Mechanical Engineering 2024-25

mech.utah.edu/academics

Admissions

- ❑ Apply to U of U
- ❑ Be ready to take Calc I or higher
- ❑ Be offered full major status through the Dept. of Mechanical Engineering (see our website for more information).

Continuing Performance

- ❑ 2.5 cumulative U of U GPA
- ❑ Pre/co-reqs strictly enforced
- ❑ C or better in major courses
- ❑ One repeat per course (second grade counts, total number of repeats limited).

Graduation Requirements

- ❑ U of U BS requirements
- ❑ 2.5 cumulative U of U GPA
- ❑ C or better in major courses

Co-requisite, Prerequisite

CATALOG #### Course Title 4hr L F,S,Su* — Gen. Ed. Course

Concurrent, Subsequent

Requires Full Major Status

L = Lab Included

F = Fall

S = Spring

Su* = Summer (tentative)

General Education: Choose 7 courses that satisfy these 9 requirements:

WR1 WR2 FF BF DV·

AI HF LS IR·

WRTG 1010 is a prerequisite for WRTG/ENGL 2010.Credit for WRTG 1010 may be completed through challenge exam.

·DV and IR can double count with an FF, HF, LS, or BF

† Meets the CW (Communication/Upper Division Writing) requirement

‡ Meets the QI (Quantitative Intensive) requirement

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)**
ME EN 1000 Intro to Design for Eng Sys 3hr L F,S MATH 1310 → 1010, 2650	**ME EN 1010** Comp Prob Solv for Eng Sys 4hr L F,S PHYS 2210, MATH 1310 → 2450, 2550, 3220		**ME EN 2450** Num Methods for Eng Sys 3hr F,S 1010,MATH 2250, ME EN 2455 → 3220, 3710	**ME EN 3400†** Professional Communication 3hr F,S, Su* WRTG/ENGL 2010, ME EN 3xxx → 4000, 4650	**ME EN 3000** Design of Mech Elem 3hr F,S, Su* 2650, 3310, 3315 MSE 2160 → 4000	**ME EN 4000†** Engineering Design I 3hr F,S 3000, 3220, 3230, 3310, 3315, 3400, 3650, 3710, 4650 → 4010	**ME EN 4010** Engineering Design II 3hr F, S 4000
CHEM 1210 Chemistry 4hr F,S,Su* MATH 1050 or MATH 1080 → CHEM 1215, MSE 2160		**MSE 2160** Materials Science 3hr F,S CHEM 1210, MATH 1310 → 2650, 3000, 3310	**ME EN 2455** Model & Sim Lab 1hr L F,S ME EN 2450 → 3220, 3710	**ME EN 3310** Mechanics of Materials 3hr F,S 2010, 3315, MSE 2160, MATH 2250 & 3140 → 3000, 4000	**Gen. Ed. Req.**	**Gen. Ed. Req.**	**Tech Elective** 3hr
CHEM 1215 Chemistry Lab 1hr L F,S,Su* CHEM 1210 →	**ME EN 2010** Statics 3hr F,S,Su* MATH 1310 & 1320 PHYS 2210 → 2030, 2650, 3310	**ME EN 2030** Dynamics 3hr F,S,Su* 2010, PHYS 2210, MATH 2250 → 3220, 3710	**ME EN 2650** Manufacturing for Eng Sys 3hr L F,S 1000, 2010, MSE 2160 → 3000, 3230	**ME EN 3315** Mechanics of Materials Lab 1hr L F,S ME EN 3310 → 3000, 4000	**Tech Elective** 3hr	**Tech Elective** 3hr	**Tech Elective** 3hr
Gen. Ed. Req. **WRTG/ENGL 2010** Recommended in first year		**ECE 2210** Electrical Engineering 3hr L F,S PHYS 2220, MATH 2250 → 3220	**ME EN 2655** Manufact Lab 1hr L F,S ME EN 2650 → 3000, 3230	**ME EN 3220‡** Dyn Sys & Control 3hr F,S 1010, 2030, 2450, ECE 2210, MATH 2250 → 3230, 4000	**ME EN 3230‡** Mechatronics 4hr L F,S 2550, 2650, 3220, MATH 3140 → 4000	**Gen. Ed. Req.**	**Gen. Ed. Req.**
ME EN 1020 Appl Ethics & Prof for MechE 1hr F,S	**PHYS 2210** Physics I 4hr F,S,Su* MATH 1310 → 1010, 2010, 2030, 2300, MATH 2250, PHYS 2220	**PHYS 2220** Physics II 4hr F,S,Su* PHYS 2210, MATH 1320 → ECE 2210	**ME EN 2300** Thermo 3hr F,S, Su* MATH 2250, PHYS 2210 → 3650, 3710, 4650, 4000	**ME EN 3710** Fluid Mechanics 3hr F,S, Su* 2030, 2300, 2450, MATH 2250 & 3140 → 3650, 4000, 4650	**ME EN 3650** Heat Transfer 3hr F,S, Su* 2300, 3710, MATH 2250 & 3140 → 4000, 4650	**ME EN 4650** TFES Lab 3hr L F,S 2550, 3400, 3650, 3710	**Gen. Ed. Req.**
MATH 1310 Engineering Calculus I 4hr F,S MATH (1050&1060) or MATH 1080 → 1000, 1010, 2010, PHYS 2210, MATH 1320	**MATH 1320** Engineering Calculus II 4hr F,S,Su* MATH 1310 → 2010, MSE 2160, PHYS 2220, MATH 2250	**MATH 2250** ODEs & Linear Algebra 4hr F,S,Su* MATH 1320 → 2030, 2450, 3310, 3650, 3710, ECE 2210, MATH 3140	**MATH 3140** Vector Calculus/ PDEs 4hr F,S,Su* MATH 1320 & 2250 → 3310, 3650, 3710	**ME EN 2550^** Probability & Statistics 3hr F,S, Su* 1010, MATH 1320 → 3230, 4650			

^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

Revised August 2024