

## SAMPLE ACADEMIC PLAN OF STUDY

The following academic plan is a *sample* pathway to completing degree requirements for this major.

| <b>Semester 1 - Fall</b>                                   |           |
|--|-----------|
| ENG 1010 Composing Arguments                               | 3         |
| Oral Communication   | 3         |
| Art and Humanities (Multicultural or Global Diversity)     | 3         |
| MTH 1110 College Algebra for Calculus                      | 4         |
| AMS 1010 Survey of Advanced Manufacturing & Workplace Prep | 3         |
| <b>TOTAL CREDIT HOURS</b>                                  | <b>16</b> |

| <b>Semester 2 - Spring</b>   |           |
|--|-----------|
| ENG 1020 Research and Argument Writing   | 3         |
| Historical (Multicultural or Global Diversity)   | 3         |
| Art and Humanities (Multicultural or Global Diversity)   | 3         |
| MET 1010 Manufacturing Processes (Recommended)<br><b>OR</b> IND 2830 Manufacturing Materials and Processes | 3         |
| MTH 1120 College Trigonometry  | 3         |
| <b>TOTAL CREDIT HOURS</b>  | <b>15</b> |

| <b>Semester 3 - Fall</b>  |           |
|---|-----------|
| Introduction to Engineering (CET 1040, EET 1040, MET 1040)  | 3         |
| PHY 2010 College Physics I  | 4         |
| PHY 2030 College Physics Lab  | 1         |
| EET 1001 Electronics: An Introduction   | 3         |
| IND 1000 Introduction to Industrial Design  | 1         |
| MET 1200 Technical Drawing (Recommended)<br><b>OR</b> IND 1450 Technical Drawing and CAD<br><b>OR</b> CET 1215 Engineering Graphics | 3         |
| <b>TOTAL CREDIT HOURS</b>   | <b>15</b> |

| <b>Semester 4 - Spring</b>                          |           |
|---|-----------|
| ECO 2020 Principles of Microeconomics (Recommended) | 3         |
| JMP 2610 Introduction to Technical Writing          | 3         |
| MET 1310 Principles of Quality Assurance            | 3         |
| IND 1130 Plastics: Materials and Fabrication        | 3         |
| IND 1470 Design Drawing Techniques                  | 3         |
| <b>TOTAL CREDIT HOURS</b>                           | <b>15</b> |

| <b>Semester 5 - Fall</b>                            |           |
|---|-----------|
| CET 3120 Engineering Economy                        | 3         |
| AMS 3010 Additive Manufacturing Stratasys Cert Prep | 3         |
| MET 3000 Manufacturing Analysis                     | 4         |
| IND 2100 Digital Composition                        | 3         |
| IND 2455 Industrial Design Studio for Non-Majors    | 3         |
| <b>TOTAL CREDIT HOURS</b>                           | <b>16</b> |

| <b>Semester 6 - Spring</b>                        |           |
|---|-----------|
| CSS 1751 Computing and Security for Manufacturing | 3         |
| MET 2010 CNC Machining and Inspection             | 3         |
| IND 3000 Design Thinking                          | 3         |
| IND 3100 Composites: Materials and Fabrication    | 3         |
| Advisor Approved Elective                         | 3         |
| <b>TOTAL CREDIT HOURS</b>                         | <b>15</b> |

| <b>Semester 7 - Fall</b>                  |           |
|---|-----------|
| IND 3260 Direct Digital Manufacturing     | 3         |
| IND 3400 Product Usability and Ergonomics | 3         |
| Advisor Approved Elective                 | 3         |
| Advisor Approved Elective                 | 3         |
| Advisor Approved Elective                 | 3         |
| <b>TOTAL CREDIT HOURS</b>                 | <b>15</b> |

| <b>Semester 8 - Spring</b>       |           |
|----------------------------------|-----------|
| AMS 4950 Professional Internship | 3         |
| IND 3660 Computer Aided Modeling | 3         |
| Advisor Approved Elective        | 3         |
| Advisor Approved Elective        | 3         |
| Advisor Approved Elective        | 3         |
| <b>TOTAL CREDIT HOURS</b>        | <b>15</b> |

Advisor Approved Electives: (21) credit hours with a minimum of (12) upper-division courses.