

Updated 8/13/2021

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR		
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring
Intro. to ME I ME 128[^] (1) (1st qtr freshman year; Concur: ME 163)	Intro to ME II ME 129[^] (1) (ME 128, 2nd quarter)	Intro to ME III ME 130[^] (1) (ME 129, 3rd quarter)	Philosophy of Design ME 234 (3) (Soph Standing)			Thermodynamics II ME 303 (3) (ME 302)	Design for Strength & Stiffness ME 328 (4) (BMED 212 or ME 234; CE 207 or 208; MATE 210; ME 212. Coreq: CPE/CSC 101 or 231 or 234; ME 251)	Mechanical Systems Design ME 329 (4) (ME 328)	Thermal System Design ME 448 (4) (ME 303; ME 343; ME 347)		
Orientation to ME ME 163[^] (1) (Concur: ME 128)			Engineering Statics ME 211 (3) (MATH 241†, PHYS 131 or 141)	Engineering Dynamics ME 212 (3) (MATH 241; ME 211 or ARCE 211)	Thermodynamics I ME 302 (3) (ME 212 & PHYS 132)	Fluid Mechanics I ME 341 (3) (MATH 242 or 244; ME 212)	Mechanical Vibrations ME 318 (4) (ME 212, MATH 344. Recom: EE 201)	Introduction to System Dynamics ME 322 (4) (CPE/CSC 101, CSC 231 or 234; EE 201; EE 251; ME 318; ME 341)			
Manufacturing Processes: Materials Joining IME 142 (2)			Intro to Detailed Design ME 251 (2) (ME 130 or 228. Recom: IME 143 for EE majors or IME 146 for ME majors.)	MATE & Laboratory I MATE 210 (3) & MATE 215 (1) (CHEM 111, 124, or 127)		Fluid Mechanics II ME 347 (4) (ME 236; ME 341; ME 302)			Select one: IME 356, IME 416, ME 423, ME 506, ME 507 (3-4)*		
Manufacturing Processes Elective IME 141 (1) OR ITP 341 (4) OR ME 161 (2) *						Heat Transfer ME 343 (4) (CPE/CSC 101 or CSC 231 or 234; MATE 360 or ME 236 & 302 & 341)			Senior Design Project I, II, and III ME 428 (2)¹ (ME 329; Coreq: ME 318 & 343 or 350; IME 141, IME 142, IME 143, IME 146, ME 161, or ITP 341.) ME 429 (2)¹ (ME 428) ME 430 (2)¹ (ME 429)		
Calculus I MATH 141 (4) * [B4]	Calculus II MATH 142 (4) (MATH 141 w/min C-) [B4]	Calculus III MATH 143 (4) (MATH 142 w/min C-) [Area B Elective]	Calculus IV MATH 241 (4) (MATH 143)	Linear Analysis I MATH 244 (4) (MATH 143)		Linear Analysis II MATH 344 (4) * [Upper-Division B]			Advanced Control Systems ME 419 (4) (ME 322, ME 236)		
	General Physics IA PHYS 141 (4) * [Area B Elective]	General Physics II PHYS 132 (4) (PHYS 131 or HNRS 131 or PHYS 141)	General Physics III PHYS 133 (4) (PHYS 131, 141, or HNRS 131; MATH 142. Recom: MATH 241)	Mechanics of Materials I CE 204 (3)² (ME 211)		Mechanics of Materials II CE 207 (2)² (CE 204)	Electronics and Electronics Lab EE 321 (3) & EE 361 (1) (EE 201, EE 251)	Intermediate Dynamics ME 326 (4) (ME 212; CPE/CSC 101, CSC 231 or 234; Coreq: MATH 244†)			
		Gen. Chem. For Phys Sci & Engineering I CHEM 124 (4) * [B1 & B3]	Gen. Chem. For Phys Sci & Engineering II CHEM 125 (4) (CHEM 124)	Select one: Programming for Engineering Students CSC 231 (2) (MATH 142; PHYS 121, 131, or 141) OR C & Unix CSC 234 (3) (MATH 142)				Introduction to Mechatronics ME 305 (4) (EE 201 & EE 251)	Mechatronics ME 405 (4) (EE 321; EE 361; ME 305; ME 329†; or CPE 316 or CPE/EE 329 or CPE/EE 336)		
Expository Writing ENGL 133 or 134 (4)** [A2] Can be taken anytime during Freshman Year											
Oral Communication COMS 101 or 102 (4)** [A1] Can be taken anytime during Freshman Year											
GE (4) **	Reasoning, Argumentation, & Writing [A3] COMS 126, 145, ENGL 145, 147, ES 145, PHIL 126, or WGS 145 (4)** (Completion of GE A2 with a C- or better) Can be taken anytime between Winter of Freshman and Winter of Sophomore Years.					GE (4) **			Graduation Writing Requirement GWR* (Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year)		
									GE (4) **	GE (4) **	GE (4) **
									GE (4)³ Rec: STS Minor Courses	GE (4) **	GE (4) **
13-16	18	18	17	18-19	17	18	16	16	13-14	14	18
										TOTAL:	196-201

Notes:

MOST GENERAL EDUCATION COURSES CAN BE TAKEN IN ANY ORDER AS LONG AS PREREQUISITES ARE MET

* Refer to current catalog for prerequisites.

** One course from each of the following GE areas must be completed: A1, A2, A3, B2, C1, C2, Lower-Division C Elective, Upper-Division C, D1, Area D Elective, E, F. Upper-Division C should be taken only after Junior standing is reached (90 units).

Refer to online catalog for GE course selection, United States Cultural Pluralism (USCP) and Graduation Writing Requirement (GWR).

USCP requirement can be satisfied by some (but not all) courses within GE categories: C1, Upper-Division C, D1, D2, Upper-Division D, or E.

*** Refer to current catalog for course selection.

† Course can be taken previously or concurrently.

^ Transfer students and change of major students take ME 228, 263 & 264 in lieu of ME 128, 129, 130 and 163; and IME 143 in lieu of IME 145 and 146.

¹ ENGR 459, ENGR 460 and ENGR 461 (6) may substitute for ME 428, ME 429 and ME 430 (6).

² CE 208 may be taken in place of CE 204 and CE 207.

³ The ME Department recommends the following courses that examine topics related to engineering, science, technology, and society: PHIL 322, PHIL 323, PHIL 327, PHIL 328, PHIL 339, PHIL 340, ISLA 303. Completion of these courses contribute to the Science, Technology, and Society Minor and meet GE requirements for upper division C.

Legend:

Course Title Course # (Units) (Prerequisite)		Major (55)
		Support (68-72)
		Concentration (25-26)
[GE Area]		General Ed. (48)