### BACHELOR OF SCIENCE IN CIVIL ENGINEERING

#### CURRICULUM OUTLINE - CLASS OF 2016, 2017, 2018, 2019, 2020

Sample Only – Actual Curriculum Sequence May Deviate from Sample

<table>
<thead>
<tr>
<th>FALL</th>
<th>SPRING</th>
<th>SUMMER 1</th>
<th>SUMMER 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CIVE2334</strong></td>
<td>Calculus 3 for Engrs.</td>
<td>4</td>
<td>MATH1342</td>
</tr>
<tr>
<td>CIVE2321</td>
<td>Recitation for CIVE2320</td>
<td>0</td>
<td>PHYS1155</td>
</tr>
<tr>
<td>CIVE2222</td>
<td>Statics &amp; Strength</td>
<td>4</td>
<td>PHYS1153</td>
</tr>
<tr>
<td>MATH1341</td>
<td>Intro. to Eng’g.</td>
<td>1</td>
<td>PHYS1151</td>
</tr>
<tr>
<td>CIVE2000</td>
<td>Arts OR Humanities Lvl. 1</td>
<td>1</td>
<td>ENGW1113</td>
</tr>
</tbody>
</table>

#### Year 1

**Mathematics**

- MATH1341: Calculus 1 for Engrs.
- MATH1342: Calculus 2 for Engrs.
- PHYS1151: General Chem. for Engrs.
- PHYS1152: Physics 1 for Engrs.
- PHYS1153: Physics 1 Lab
- PHYS1154: Eng’g. Design

**Civil Engineering**

- CIVE2000: Intro. to Eng’g.
- CIVE2321: Calculus 3 for Engrs.
- CIVE2222: Statics & Strength
- CIVE2223: Recitation for CIVE2222
- CIVE2224: Environ. Eng’g. 1

**General Elective**

- 4

**Elective**

- 4

**Civil Tech. Elective**

- 4

**Arts**

- 4

**Science Elective**

- 4

**SUMMER 1**

**Recitation for CIVE2320**

**Intro. to Eng’g. Co-op**

**Civil Tech. Elective**

- 4

**Soil Mechanics**

### Year 2 (AA)

**Mathematics**

- MATH1341: Calculus 3 for Engrs.
- MATH2341: Diff. Eq./Lin. Alg.
- MATH2342: Intro to Eng’g. Co-op
- MATH1342: Calculus 2 for Engrs.
- MATH2340: Intro. to Engg. Co-op

**Civil Engineering**

- CIVE2321: Statics & Strength
- CIVE2322: Recitation for CIVE2221
- CIVE2323: Environ. Eng’g. 1

**Civil Tech. Elective**

- 4

**Elective**

- 4

**Arts**

- 4

**Science Elective**

- 4

**SUMMER 2**

**Recitation for CIVE2320**

**Intro. to Eng’g. Co-op**

**Civil Tech. Elective**

- 4

**Soil Mechanics**

### Year 3 (AA)

**Mathematics**

- PHYS1155: Physics 2 for Engrs.
- PHYS1156: Physics 2 Lab
- PHYS1157: ILS for PHYS1155
- PHYS1158: Statics & Strength
- PHYS1159: Recitation for PHYS1157
- PHYS1160: Fluid Mechanics
- PHYS1161: Eng’g. Prob. Solv. & Comp.

**Civil Engineering**

- CIVE2331: Statics & Strength
- CIVE2332: Recitation for CIVE2331
- CIVE2333: Environ. Eng’g. 1

**Civil Tech. Elective**

- 4

**Elective**

- 4

**General Elective**

- 4

**Elective**

- 4

**Sumner Design Project**

### Year 4 (AA)

**Mathematics**

- MATH2341: Calculus 3 for Engrs.
- MATH2342: Intro. to Engg. Co-op
- MATH2343: Intro. to Engg. Co-op
- MATH2344: Intro. to Engg. Co-op
- MATH2345: Intro. to Engg. Co-op

**Civil Engineering**

- CIVE2341: Statics & Strength
- CIVE2342: Statics & Strength
- CIVE2343: Statics & Strength
- CIVE2344: Statics & Strength
- CIVE2345: Statics & Strength
- CIVE2346: Statics & Strength

**Civil Tech. Elective**

- 4

**Elective**

- 4

**General Elective**

- 4

**Elective**

- 4

**CIVE476x**

### Year 5 (AA)

**Mathematics**

- CIVE4768: Transportation capstone
- CIVE4767: Structural capstone
- CIVE4766: Environmental capstone

**Civil Engineering**

- CIVE4765: Environmental capstone
- CIVE4764: Structural capstone
- CIVE4763: Structural capstone

**Civil Tech. Elective**

- 4

**Elective**

- 4

**General Elective**

- 4

**General Elective**

- 4

**Sumner Design Project**

### Notes

- *ENGW3315* is an acceptable substitution for engineering majors.

- English course prefixes have changed from ENGL to ENGW. ENGW1111 is equivalent to ENGL1111. ENGW3302 is equivalent to ENGL3302. Effective Fall 2014, the ENGW 3301 course number will be retired. Students may take ENGW 3302 or ENGW 3315 to fulfill their Advanced Writing in the Technical Professions requirement. ENGW 3301 will still count towards the Advanced Writing in the Technical Professions requirement if the course was taken prior to Fall 2014.

- **Steel Design is an acceptable substitution for Concrete Design. If this option is chosen, Steel Design will not count for a technical elective and student must complete 4 other technical electives one of which can include Concrete Design.**

- Students must fill elective slots with the following:
  - NU Core Elective Requirements: 2 required - (One Arts Lvl. 3 or OR Humanities Lvl. 1) AND (One Social Science Lvl. 1 Social Science Lvl. 1 fulfilled by either ECON1115 or ECON1116)
  - General Elective Requirements: 5 required - Any 5 SH course that is not remedial or repetitive

- Science Elective: 1 required - See approved Science elective list

- Civil Engineering Technical Electives (TE): 4 required - This must include either Foundation Engineering, Hydrologic Engineering or Highway Engineering

- Capstones (Senior Design Project): CIVE4765 - Environmental capstone
  - CIVE4767 - Structural capstone
  - CIVE4768 - Transportation capstone

Electives may be interchanged. Please consult with your academic advisor.

The registrar’s website provides a listing of degree requirements and the DARS system provides a degree audit utility for students.

Revised 3/30/15