BACHELOR OF SCIENCE IN CONSTRUCTION ENGRG – PreLaw Track (2010)

**Semester 1 (15 hours)**
- EN 101 English Composition I
- ENGR 111 Engineering the Future
- ENGR 131 Enggr Concepts & Design I
- ENGR 151 Fund of Enggr Graphics
- MATH 125 Calculus I
- 1 Approved Science Elective
- CE 121 Intro to Civil, Constr & Enviro Engrg

**Semester 2 (16 hours)**
- EN 102 English Composition II
- ENGR 141 Enggr Concepts & Design II
- ENGR 171 Large-Scale Enggr Graphics
- MATH 126 Calculus II
- PH 105 Gen. Physics w/Calculus I
- 2 (HI/FA) Elective

**Semester 3 (16 hours)**
- AEM 201 Statics
- CE 260 Civil & Constr Engrg Surveying
- MATH 227 Calculus III
- CH 101 Gen Chem
- 2 (HI/FA) Elective

**Semester 4 (16 hours)**
- AEM 250 Mechanics of Materials I
- AEM 264 Dynamics
- MATH 238 Applied Diff Equations I
- CH 102 Gen Chem II
- PH 106 Gen. Physics w/Calculus II

**Senior Year**
- CE 331 Intro to Struct Engrg
- CE 390 Geotechnical Engrg
- MATH 328 Systems Elective
- 2 (HI/FA) Elective
- (See PreLaw Note)
- Total = 125 hours

**Notes:**
2. PreLaw students are encouraged to consider the following courses for HU: COM 123, PHL 104, PHL 200, PHL 235, and PHL 251; and for SB: CE 220, COM 151, COM 220, EC 110, EC 111, PSC 101. Requires a min of 6 hours from the same discipline in either HU or SB.
3. Senior plan of study electives must include at least one project management elective (see approved list) and at least one design elective (see approved list). Students with a 3.0 GPA or higher are encouraged to consider 500-level electives. Students with a 3.3 GPA or higher are encouraged to enroll in the University Scholars Program. See an academic advisor for additional information.
4. Students may select, based on interest and completion of the appropriate prerequisites, either CE 402 or CE 404. Students should take CE 402 or CE 404 their last semester prior to graduation.
5. Upon consultation with an academic advisor, students may select from the following electives: CE 330, CE 361, CE 366, CE 463, CE 464, and CE 444.

**Prerequisite (5)**

**Prerequisite with Concurrence (5)**

**Hi/FA = History/Social & Behavioral Science**

**HU/L/FA = Humanities/Literature/Fine Arts**

**C = Computer course**

**W = Writing course**

Revised August 5, 2010
Plan of Study Requirement: You must complete and have approved a Plan of Study for your three senior electives. Your Plan must include at least one project management (PM) elective and at least one construction design (CD) elective. One course may be a general technical elective (GT).

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Type</th>
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<tbody>
<tr>
<td>CE 350</td>
<td>Introduction to Transportation Engineering</td>
<td>GT</td>
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<tr>
<td>CE 378</td>
<td>Water Resources Engineering</td>
<td>CD</td>
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<tr>
<td>CE 414/514</td>
<td>Information Systems Design</td>
<td>PM</td>
</tr>
<tr>
<td>CE 415/515</td>
<td>Advanced Engineering Economics</td>
<td>PM</td>
</tr>
<tr>
<td>CE 416/516</td>
<td>Advanced Information Systems Design</td>
<td>PM</td>
</tr>
<tr>
<td>CE 417/517</td>
<td>Advanced Project Management</td>
<td>PM</td>
</tr>
<tr>
<td>CE 432/532</td>
<td>Advanced Structural Analysis I</td>
<td>GT</td>
</tr>
<tr>
<td>CE 433</td>
<td>Reinforced Concrete Structures I</td>
<td>CD</td>
</tr>
<tr>
<td>CE 434</td>
<td>Structural Steel Design I</td>
<td>CD</td>
</tr>
<tr>
<td>CE 436/536</td>
<td>Wood Structural Design</td>
<td>CD</td>
</tr>
<tr>
<td>CE 437/537</td>
<td>Reinforced Concrete Structures II</td>
<td>CD</td>
</tr>
<tr>
<td>CE 438/538</td>
<td>Structural Steel Design II</td>
<td>CD</td>
</tr>
<tr>
<td>CE 439/539</td>
<td>Design of Masonry Structures</td>
<td>CD</td>
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<tr>
<td>CE 442/542</td>
<td>Waste Containment Facilities</td>
<td>CD</td>
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</table>

1 CE 350 or CE 378 is a prerequisite for CE 402 Construction Engineering Project – Site Development.
2 CE 491/591, CE 498, and CE 499 are designated as general technical electives (GT) unless approved otherwise.

Prerequisites for CE 402 Construction Engineering Project – Site Development: CE 340, CE 366, CE 461, CE 463, and either CE 350 or CE 378

Prerequisites for CE 404 Construction Engineering Project – Building Design: CE 331, CE 340, CE 366, CE 462 and at least one of the following: CE 433, CE 434, CE 436, CE 439, or CE 444.

Minor in Architectural Engineering: 22 hours. CE 331, CE 366, CE 403, and four approved electives with a minimum of one elective from at least two areas: (A) Structural Engineering and Design – CE 432, CE 433, CE 434, CE 436, CE 437, CE 438, CE 444, CE 439; (B) Building Mechanical/Electrical Systems – ME 309, ME 407, ME 416, ECE 350; (C) Construction Engineering and Management – CE 467, CE 468, CE 417, CE 418.

Minor in Civil Engineering: 25 hours. CE 320, CE 331, CE 340, CE 350, CE 366, CE 378, and two approved civil engineering senior electives.

Minor in Environmental and Water Resources Engineering: 18 hours. CE 320, CE 378, CE 422, CE 425, and two of the following: CE 220, CE 423, CE 424, CE 427, CE 429, CE 442, CE 475, CE 485, CE 486, CE 519.

Minor in Structural Engineering: 15 hours. CE 331, CE 432, CE 433, CE 434, and one of the following: CE 436, CE 437, CE 438, CE 439, CE 444, CE 534.


Note: A minimum 2.0 GPA for all courses is required for the above minors.

University Scholars Program: Students with a 3.3 or higher GPA who apply and are admitted to graduate school may take up to three elective courses (9 hours) at the graduate level (500- or 600-level) and have these count towards both their BSCE and MSCE degree. Students must be admitted into the program prior to taking any graduate-level courses. Scholars’ courses may also be used towards any of the above minors.