

| Name of student: |         |  |
|------------------|---------|--|
| Class of:        |         |  |
| Date:            | Advisor |  |

# **Undergraduate Major Planning**

|            | SUMMER      | FALL | WINTER | SPRING |
|------------|-------------|------|--------|--------|
| First year | AP credits: |      |        |        |
| _          |             |      |        |        |
|            |             |      |        |        |
| Sophomore  |             |      |        |        |
| _          |             |      |        |        |
|            |             |      |        |        |
| Junior     |             |      |        |        |
| _          |             |      |        |        |
|            |             |      |        |        |
| Senior     |             |      |        |        |
| _          |             |      |        |        |
|            |             |      |        |        |

| Engs major | Engs modified with | Biomedical ENG | Eng physics |
|------------|--------------------|----------------|-------------|
|            |                    |                |             |

## **PREREQUISITES**

Math 3, 8, 11 or 13 (F,W,S, see ORC for times) Physics 13 (F, W:) & 14 (W, S: times vary)

Chemistry 5 (F: 10; W: 9L, 10)

Engs 20 (F,W: 10, ; S:11, 12) or CoSc 1 (F: 12, W:12, S: 2)

and CoSc 10 (F: 2, W:11, S:2)

# **COMMON CORE COURSES (3 courses)**

ENGS 21 Intro to Engineering (F, W,S: 10A)\*\*Math 3

ENGS 22 Systems (F:10A; W:9L; S: 9L; X: 10) \*\*Math 13,

Phys 14, Engs 20

ENGS 23 Distributed Systems & Fields (F:2; W:9L;

S:9L)\*\*Engs 22

#### DISTRIBUTIVE CORE COURSES (choose 2)

ENGS 24 Science of Materials (W,S: 10) \*\*Phys 14, Chem 5

ENGS 25 Thermodynamics (S: 2; X: 10A) \*\*Math 13, Phys 13, ENGS 20 or CoSc 1 & 10

ENGS 26 Control Theory (F, S: 9L;) \*\*Engs 22

ENGS 27 Discrete & Probabilistic Systems (F: 10A) \*\*Math

8, Engs 20 or CoSc 1&10, Phys 13 or Chem 5

## GATEWAY COURSES (choose 2)

ENGS 30 Biological Physics (S:11) \*\*Chem 5, Phys 13, Phys 14

ENGS 31 Digital Electronics (S: 12; X: 9L) \*\* Engs 20 or

ENGS 32 Electronics (W: arrange) \*\*Engs 22

ENGS 33 Solid Mechanics (X: 12; F: 11; W: 12) \*\* *Math 13*, *Phys 13* 

ENGS 34 Fluid Dynamics (W: 9L) \*\*Engs 2

ENGS 35 Biotechnology & Biochemical Eng (F: 9L)

\*Math 3, Chem 3 or 5, Biol 12 or 13

ENGS 36 Chemical Engineering (F: 10A) \*\*Engs 22, Engs 25 and Chem 5

ENGS 37 Environmental engineering (F: 11) \*\*Math 3, Chem 5

#### ELECTIVES (choose 2)

Math, natural science, or engineering science Engineering science (may be culminating exp)

CULMINATING EXPERIENCE (choose 1) Consult ORC or Thayer Course Guide

\*\*Indicates pre-requisite, check ORC for exceptions. For modified, Biomedical, and engineering physics majors, consult the Thayer School course guide or ORC. Only pre-requisites may be taken under the NRO option unless prohibited.