

## Major Requirements

The BS in Mechanical Engineering requires 128 credit hours. All courses must be completed with a “C” or higher. A curriculum flowchart is attached at the end of this handbook.

| Course Title  | Course Number | Credit Hours |
|---|---------------|--------------|
| <b>Pre-Engineering</b>  |               |              |
| See the section above. All engineering majors complete the same pre-engineering coursework. |               |              |
| <b>Subtotal</b>   |               | <b>50</b>    |
| <b>Other Lower Division Courses</b>   |               |              |
| Introduction to Literature  | LIT 2110      | 3            |
| Statics   | EGN 3311      | 3            |
| Computer Science I  | COP 2220      | 3            |
| Free Elective   |               | 1            |
| <b>Subtotal</b>   |               | <b>10</b>    |
| <b>Foundation</b>   |               |              |
| Probability and Statistics for Engineers  | STA 3032      | 3            |
| Circuit Analysis I  | EEL 3111      | 3            |
| Economics for Engineers   | ECP 3007      | 2            |
| <b>Subtotal</b>   |               | <b>8</b>     |
| <b>Core Requirements</b>  |               |              |
| Dynamics  | EGN 3321      | 3            |
| Strength of Materials   | EGN 3331      | 3            |
| Thermodynamics I  | EML 3100      | 3            |
| Modern Computational Methods  | EGN 3203      | 3            |
| Senior Capstone Design I  | EML 4551      | 1            |
| Senior Capstone Design II   | EML 4552      | 3            |
| <b>Subtotal</b>   |               | <b>16</b>    |
| <b>Major Requirements</b>   |               |              |
| Fluids I  | EML 3015      | 3            |
| Fluid Mechanics Laboratory  | EML 4304 L    | 1            |
| Materials Science I   | EML 3520 C    | 4            |
| Machine Design  | EML 4501      | 3            |
| Modeling and Analysis of Dynamic Systems  | EML 4312      | 3            |
| Heat Transfer   | EML 4140      | 3            |
| Modern Engineering CAD  | EML 3535 C    | 3            |
| Thermodynamics II   | EML 3101      | 3            |
| Control of Machinery  | EML 4313      | 3            |
| Energy Systems Lab  | EML 4004 L    | 1            |
| Integrated Design and Manufacturing   | EML 4320 C    | 4            |
| Mechanical Systems Lab  | EGN 4301 L    | 1            |
| Transport Phenomena   | EML 4126      | 3            |
| <b>Subtotal</b>   |               | <b>35</b>    |

|  |  |            |
|--|--|------------|
| <i>Technical Electives</i>   |  |            |
| See the Engineering academic advisor for a list of approved courses. |  |            |
| <i>Subtotal</i>  |  | <b>9</b>   |
| <b><i>TOTAL</i></b>  |  | <b>128</b> |