Year 1		Year 2		Year 3		Year 4		Year 5
Fall (15 hrs)	Spring (14 hrs)	Fall (15 hrs)	Spring (12 hrs)	Fall (16 hrs)	Spring (15 hrs)	Fall (16 hrs)	Spring (15 hrs)	Fall (12 hrs)
MATH 1210 → **ME EN 1000** Intro to Design for Eng Sys 3hr L F,S → 1010, 2650	1000, PHYS 2210, MATH 1210 → **ME EN 1010** Comp Prob Solv for Eng Sys 3hr L F,S → 2450, 2550, 3220		1010, MATH 2250 → **ME EN 2450** Num Methods for Eng Sys 3hr L F,S → 3220, 3710	1000, 2010, MSE 2160 → **ME EN 2650** Manufacturing for Eng Sys 3hr L F,S → 3000, 3230	2010, 3315, MSE 2160, MATH 2250 & 2210 → **ME EN 3310 & 3315** Mechanics of Materials & Lab 3hr+ 1hr L F,S → 3000, 4000	2650, 3310, 3315 MSE 2160 → **ME EN 3000** Design of Mech Elem 3hr F,S, Su* → 4000	3000, 3220, 3230, 3310, 3315, 3400, 3650, 3710, 4650 → **ME EN 4000†** Engineering Design I 3hr F,S → 4010	4000 → **ME EN 4010** Engineering Design II 3hr F, S
MATH 1050 or MATH 1080 → **CHEM 1210** Chemistry 4hr F,S,Su* → CHEM 1215, MSE 2160	MATH 1210 → **PHYS 2210** Physics I 4hr F,S,Su* → 1010, 2010, 2030, 2300 MATH 2250, PHYS 2220	PHYS 2210, MATH 1220 → **PHYS 2220** Physics II 4hr F,S,Su* → ECE 2210	CHEM 1210, MATH 1210 → **MSE 2160** Materials Science 3hr F,S → 2650, 3000, 3310	MATH 2250, PHYS 2210 → **ME EN 2300** Thermo 3hr F,S, Su* → 3650, 3710, 4650, 4000	2030, 2450, 2300, MATH 2250 & 2210 → **ME EN 3710** Fluid Mechanics 3hr F,S, Su* → 3650, 4000, 4650	2300, 3710, MATH 2250 & 3150 → **ME EN 3650** Heat Transfer 3hr F,S, Su* → 4000, 4650	2550, 3400, 2300, 3710, 3650 → **ME EN 4650** TFES Lab 3hr L F,S → 4000	**Tech Elective** + 3hr
CHEM 1210 → **CHEM 1215** Chemistry Lab 1hr L F,S,Su*	**Gen. Ed. Req.** **WRTG 2010** Recommended in first year	MATH 1210 & 1220 PHYS 2210 → **ME EN 2010** Statics 3hr F,S,Su* → 2030, 2650, 3310	2010, PHYS 2210, MATH 2250 → **ME EN 2030** Dynamics 3hr F,S,Su* → 3220, 3710	PHYS 2220, MATH 2250 → **ECE 2210** Electrical Engineering 3hr L F,S → 3220	1010, 2030, 2450, ECE 2210, MATH 2250 → **ME EN 3220‡** Dyn Sys & Control 3hr F,S → 3230, 4000	WRTG 2010, ME EN 3xxx → **ME EN 3400†** Professional Communication 3hr F,S, Su* → 4000, 4650	**Tech Elective** + 3hr	**Tech Elective** + 3hr
MATH (1050&1060) or MATH 1080 → **MATH 1210** *** Calculus I 4hr F,S, Su* → 1000, 1010, 2010, PHYS 2210, MATH 1220	MATH 1210 → **MATH 1220** Calculus II 4hr F,S,Su* → PHYS 2220, MATH 2250, MATH 2210	MATH 2210 OR MATH 1220 & PHYS 2210 → **MATH 2250** Diff Eqs & Linear Algebra 4hr F,S,Su* → 2030,2300, 2450, 3220, 3310, 3650, 3710, ECE 2210, MATH 3150	MATH 1220 → **MATH 2210** Calculus III 3hr F,S,Su* → 3310, 3710, 3650	1010, MATH 1220 → **MATH 3070** Probability & Statistics 3hr F,S, Su* → 3230, 4650, DS Elec	MATH 2210 & 2250 → **MATH 3150** PDEs 2hr F,S,Su* → 3230, 3650	2550, 2650, 3220, MATH 3150 → **ME EN 3230‡** Mechatronics 4hr L F,S → 4000	**Gen. Ed. Req.**	**Gen. Ed. Req.**
Gen. Ed. Req. ***		ME EN 1010 → **CS 1420** Accel Object-Oriented Prog 4hr F,S → CS 2420		CS 1420 → **CS 2420^** Intro Alg & Data Struct 4hr F,S → CS 3xxx	**Gen. Ed. Req.**	**Gen. Ed. Req.**	**Gen. Ed. Req.**	**Gen. Ed. Req.**

2023 -2024 Flowchart Key, Graduation Requirements, and Department of Mechanical Engineering Policies

Co-requisite, Prerequisite → CATALOG #### Course Title → Concurrent, Subsequent

2.7 or higher cum. GPA required for Full Major Status

Gen. Ed. Course

Requires Full Major Status

L = Lab Included

F = Fall

S = Spring

Su* = Summer (tentative)

^ CS 2420 can be counted as a Mechanical Engineering Technical Elective if completing the DS emphasis

***This flowchart uses GenEd requirements for catalog years through 2023.

+ Refer to the second page on technical electives to see the overlap of the DS emphasis, the DS certificate, and the Computer Science minor.

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Disclaimer: Course availability and prerequisites subject to change. See catalog.utah.edu. Revised 5/2022