**General Studies Requirements (56-60 sh)**

**FIRST-YEAR CORE:**

- **GST 110** - Global Experience (4 s.h.)
- **ENG 110** - Writing: Argument & Inquiry (4 s.h.)
  *(C- or better required for graduation)*
- **MTH 110 or 151 or 220** (4 s.h.)
  *(MTH 151)*

**Experiential Learning Requirement (ELR — 2 units required):**

Included in experiential learning are study abroad, research, service-learning, leadership, internships, (including co-ops, teaching, and practicum), or other courses or experiences with ELR designation.

**Foreign Language Requirement:**

Students must meet one of the following: (a) complete a language course numbered 122 or higher at Elon, or receive transfer for study abroad credit for the same; (b) place into a language course numbered 200 or above upon arriving at Elon, using a department of foreign languages approved placement instrument; (c) score a 4 or 5 on an AP language exam or similar exam. Each student must take the language placement test by October 1 of his or her first full year at Elon. Students are allowed two tries; the higher score is counted. That score stands and may not be repeated by later testing.

**STUDIES IN THE ARTS AND SCIENCES:**

<table>
<thead>
<tr>
<th>Transfer students with at least 18 s.h. of transfer credit must complete 32 hours total in Studies in the Arts &amp; Sciences, but may have as few as 7 hours in one or more of the four Studies in the Arts &amp; Sciences areas.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eight hours chosen from at least two of the following: literature (in English or foreign languages), philosophy, &amp; fine arts (art, art history, dance, fine arts, music, music theatre, &amp; theatre arts). At least one course must be literature.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Civilization</th>
<th>(8 s.h.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eight hours chosen from at least two of the following: history, foreign languages, and religious studies.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Society</th>
<th>(8 s.h.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eight hours chosen from at least two of the following: economics, geography, human service studies, political science, psychology, &amp; sociology/anthropology.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Science/Analysis</th>
<th>CHM 111 (Lab: __) CHM 112 (8 s.h.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eight hours chosen from one or more of the following: mathematics/statistics, science, computer science and information science. At least one course must be a physical or biological laboratory science.</td>
<td></td>
</tr>
</tbody>
</table>

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

- **MTH 359** (8 s.h.)
  *(MTH 359)*

*Eight hours of 300-400 level coursework outside the major field and chosen from areas under Studies in the Arts and Sciences.*

**GST Interdisciplinary Capstone Seminar** (4 s.h.)

[300-400 level GST course; requires junior/senior status.]

**Major Requirements**

Core Requirements (54 s.h.):

- **CHM 111 (4)** - General Chemistry I with Lab
- **CHM 112 (4)** - General Chemistry II with Lab
- **PHY 221 (4) & PHYL 221 – University Physics I**
- **PHY 222 (4) & PHYL 222 – University Physics II**
- **MTH 151 (4)** - Calculus I
- **MTH 251 (4)** - Calculus II
- **MTH 252 (4)** - Multivariable Calculus and Analytic Geometry
- **MTH 359 (4)** - Differential Equations
- **CSC 130 (4)** - Computer Science I
- **EGR 103 (4)** - Challenges in Engineering
- **EGR 206 (3)** - Engineering Mechanics - Statics
- **EGR 208 (3)** - Engineering Mechanics – Dynamics

Select two (8 s.h.) of the following:

- **EGR 211 & 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......)
Select one (1) of the following six (6) options

**B.S. in Engineering Physics (16 s.h.):**

- PHY 314 (4) – Modern Physics
- PHY 397 (4) – Research Methods I
- PHY 398 (4) – Research Methods II
- PHY 401 (4) – Classical Mechanics
- PHY 403 (4) – Electrodynamics I
- Select 4 s.h. of PHY at the 300-400 level

**B.S. in Engineering Mathematics (24 s.h.)**

- MTH 243 (4) – Applied Mathematical Modeling
- MTH 329/STS 341 (4) – Probability Theory and Statistics
- MTH 445 (4) – Numerical Analysis
- CSC 230 (4) – Computer Science II

Choose from one of the following options:
- MTH 241 (4) – Discrete Structures
- MTH 349 (4) – Applied Matrix Theory
- MTH 330 (4) – Mathematical Reasoning
- MTH 239 (4) – Linear Algebra

**B.S. in Computer Science/Engineering (24 s.h.)**

- MTH 241 (4) – Discrete Structures
- MTH 330 (4) – Mathematical Reasoning
- CSC 230 (4) – Computer Science II
- CSC 303 (4) – Mobile Computing
- CSC 330 (4) – Computer Science III
- CSC 331 (4) – Algorithm Analysis
- CSC 443 (4) – Computer Systems

**B.S. in Chemistry/Chemical Engineering (23 s.h.)**

- CHM 211 (4) – Organic Chemistry I with Lab
- CHM 212 (4) – Organic Chemistry II with Lab
- CHM 311 (4) – Qualitative Analysis
- CHM 332 (4) – Physical Chemistry I
- CHM 341 (4) – Inorganic Chemistry I
- CHE 450 – Chemical Engineering Design I
- CHE 451 – Chemical Engineering Design II

^CHE 450 – Chemical Engineering Design I
^CHE 451 – Chemical Engineering Design II

**B.S. in Environmental Science/Environmental Engineering (18-28 s.h.)**

- ENS 111/113 (4) – Intro to Environmental Science w/ Lab
- ENS 200 (4) – Strategies for Environmental Inquiry
- CHM 211 (4) – Organic Chemistry I w/Lab
- MTH 329/STS 341 (4) – Probability Theory and Statistics

Ecological Processes (select one)
- BIO 215 (4) – Diversity of Life
- BIO 335 (4) – Field Biology
- ENS 320 (4) – Restoration Ecology
- ENS 330 (4) – Wildlife Ecology

Social Sciences and Humanities (select two)
- POL 224 (4) – Environmental Policy and Law
- POL 322 (4) – State Environmental Policy and Administration
- POL 344 (4) – International Environmental Policy
- SOC 334 (4) – Environmental Sociology
- ENG 318 (4) – Science Writing
- ENG 339 (4) – American Environmental Writers
- COM 331 (4) – Environmental Communications
- ART 339 (4) – Ecological Art
- GIS 250* (4) – Introduction to Geographical Systems
- POL 228* (4) – U.S. Environmental Law and Politics
- POL 344* (4) – Global Environmental Politics

*(or affiliate school equivalent)

**B.S. in Bio-physics / Biomedical Engineering (24 s.h.)**

- BIO 111/113 (4) – Introductory Cell Biology and Lab
- BIO 245/246 (4) – Principles of Genetics and Lab
- BIO 261 (4) – Human Anatomy
- BIO 262 (4) – Human Physiology
- BIO 401 (4) – Classical Mechanics
- BIO 403 (4) – Electrodynamics I
- PHY 397-98 (4) – Research Methods I and II

^Taken at engineering school

^CHE 450 – Chemical Engineering Design I
^CHE 451 – Chemical Engineering Design II

^CHE 450 – Chemical Engineering Design I
^CHE 451 – Chemical Engineering Design II