## CIVIL ENGINEERING (BSCE - 131 hours)

Name: ________________________ USF ID: ________________________

### GENERAL EDUCATION & EXIT REQUIREMENTS (27 HOURS)

<table>
<thead>
<tr>
<th>ENGLISH (9 hrs)</th>
<th>FKL SOCIAL &amp; SCIENCE (3 hrs)</th>
<th>FKL FINE ARTS (3 hrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 (3) Composition I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENC1102 (3) Composition II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENC 3246 (3) Communications for</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineers (Exit L&amp;W)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### MATHEMATICS AND SCIENCE (33 HOURS)

| MAC 2281 (4) Engr. Calculus I          | CHM 2045 (3) Gen Chem I***                      | PHY 2048 & 2048L (3) Physics w/ Calculus I  |
| MAC 2282 (4) Engr Calculus II         | CHM 2045L (1) Chem Lab                          | PHY 2049 & 2049L (1) Physics w/ Calculus II |
| MAC 2283 (4) Engr Calculus III        | GLY 3850 (3) Geology for Engineers              |                                             |
| MAP 2302 (3) Diff Equations**         | EGN 3443 (3) Eng Statistics I                   |                                             |

### ENGINEERING CORE (35 HOURS)

| EGN 1113 (3) Intro to Design Graphics | EGN 3321 (3) Dynamics                          | EGN 3353C (3) Basic Fluid Mechanics          |
| EGN 3000 (1) Foundations of Engineering* | EGN 3331 (3) Mechanics of Materials           | EGN 3365 (3) Materials Engineering I         |
| EGN 3311 (3) Statics                  | EGN 3331L (1) MoM/Materials Lab                | EGN 3373 (3) Intro to Electrical Sys I       |
| EGN 4453 (3) Numerical & Computer Tools I | EGN 3343 (3) Thermodynamics I                  | EGN 3615 (3) Engineering Economy I          |
| EGN 4454 (3) Numerical & Computer Tools II |                                             |                                             |

### SPECIALIZATION (36 HOURS) FOR BSCE

| ENV 4004L (1) Environmental/Water Lab | CONCENTRATION COURSES | TTE 4004 (3) Transportation Engineering I |
| CES 3102 (3) Structures I             |                        | ENV 4001 (3) Environmental Engineering     |
| CEG 4011 (3) Geotech I                |                        | CAPSTONE DESIGN REQ MW/ MI                |
| CEG 4011L (1) Geotech/Trans Lab       |                        |                                           |
| CWR 4202 (3) Hydraulics               |                        |                                           |

| CLAST: ________ | GORDON: ________ | FLENT: ________ | ABET D & B: ________ |

Code: **T** = Transfer  **W** = Waived  **K** = Clep  **A, B, C, D** = Grade

* Substitution allowed for transfer students with AA degree
** EGN 3433 substitutes for MAP 2302
*** CHS 2440 substitutes for CHM 2045
Civil Engineering (BSCE - 131 Hours)

Civil Engineering Concentration and Capstone Design Requirements

The following is a list of possible concentration electives that students may take. It is important that students adhere to prequisites and corequisites in choosing their electives. Civil Engineering students take one of 3 tracks listed next:

**Structures/ Materials/ Geotechnical Track**

- CES 4702 Concepts of Concrete Design *
- CES 4605 Concepts of Steel Design*
- CGN 4851 Concrete Construction Materials*
- CEG 4012 Geotechnical Engineering II  
  **or**
- TTE 4005 Transportation Engineering II
- Technical Elective
- CES 4750 Capstone Structures/Materials/Geotechnical Design

**Geotechnical/ Transportation Track**

- CGN 4851 Concrete Construction Materials*
- CEG 4012 Geotechnical Engineering II*
- TTE 4005 Transportation Engineering II*
- Technical Elective
- Technical Elective
- CEG 4850 Capstone Geotechnical/Transportation Design

**Environmental/ Water Resources Track**

- ENV 4417 Water Quality and Treatment*
- CWR 4540 Water Resources Engineering*
- CEG 4012 Geotechnical Engineering II  
  **or**
- TTE 4005 Transportation Engineering II
- Technical Elective
- Technical Elective
- CWR 4812 Capstone Water Resources/Environmental Design

**The program supports the following technical elective courses:**

- CCE 4031 Construction Management
- CEG 4012 Geotechnical Engineering II
- CES 4605 Concepts of Steel Design
- CES 4702 Concepts of Concrete Design
- CGN 4851 Concrete Construction Materials
- CGN 4933 Special Topics in Civil & Environmental Engineering**
- CRW 4540 Water Resources Engineering I
- CWR 4541 Water Resources Engineering II
- ENV 4417 Water Quality and Treatment
- SUR 2101C Land Surveying
- TTE 4003 Transportation and Society
- TTE 4005 Transportation Engineering II
- CWR 4541 Water Resources Engineering II

Students may, with the help of their advisor, formulate their own track to meet the requirements for a bachelor's degree in civil engineering. This track will consist of five electives coupled with a capstone design course (18 total credit hours).

* Required for concentration.  
**Please see academic advisor for selected special topic courses.