Bachelor of Science in **Civil Engineering** Curriculum

**OTHER REQUIREMENTS:**
- At least 128 credits total
- Gordon Rule Math/Writing
- At least 45 credits at senior institution
- A total of 18 credits in Foundations of Human Behavior, Creative Expression, and Global Citizenship with at least 6 credits in each

**Foreign Language Admission Requirement**
A GRADE OF C OR BETTER IS REQUIRED IN ALL GORDON RULE WRITING COURSES, MATHEMATICS, SCIENCE, AND ENGINEERING COURSES.

**LEGEND:**
- Recommended
- Co-Requisite
- Required

Shaded courses are department “prerequisites” often taken as part of a student’s AA degree.

**Elective Requirements:**
(6 credit hours required)
- Technical Electives may be taken only after completion of EGN 3331

**Undergraduate Research in CE I**
CGN 3910 (1)

**Undergraduate Research in CE II**
CGN 4911 (1)

**Strength of Materials**
EGN 3331 (3)

**Statics**
EGN 3311 (3) *PreReq Calculus 1 & Physics 1

**Engineering Math I**
MAP 3305 (3) *PreReq Calculus 2

**Fundamentals of Surveying**
SUR 2104C (3)

**Engineering Thermodynamics**
EGN 3343 (3) *CoReq Calculus 3 *PreReq Physics I

**Computer Applications in Eng.**
EGN 2213 (3)
### Mathematics Requirements:

- **MAC 1105 – College Algebra**
- **MAC 1140 – Precalculus Algebra**
- **MAC 1147 – Precalculus Algebra & Trig**
- **MAC 2281 – Calculus I for Engineers I**
- **MAC 2311 – Calculus with Analytical Geometry I**
- **PHY 2043 – Physics for Engineers I**

### Humanities and Social Sciences Requirements:

- At least 1 course must be Global Perspectives (GP)
- At least 1 course must be Oral Communication (GRW)
- At least 1 course must be Written Communication (GRW)
- At least 1 course must be Critical Thinking (GRW)

- History
  - **HIS 1021 – World History**
  - **HIS 2022 – United States History Since 1877**

- English
  - **ENG 1102 – College Writing II**
  - **ENG 1104**

- Fine Arts
  - **ART 2000 – Art Appreciation**
  - **THE 2000 – Appreciation of Theater**

- Philosophy
  - **PHI 2010 – Introduction to Philosophy**

- **NATURAL SCIENCE**
  - **GLY 2010 – General Geology**
  - **PHY 2048 – Physics for Engineers I**
  - **ENG 2452 – College Writing II**

### Social Problems and Perspectives:

- **SYG 1000 – Sociological Perspectives**
- **SYG 2010 – Social Problems**

### Other Requirements:

- **ANR 2410 – Cultural and Creative Environments**
- **ART 2000 – Art Appreciation**
- **THE 2000 – Appreciation of Theater**
- **PHI 2010 – Introduction to Philosophy**

### Additional Notes:

- All courses are three (3) credits unless otherwise indicated. A grade of "C" or higher is required.
- The following courses are acceptable in the Computer Science program in lieu of Chemistry:
  - **CHE 2043**
  - **CHE 2044**

### Prerequisites:

- Pre-requisite of **MAC 2281 – Calculus I for Engineers I** or **MAC 2311 – Calculus with Analytical Geometry I**
- Pre-requisite of **MAC 1105 – College Algebra**
- Pre-requisite of **PHY 2048 – Physics for Engineers I**
- Pre-requisite of **NSP 1195 – College Writing I**
- Pre-requisite of **GLY 2010 – General Geology**
- Pre-requisite of **SYG 2010 – Social Problems**
- Pre-requisite of **ENG 2452 – College Writing II**

### Foundations of Written Communication (GRW)

- **ENG 1102 – College Writing II**
- **ENG 1104 – College Writing II**
- **ENG 1106 – College Writing II**
- **ENG 1108 – College Writing II**
- **ENG 1110 – College Writing II**

### Foundations of Oral Communication (GRW)

- **ENG 1102 – College Writing II**
- **ENG 1104 – College Writing II**
- **ENG 1106 – College Writing II**
- **ENG 1108 – College Writing II**
- **ENG 1110 – College Writing II**

### Foundations of Critical Thinking (GRW)

- **ENG 1102 – College Writing II**
- **ENG 1104 – College Writing II**
- **ENG 1106 – College Writing II**
- **ENG 1108 – College Writing II**
- **ENG 1110 – College Writing II**

### Pre-professional Engineering Program (2013-2014)

- **Pre-requisite of MAC 2281 – Calculus I for Engineers I**

### Freshman Academic Advising Services

- **College of Engineering & Computer Science**