



Student Name: \_\_\_\_\_

Student ID: \_\_\_\_\_

### Engineering Core Requirements

|       |         |   |  |
|-------|---------|---|--|
| _____ | COS 130 | 3 | Computational Problem Solving for Engineers    |
| _____ | ENP 104 | 3 | Introduction to Engineering and Software Tools |
| _____ | ENP 231 | 4 | Introduction to Electric Circuits              |
| _____ | ENP 301 | 3 | Statics  |
| _____ | ENP 332 | 4 | Control Systems                                |
| _____ | ENP 351 | 3 | Engineering Thermodynamics                     |
| _____ | ENP 352 | 3 | Materials Science                              |
| _____ | ENP 392 | 3 | Junior Engineering Project                     |
| _____ | ENP 393 | 2 | Practicum                                      |
| _____ | ENP 405 | 1 | Engineering Ethics                             |
| _____ | ENP 491 | 1 | Review of the Fundamentals of Engineering      |
| _____ | ENP 493 | 2 | Engineering Senior Capstone I                  |
| _____ | ENP 494 | 3 | Engineering Senior Capstone II                 |
| _____ | ENP 495 | 1 | Engineering Senior Capstone III                |

### Science and Math Core Requirements

|       |         |   |   |
|-------|---------|---|---|
| _____ | CHE 211 | 4 | College Chemistry I                     |
| _____ | MAT 151 | 4 | Calculus I                              |
| _____ | MAT 230 | 4 | Calculus II                             |
| _____ | MAT 240 | 4 | Calculus III                            |
| _____ | MAT 251 | 4 | Differential Equations                  |
| _____ | PHY 211 | 5 | University Physics I                    |
| _____ | PHY 212 | 5 | University Physics II                   |
| _____ | PHY 341 | 3 | Math Methods in Physics and Engineering |

Select one course from the following:

|       |         |   |                         |
|-------|---------|---|-------------------------|
| _____ | MAT 210 | 4 | Introductory Statistics |
| _____ | MAT 352 | 4 | Mathematical Statistics |

### Additional Core Requirements

|       |         |   |                                  |
|-------|---------|---|----------------------------------|
| _____ | ECO 201 | 3 | Principles of Microeconomics     |
| _____ | SYS 330 | 3 | Human Relations in Organizations |

### Mechanical Engineering Requirements

|       |         |   |                                   |
|-------|---------|---|-----------------------------------|
| _____ | ENP 252 | 4 | Engineering Systems               |
| _____ | ENP 302 | 3 | Mechanics of Materials            |
| _____ | ENP 303 | 3 | Dynamics                          |
| _____ | ENP 355 | 3 | Fluid Mechanics and Water Flow    |
| _____ | ENP 357 | 3 | Heat Transfer                     |
| _____ | ENP 359 | 2 | Mechanical Engineering Laboratory |

Select 6 additional hours from the following:

|       |           |      |  |
|-------|-----------|------|--|
| _____ | BIO 201   | 4    | Biology I: Foundations of Cell Biology and Genetics  |
| _____ | BIO 203   | 4    | Principles of Genetics                               |
| _____ | CHE 212   | 4    | College Chemistry II                                 |
| _____ | COS 121   | 4    | Foundations of Computer Science                      |
| _____ | COS 230   | 3    | Missions Technology                                  |
| _____ | ENP 261   | 3    | Digital Systems Design                               |
| _____ | ENP 360   | 1-4  | Independent Study                                    |
| _____ | ENP 370   | 1-4  | Selected Topics                                      |
| _____ | ENP 386   | 3    | Shop Machining and Fabrication                       |
| _____ | ENP 450   | 1-4  | Directed Research                                    |
| _____ | ENS 241   | 4    | Physical Geology                                     |
| _____ | MAT 345   | 4    | Linear Algebra                                       |
| _____ | BIO _____ | 1-10 | Any 300/400 electives not used in major              |
| _____ | CHE _____ | 1-10 | Any 300/400 electives not used in major              |
| _____ | COS _____ | 1-10 | Any 300/400 electives not used in major              |
| _____ | ENP _____ | 1-10 | Any 300/400 electives not used in major              |
| _____ | ENS _____ | 1-10 | Any 300/400 electives not used in major              |
| _____ | MAT _____ | 1-10 | Any <sup>†</sup> 300/400 electives not used in major |
| _____ | PHY _____ | 1-10 | Any 300/400 electives not used in major              |
| _____ | SYS _____ | 1-10 | Any 300/400 electives not used in major              |

<sup>†</sup>Excluding MAT 301, 302, 309

**Total Major Hours Required: 103**

\_\_\_\_\_ Participation in a weekend retreat for all students in the department.

### Degree Requirements

- 128 minimum hours and 42 minimum upper-division hours (3XX/4XX course numbers).
- Fifty percent of the minimum hours must be completed at Taylor—64 hours.
- Fifty percent of the major/minor hours must be completed at Taylor.
- 22 of the last 30 hours earned must be completed at Taylor.
- Cumulative GPA of 2.0; major GPA of 2.3 (higher GPA may be required in certain curricula). (See current catalog for policy).
- All general education, major, minor, and proficiency requirements must be completed (including Senior Comprehensive Exam/Paper/Project).
- Two years of one foreign language is required for the BA degree.
- Candidates for 2 degrees must complete a minimum of 158 semester hours and meet all requirements for 2 different majors.