Mechanical Engineering Curriculum

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Freshman Fall  Course Title | Credits |  | Freshman Spring  Course Title | Credits |
| ENGL 1010/1011 Composition | 4 |  | MATH 1132Q Calculus II | 4 |
| MATH 1131Q Calculus I | 4 |  | ENGR 1166 Found. of Engineering | 3 |
| CHEM 1127Q Chemistry I | 4 |  | PHYS 1501Q[[1]](#footnote-1) Physics for Eng. I | 4 |
| ENGR 1000 Orien. to Engineering | 1 |  | Content Area[[2]](#footnote-2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 3 |
| CSE 1010 Intro. to Computing | 3 |  | Content Area2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 3 |
| **Total Credits** | **16** |  | **Total Credits** | **17** |

Sophomore Fall Sophomore Spring

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Course | Title | Credits |  | Course | Title | Credits |
| CE 2110 | Applied Mechanics I | 3 |  | CE 2120 | Applied Mechanics II | 3 |
| MATH2110Q | Multi. Calculus | 4 |  | MATH2410Q | Differential Equations | 3 |
| ME 2233 | Thermodynamic Principles | 3 |  | ME 2234 | Applied Thermodynamics | 3 |
| PHYS 1502Q1 | Physics for Eng. II | 4 |  | PHIL 1104 | Ethics (CA-1) | 3 |
| Content Area2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 3 |  | Content Area2 | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 3 |
|  |  |  |  | Content Area2 | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 3 |

**Total Credits 17 Total Credits 18**

Junior Fall Junior Spring

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Course  CE 3110 | Title Credits  Mechanics of Materials 3  Credits  3 | |  | Course  ME 3220 | Title  Mechanical Vibrations | Credits  3 |
| YY XXXX | Prof & Math/Sci Requirement[[3]](#footnote-3) | 3 |  | ME 3242 | Heat Transfer | 3 |
| ME 3250 | Fluid Dynamics I | 3 |  | ME 3264 | App. Measurements Lab | 3 |
| ME 3253 | Linear Systems Theory | 3 |  | MSE 2101 | Materials Science & Eng. | 3 |
| ME 3263 | Intro. to Sensors & Data | 3 |  | ME 3XXX | ME Elective[[4]](#footnote-4) | 3 |

**Total Credits 15 Total Credits 15**

Senior Fall Senior Spring

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Course  ME 3227 | Title  Design of Machine Elem. | Credits  3 |  | Course  ME 4973W | Title  Senior Design Project II | Credits  3 |
| ME 3255 | Comput. Mechanics | 3 |  | ME 3XXX | ME Elective4 | 3 |
| ME 4972 | Senior Design Project I | 3 |  | ME 3XXX | ME Elective4 | 3 |
| YY XXXX | Prof & Math/Sci Requirement3 | 3 |  |  | Free Elective | 3 |
| ECE 2000 | Elec. & Comp. Principles | 3 |  |  | Free Elective | 3 |

**Total Credits 15 Total Credits 15**

**Total Credits for 4 years 128**

1. PHYS1401Q & 1402Q or PHYS 1201, 1202, & 1230(or 1530) can substitute for the PHYS1501Q & 1502Q sequencing. Only 8 credits for courses numbered PHYS 1201Q through 1602Q may be applied toward the degree. For more information please visit: <https://catalog.uconn.edu/school-of-engineering/> [↑](#footnote-ref-1)
2. CA = Content Area in General Education Requirements For a current list, visit: <https://catalog.uconn.edu/general-education/>. [↑](#footnote-ref-2)
3. Professional Requirements are 2000 level or higher in engineering, mathematics, statistics, physical, or life sciences. The Additional Math & Science Requirement is 6 credits in 1000 level or higher mathematics, statistics, physics, or life sciences. For a complete list of courses that satisfy this requirement, see your advisement report. **Most 2000 level or higher mathematics, statistics, physics, or life sciences courses may be used to satisfy both requirements.**  [↑](#footnote-ref-3)
4. Students who wish to pursue an area of concentration should choose classes within their chosen concentration. For more information visit: <http://me.engr.uconn.edu/education/areas-of-concentration/> [↑](#footnote-ref-4)