

| Mechanical Engineering 2024-25<br>mech.utah.edu/academics  | Year 1   |  | Year 2  |   | Year 3  |   | Year 4   |   |
|--|--|--|---|---|---|---|--|---|
|  | Fall (16 hrs)**  | Spring (15 hrs)  | Fall (17 hrs)   | Spring (15 hrs)   | Fall (16 hrs)   | Spring (16 hrs)**   | Fall (15 hrs)**  | Spring (15 hrs)**   |
| <p><b>Admissions</b></p> <ul style="list-style-type: none"> <li>☐ Apply to U of U</li> <li>☐ Be ready to take Calc I or higher</li> <li>☐ Be offered full major status through the Dept. of Mechanical Engineering (see our website for more information).</li> </ul> <p><b>Continuing Performance</b></p> <ul style="list-style-type: none"> <li>☐ 2.5 cumulative U of U GPA</li> <li>☐ Pre/co-reqs strictly enforced</li> <li>☐ C or better in major courses</li> <li>☐ One repeat per course (second grade counts, total number of repeats limited).</li> </ul> <p><b>Graduation Requirements</b></p> <ul style="list-style-type: none"> <li>☐ U of U BS requirements</li> <li>☐ 2.5 cumulative U of U GPA</li> <li>☐ C or better in major courses</li> </ul> | <p>MATH 1310</p> <p><b>ME EN 1000</b><br/>Intro to Design for Eng Sys<br/>3hr L F,S</p> <p>1010, 2650</p>  | <p>PHYS 2210, MATH 1310</p> <p><b>ME EN 1010</b><br/>Comp Prob Solv for Eng Sys<br/>4hr L F,S</p> <p>2450, 2550, 3220</p>        |   | <p>1010, MATH 2250, ME EN 2455</p> <p><b>ME EN 2450</b><br/>Num Methods for Eng Sys<br/>3hr F,S</p> <p>3220, 3710</p> | <p>WR TG/ENGL 2010, ME EN 3xxx</p> <p><b>ME EN 3400†</b><br/>Professional Communication<br/>3hr F,S, Su*</p> <p>4000, 4650</p>      | <p>2650, 3310, 3315 MSE 2160</p> <p><b>ME EN 3000</b><br/>Design of Mech Elem<br/>3hr F,S, Su*</p> <p>4000</p>                      | <p>3000, 3220, 3230, 3310, 3315, 3400, 3650, 3710, 4650</p> <p><b>ME EN 4000†</b><br/>Engineering Design I<br/>3hr F,S</p> <p>4010</p> | <p>4000</p> <p><b>ME EN 4010</b><br/>Engineering Design II<br/>3hr F,S</p>        |
|  | <p>MATH 1050 or MATH 1080</p> <p><b>CHEM 1210</b><br/>Chemistry<br/>4hr F,S,Su*</p> <p>CHEM 1215, MSE 2160</p>   |  | <p>CHEM 1210, MATH 1310</p> <p><b>MSE 2160</b><br/>Materials Science<br/>3hr F,S</p> <p>2650, 3000, 3310</p>                                    | <p>ME EN 2450</p> <p><b>ME EN 2455</b><br/>Model &amp; Sim Lab<br/>1hr L F,S</p> <p>3220, 3710</p>                    | <p>2010, 3315, MSE 2160, MATH 2250 &amp; 3140</p> <p><b>ME EN 3310</b><br/>Mechanics of Materials<br/>3hr F,S</p> <p>3000, 4000</p> | Gen. Ed. Req.   | Gen. Ed. Req.  | <p>Tech Elective</p> <p>3hr</p>   |
|  | <p>CHEM 1210</p> <p><b>CHEM 1215</b><br/>Chemistry Lab<br/>1hr L F,S,Su*</p>   | <p>MATH 1310 &amp; 1320, PHYS 2210</p> <p><b>ME EN 2010</b><br/>Statics<br/>3hr F,S,Su*</p> <p>2030, 2650, 3310</p>              | <p>2010, PHYS 2210, MATH 2250</p> <p><b>ME EN 2030</b><br/>Dynamics<br/>3hr F,S,Su*</p> <p>3220, 3710</p>                                       | <p>1000, 2010, MSE 2160</p> <p><b>ME EN 2650</b><br/>Manufacturing for Eng Sys<br/>3hr L F,S</p> <p>3000, 3230</p>    | <p>ME EN 3310</p> <p><b>ME EN 3315</b><br/>Mechanics of Materials Lab<br/>1hr L F,S</p> <p>3000, 4000</p>                           | Tech Elective   | Tech Elective  | Tech Elective   |
|  | <p>Co-requisite, Prerequisite</p> <p>CATALOG #####<br/>Course Title<br/>4hr L F,S,Su* — Gen. Ed. Course</p> <p>Concurrent, Subsequent</p> <p>Requires Full Major Status</p> <p>L = Lab Included<br/>F = Fall<br/>S = Spring<br/>Su* = Summer (tentative)</p> | <p>Gen. Ed. Req. WRTG/ENGL 2010<br/>Recommended in first year</p>  | <p>PHYS 2220, MATH 2250</p> <p><b>ECE 2210</b><br/>Electrical Engineering<br/>3hr L F,S</p> <p>3220</p>   | <p>ME EN 2650</p> <p><b>ME EN 2655</b><br/>Manufact Lab<br/>1hr L F,S</p> <p>3000, 3230</p>                           | <p>1010, 2030, 2450, ECE 2210, MATH 2250</p> <p><b>ME EN 3220‡</b><br/>Dyn Sys &amp; Control<br/>3hr F,S</p> <p>3230, 4000</p>      | <p>2550, 2650, 3220, MATH 3140</p> <p><b>ME EN 3230‡</b><br/>Mechatronics<br/>4hr L F,S</p> <p>4000</p>                             | Gen. Ed. Req.  | Gen. Ed. Req.   |
|  |  | <p>ME EN 1020<br/>Appl Ethics &amp; Prof for MechE<br/>1hr F,S</p>   | <p>MATH 1310</p> <p><b>PHYS 2210</b><br/>Physics I<br/>4hr F,S,Su*</p> <p>1010, 2010, 2030, 2300, MATH 2250, PHYS 2220</p>                      | <p>PHYS 2210, MATH 1320</p> <p><b>PHYS 2220</b><br/>Physics II<br/>4hr F,S,Su*</p> <p>ECE 2210</p>                    | <p>MATH 2250, PHYS 2210</p> <p><b>ME EN 2300</b><br/>Thermo<br/>3hr F,S, Su*</p> <p>3650, 3710, 4650, 4000</p>                      | <p>2030, 2300, 2450, MATH 2250 &amp; 3140</p> <p><b>ME EN 3710</b><br/>Fluid Mechanics<br/>3hr F,S, Su*</p> <p>3650, 4000, 4650</p> | <p>2300, 3710, MATH 2250 &amp; 3140</p> <p><b>ME EN 3650</b><br/>Heat Transfer<br/>3hr F,S, Su*</p> <p>4000, 4650</p>                  | <p>2550, 3400, 3650, 3710</p> <p><b>ME EN 4650</b><br/>TFES Lab<br/>3hr L F,S</p> |
| <p><b>General Education:</b> Choose 6 courses that satisfy these 8 requirements:</p> <p>WR2 FF BF DV♦<br/>AI HF LS IR♦</p> <p>Notes:<br/>** Assumes 3 hrs per Gen. Ed. Req.<br/>WRTG 1010 is a prerequisite for WRTG/ENGL 2010.<br/>Credit for WRTG 1010 may be completed through challenge exam.</p>  | <p>MATH (1050&amp;1060) or MATH 1080</p> <p><b>MATH 1310</b><br/>Engineering Calculus I<br/>4hr F,S</p> <p>1000, 1010, 2010, PHYS 2210, MATH 1320</p>  | <p>MATH 1310</p> <p><b>MATH 1320</b><br/>Engineering Calculus II<br/>4hr F,S,Su*</p> <p>2010, MSE 2160, PHYS 2220, MATH 2250</p> | <p>MATH 1320</p> <p><b>MATH 2250</b><br/>ODEs &amp; Linear Algebra<br/>4hr F,S,Su*</p> <p>2030, 2450, 3310, 3650, 3710, ECE 2210, MATH 3140</p> | <p>MATH 1320 &amp; 2250</p> <p><b>MATH 3140</b><br/>Vector Calculus/PDEs<br/>4hr F,S,Su*</p> <p>3310, 3650, 3710</p>  | <p>1010, MATH 1320</p> <p><b>ME EN 2550^</b><br/>Probability &amp; Statistics<br/>3hr F,S, Su*</p> <p>3230, 4650</p>                |   |  |   |

^MATH 3070 is an allowed substitute for ME EN 2550, but only recommended for students in the Data Science Emphasis

Disclaimer: Course availability and prerequisites subject to change. See catalog.utah.edu.

Notes: †Meets the CW (Communication/Upper Division Writing) requirement ‡ Meets the QI (Quantitative Intensive) requirement