Minimum of 132 s.h. required for graduation (36 s.h. must be 300/400-level courses)  
(Additional hours to total 132 s.h. – includes second major, minor, and elective hours.)

### General Studies Requirements
(General Studies must total at least 58 s.h.)

**FIRST-YEAR CORE:**

- GST 110 - Global Experience (4 s.h.)
- ENG 110 - College Writing (4 s.h.)
- MTH 112 or 121 or 212 (4 s.h.)
- HED 111 – Contemp. Wellness Issues (2 s.h.)

**Experiential Learning Requirement (ELR):** (One Unit)
[May be met by any one of the following: internship, practicum, co-op, study abroad, student teaching, or an approved field-based course. Also may be met by service, leadership, or individualized learning experience.]

**Foreign Language Requirement:**
Students must meet one of the following: placing beyond FL 122 on the CAPE placement test, completing a 122-level language course, completing a semester or summer in a university-approved program in a non-English speaking country with language study at the 122-level or above, scoring 4 or 5 on an Advanced Placement language exam or similar exam.

**STUDIES IN THE ARTS AND SCIENCES:**
[Transfer students with at least 18 s.h. of transfer credit must complete 32 hours total in Studies in the Arts & Sciences, but may have as few as 7 hours in one or more of the four Studies in the Arts & Sciences areas.]

- **Expression** (8 s.h.)
- **Civilization** (8 s.h.)
- **Society** (8 s.h.)
- **Science** (8 s.h.)

**ADVANCED STUDIES** (Must be outside major.)

- **MTH** (8 s.h.)

**GST Interdisciplinary Seminar** (4 s.h.)
[300-400 level GST course; requires junior/senior status.]

### Major Requirements
A minimum of 73-95 s.h. depending upon concentration selected.

**Core Requirements (53 s.h.):**

- **CHM 111** (3) - General Chemistry I
- **CHM 113** (1) - General Chemistry I Lab
- **CHM 112** (3) - General Chemistry II
- **CHM 114** (1) - General Chemistry II Lab
- **PHY 113** (4) & **PHYL 113** - General Physics I w/ Calculus
- **PHY 114** (4) & **PHYL 114** General Physics II w/ Calculus
- **MTH 121** (4) - Calculus and Analytic Geometry I
- **MTH 221** (4) - Calculus and Analytic Geometry II
- **MTH 321** (4) - Calculus and Analytic Geometry III
- **MTH 421** (4) - Differential Equations
- **CSC 130** (4) – Computer Science I
- **EGR 103** (3) – Challenges in Engineering
- **EGR 206** (3) - Engineering Mechanics - Statics
- **EGR 208** (3) – Engineering Mechanics – Dynamics

Choose two of the following:

- EGR /PHY 211 (3) & 212 (1) - Circuit Analysis & lab
- EGR 306 (4) – Mechanics of Solids
- EGR/PHY 310 (4) - Engineering Thermodynamics

(...Additional requirements for Engineering are continued on back.....)

*Required in major; may count in General Studies.
Select one (1) of the following five (5) options

### Engineering Physics (20 s.h.)
- **PHY 213 (4)** - Intro to Modern Physics
- **PHY 311 (4)** - Classical Electrodynamics
- **PHY 397-98 (4)** – Physics Lab/Seminar

Select 8 s.h. of PHYSICS at the 300-400 level (excluding PHY 305)

### Engineering Mathematics (24 s.h.)
- **MTH 231(4)** – Mathematical Reasoning
- **MTH 311 (4)** - Linear Algebra
- **MTH 312 (4)** - Abstract Algebra
- **MTH 341 (4)** - Probability Theory and Statistics
- **MTH 415 (4)** - Numerical Analysis
- **CSC 230 (4)** - Algorithm Development

### Computer Science/Engineering (24 s.h.)
- **MTH 206 (4)** – Discrete Structures
- **-OR-**
- **MTH 231 (4)** – Mathematical Reasoning
- **CSC 230 (4)** – Computer Science II
- **CSC 330 (4)** – Distributed Computing
- **CSC 331 (4)** - Algorithm Analysis
- **CSC 342 (4)** - Computer Systems
- **CSC 442 (4)** – Mobile Computing

### Chemistry/Chemical Engineering (22 s.h.)
- **CHM 125 (1)** - The Chemical Literature
- **CHM 205 (4)** - Inorganic Chemistry I
- **CHM 211 (3)** - Organic Chemistry I
- **CHM 213 (1)** - Organic Chemistry Lab I
- **CHM 212 (3)** - Organic Chemistry II
- **CHM 214 (1)** - Organic Chemistry Lab II
- **CHM 311 (4)** - Quantitative Analysis
- **CHM 332 (4)** - Physical Chemistry I
- **CHM 461 (1)** - Senior Seminar

### Environmental Studies/Environmental Engineering (40-42 s.h.)
- **POL 224 (4)** – Environmental Policy & Law
- **REL 348 (4)** – Environmental Ethics
- **ENS 461 (4)** – Senior Seminar
- **CHM 211 & 213 (4)** – Organic Chemistry w/Lab
- **BIO 112 & 114 (4)** – Intro Population Biology w/Lab
- **BIO 452 (4)** – General Ecology
- **ENS 215 (4)** – Organismal Biology & Field Techniques
- **ENS 381 (2-4)** – Internship (during summer)
- **CE 323 (3)** – Earth Systems Chemistry (at engineering school)
- **CE 373 (4)** – Fundamentals of Env. Engineering (at engineering school)
- **ST 370 (3)** – Probability & Stat. For Engineers (at engineering school)

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**Major Total**