

### Engineering Physics - Mechanical Engineering Option (BS)

Suggested Plan of Study 2015-2016 Catalog

| Fall - Semester 1   |           | Spring - Semester 2   |           |
|---|-----------|---|-----------|
| ENGL 1113 Composition I   | 3         | ENGL 1123 Composition II  | 3         |
| MATH 1525 Calculus I  | 5         | MATH 1545 Calculus II   | 5         |
| CHEM 1023/1021 University Chemistry I/Lab   | 4         | CHEM 1123/1121 University Chemistry II/Lab  | 4         |
| PHYS 2203/2201 University Physics I/Lab   | 4         | PHYS 2213/2211 University Physics II/Lab  | 4         |
| GSTD 1002 Freshman Seminar  | 2         |   |           |
| <b>Total Semester Hours</b>   | <b>18</b> | <b>Total Semester Hours</b>   | <b>16</b> |
| Fall - Semester 3   |           | Spring - Semester 4   |           |
| MATH 2563 Calculus III  | 3         | CSCI 2103 Computer Science I  | 3         |
| ENGR 1021 Introduction to Engineering Lab   | 1         | BIOL 1103/1101 University Biology I/Lab   | 4         |
| ENGR 1023 Introduction to Engineering   | 3         | ENGR 2053 Chemical Engineering Fundamentals   | 3         |
| ENGR 1212 Engineering Graphics  | 2         | ENGR 2063 Dynamics  | 3         |
| ENGR 2143 Statics   | 3         | MATH 3033 Differential Equations  | 3         |
| <b>Total Semester Hours</b>   | <b>12</b> | <b>Total Semester Hours</b>   | <b>16</b> |
| Fall - Semester 5   |           | Spring - Semester 6   |           |
| ENGR 2033 Electrical Circuits I   | 3         | *HIST 1003 or 1013 World History I or II OR HIST 2013 or 2023 U.S. History I or II or PSCI 2003 American Government: National | 3         |
| ENGR 3013 Thermodynamics  | 3         | ENGR 3053 Properties of Materials   | 3         |
| ENGR 3033 Fluid Mechanics   | 3         | ENGR 3112 Thermal Fluid Science Lab   | 2         |
| ENGR 3102 Solid Mechanics Lab   | 2         | ENGR 4013 Machine Design  | 3         |
| ENGR 3043 Mechanics of Materials  | 3         | MATH 3043 Intro to Applied Probability & Statistics   | 3         |
| <b>Total Semester Hours</b>   | <b>14</b> | <b>Total Semester Hours</b>   | <b>14</b> |
| Fall - Semester 7   |           | Spring - Semester 8   |           |
| World Literature I/II (ENGL 2213 or ENGL 2223)  | 3         | Fine Arts/Humanities (ART 2013, HUM 2003, ENGL 2213, ENGL 2223, MUS 2013, PHIL 2403, THEA 2003)                               | 3         |
| Fine Arts/Humanities (ART 2013, HUM 2003, ENGL 2213, ENGL 2223, MUS 2013, PHIL 2403, THEA 2003 or Foreign Language)           | 3         | ENGR 4023 Senior Design Project   | 3         |
| *HIST 1003 or 1013 World History I or II OR HIST 2013 or 2023 U.S. History I or II or PSCI 2003 American Government: National | 3         | ENGR 4003 Numerical Methods in Engineering  | 3         |
| Social Science choice (ECON 2103, FIN 2003, GEOG 2003, PSCI 2003, PSYC 2003, SOC 1003 or SOC 2003)                            | 3         | ITEC 3073 Engineering Economic Analysis   | 3         |
| Engineering Electives   | 3         | Engineering Electives   | 4         |
| <b>Total Semester Hours</b>   | <b>15</b> | <b>Total Semester Hours</b>   | <b>16</b> |

Total hours required for major – 121

\*Note: Must have six hours of history/government. Three hours must be World History I or II. Three hours must be U.S. History I, U.S. History II or American Government: National.