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.)

Name________________________________________ I.D. #________________________ H.S. deficiencies: Math ____  Foreign Language ____

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

**FIRST-YEAR CORE:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>GST 110 - Global Experience</td>
<td>4 s.h.</td>
<td>(C- or better required for graduation)</td>
</tr>
<tr>
<td>ENG 110 - College Writing</td>
<td>4 s.h.</td>
<td></td>
</tr>
<tr>
<td>MTH 112 or 121 (or higher)</td>
<td>4 s.h.</td>
<td>*MTH 121</td>
</tr>
<tr>
<td>HED 111 – Contemp. Wellness Issues</td>
<td>2 s.h.</td>
<td></td>
</tr>
</tbody>
</table>

**Experiential Learning Requirement (ELR):** (One Unit)

May be met by any one of the following:
- internship, practicum, co-op, study abroad, student teaching,
- 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.)

Eight hours chosen from at least two of the following:
literature (in English or foreign languages), philosophy, & fine arts
(art, dance, fine arts, music, music theater, and theater arts).
At least one course must be literature.

**Civilization** (8 s.h.)

Eight hours chosen from at least two of the following:
history, foreign languages, and religion. Students taking foreign
language courses to meet Elon’s proficiency requirement may only
apply 4 s.h. of that coursework toward Civilization.

**Society** (8 s.h.)

Eight hours chosen from at least two of the following:
economics, geography, political science, psychology, and sociology.

**Science** *(CHM 111-113 Lab: ___) *(CHM 112-114(8 s.h.)

Eight hours chosen from one or more of the following:
mathematics, science, and computer science *(must have the CSC
department designation). At least one course must be a physical or
biological laboratory science.]

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

* *MTH *(8 s.h.)

Eight hours of 300-400-level courses outside the major field chosen
departments and areas listed under Studies in the Arts and
Sciences.

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) - General Physics I with Calculus
- ___PHY 114 (4) - General Physics II with Calculus
- ___ PHY 117 & PHY 118 Gen. Physics Lab I & II
- ___ 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) – Introduction to Computer Science
- ___ EGR 101 (1) – Introduction to Engineering
- ___ EGR 102 (2) – Intro.to Engineering Graphics & Design
- ___ EGR 206 (3) - Engineering Mechanics - Statics
- ___ EGR 208 (3) - Engineering Mechanics - Dynamics
- ___ EGR /PHY 211 (3) - Circuit Analysis
- ___ EGR/PHY 212 (1) - Circuit Analysis Lab
- ___ EGR/PHY 310 (4) - Engineering Thermodynamics

*(...Additional requirements for Engineering are continued on back.....)*
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 (28 s.h.)

   ____ MTH 206 (4) – Discrete Structures
      -OR-
   ____ MTH 231 (4) – Mathematical Reasoning
   ____ CSC 230 (4) - Algorithm Development
   ____ CSC 331 (4) - Algorithm Analysis
   ____ CSC 342 (4) - Computer Organization and Architecture
   ____ CSC 351 (4) - Theory of Computation
   ____ CSC 441 (4) – Operating Systems/Networking
   ____ One upper-level course in programming languages at another
        institution (if electrical or computer engineering.) For another
        engineering degree, an additional upper-level CSC course
        is required.

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

   ____ Major Total