Mechanical Engineering Curriculum Map

(down arrows indicate pre-requisite, horizontal arrows indicate co-requisite)



Professional Requirement

Additional Math and Science Requirement

Two courses at the 2000 level or higher in engineering, mathematics, statistics, physical, or life sciences

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.

Note: 2000 level or higher mathematics, statistics, physics, or life sciences courses may be used to satisfy both requirements.

You must meet with your academic advisor at least once every semester to ensure you are making satisfactory progress towards your degree.

Mechanical Engineering Curriculum

Freshman Fall

| Course | Title | Credits |
|----------------|-----------------------|---------|
| ENGL 1010/1011 | Composition | 4 |
| MATH 1131Q | Calculus I | 4 |
| CHEM 1127Q | Chemistry I | 4 |
| ENGR 1000 | Orien. to Engineering | 1 |
| CSE 1010 | Intro. to Computing | 3 |
| Total Credits | | 16 |

Sophomore Fall

| Title | Credits |
|--------------------------|--|
| Applied Mechanics I | 3 |
| Multi. Calculus | 4 |
| Thermodynamic Principles | 3 |
| Physics for Eng. II | 4 |
| | 3 |
| | Title Applied Mechanics I Multi. Calculus Thermodynamic Principles Physics for Eng. II |

Total Credits

17

Junior Fall

| Course | Title | Credits |
|---------------|----------------------------|------------------|
| CE 3110 | Mechanics of Materials | 3 |
| YY XXXX | Prof & Math/Sci Requiremen | t ³ 3 |
| ME 3250 | Fluid Dynamics I | 3 |
| ME 3253 | Linear Systems Theory | 3 |
| ME 3263 | Intro. to Sensors & Data | 3 |
| Total Credits | | 15 |

Senior Fall

| Course | Title | Credits |
|-------------|--|---------|
| ME 3227 | Design of Machine Elem. | 3 |
| ME 3255 | Comput. Mechanics | 3 |
| ME 4972 | Senior Design Project I | 3 |
| YY XXXX | Prof & Math/Sci Requirement ³ | 3 |
| ECE 2000 | Elec. & Comp. Principles | 3 |
| Total Credi | ts | 15 |
| | | |

Freshman Spring

| Course | Title | Credits |
|---------------------------|-----------------------|---------|
| MATH 1132Q | Calculus II | 4 |
| ENGR 1166 | Found. of Engineering | 3 |
| PHYS $1501Q^1$ | Physics for Eng. I | 4 |
| Content Area ² | | 3 |
| Content Area ² | | 3 |
| Total Credit | ts | 17 |

Sophomore Spring

| Total Credits | | 18 |
|---------------------------|------------------------|---------|
| Content Area ² | | 3 |
| Content Area ² | | 3 |
| PHIL 1104 | Ethics (CA-1) | 3 |
| ME 2234 | Applied Thermodynamics | 3 |
| MATH2410Q | Differential Equations | 3 |
| CE 2120 | Applied Mechanics II | 3 |
| Course | Title | Credits |

Junior Spring

| Total Credits | | 15 |
|---------------|--------------------------|---------|
| ME 3XXX | ME Elective ⁴ | 3 |
| MSE 2101 | Materials Science & Eng. | 3 |
| ME 3264 | App. Measurements Lab | 3 |
| ME 3242 | Heat Transfer | 3 |
| ME 3220 | Mechanical Vibrations | 3 |
| Course | Title | Credits |
| | 0 | |

Senior Spring

| Total Credits Total Credits for 4 years | | 15 128 |
|--|--------------------------|-----------|
| | Free Elective | 3 |
| | Free Elective | 3 |
| ME 3XXX | ME Elective ⁴ | 3 |
| ME 3XXX | ME Elective ⁴ | 3 |
| ME 4973W | Senior Design Project II | 3 |
| Course | Title | Credits |

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: <u>https://catalog.uconn.edu/school-of-engineering/</u>

² CA = Content Area in General Education Requirements For a current list, visit: <u>https://catalog.uconn.edu/general-education/</u>.

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 may be used to satisfy both requirements.**

⁴ Students who wish to pursue an area of concentration should choose classes within their chosen concentration. For more information visit: <u>http://me.engr.uconn.edu/education/areas-of-concentration/</u>