraduate/information/undergraduate_degree/](http://registrar.fsu.edu/bulletin/undergraduate/information/undergraduate_degree/)

For FAMU go to [http://catalog.famu.edu/content.php?catoid=5&navoid=218](http://catalog.famu.edu/content.php?catoid=5&navoid=218)

---

**GROUP A, B, C, AND D COURSE ARE ON BACK OF THIS PAGE**

**HIGHLIGHTED AREAS ARE MAJOR MILESTONES**

**GREEN = REQUIRED ELECTIVES**

**BLUE = GENERAL EDUCATION COURSES**

---

**THIS IS A SUGGESTED ACADEMIC MAP; STUDENTS MAKE TAKE ANY COURSE IF PRE-REQ REQUIREMENTS ARE MET**

---

*Updated: 08/2018*
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 TWO)

**BOTH** Group B courses **MAY** be from the CEE Dept. but at least **ONE** Group B course **MUST** be from the CEE Dept.:

- **CEE Department:**
  - 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 Coordinator for more info)

- **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)

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

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 4930* Blending STEM and Public Policy (3)
  - EIN 4445(FSU) / 4150(FAMU) Technology Entrepreneurship and Commercialization (3)

- **FSU:**
  - BUL 3310 Legal & Ethical Environment of Business (3)
  - GIS 2040 Essentials of Geographic Information Systems (3)
  - CGS 3406 Object-Oriented Programming in C++ (3)
  - ENC 4212 Editing: Manuscripts, Documents, Reports (3)
  - GIS 4043 & Lab Geographic Info Processing & Systems (3+1)
  - URP 4710 Intro to Transportation Issues and Transportation Planning (3)
  - PAD 4936* Disasters: From Shock to Recovery or Disaster Mgt.

- **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: 08/2018*