

Updated 11/4/2020

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)			Design for Strength & Stiffness ME 328 (4) (BMED 212 or ME 234; CE 207; CPE/CSC 101 or CSC 231 or 234; MATE 210; ME 212 & 251. IME 141f, ITP 341f or ME 161f)			Thermal System Design ME 420 (4) (ME 303; ME 347; ME 350)			
Orientation to ME ME 163[^] (1) (Concur: ME 128)	Sub. Manuf. I IME 145[^] (1) (Concur: ME 129)	Sub. Manuf. II IME 146[^] (1) (IME 145; Concur: ME 130)	Engineering Statics ME 211 (3) (MATH 241f, 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 Systems Design ME 329 (4) (ME 328)	Thermodynamics II ME 303 (3) (ME 302)	Take concurrently: Life Science for Engineers & Bioengineering Fundamentals BIO 213 (2) & BMED 213 (2) (MATH 142. Recom: CHEM 124) [B2]			
Manufacturing Processes: Materials Joining IME 142 (2)			Intro to Detailed Design ME 251 (2) (ME 130 or 228. Recom: IME 143)	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)	Heat Transfer ME 350 (4) (CPE/CSC 101 or CSC 231 or 234; MATE 360 & 380, or ME 236 & 302 & 341)	Technical Elective (3-4) ***			
Manufacturing Processes Elective IME 141 (1) OR ITP 341 (4) OR ME 161 (2) *			Calculus IV MATH 241 (4) (MATH 143)	Linear Analysis I MATH 244 (4) (MATH 143)	Linear Analysis II MATH 344 (4) (MATH 206 & 242; or 241 & 244) [Upper-Division B]	Mechanical Vibrations ME 318 (4) (ME 212, MATH 344. Recom: EE 201)	Intro to System Dynamics ME 322 (4) (CPE/CSC 101 or CSC 231 or 234; EE 201; EE 251; ME 318; ME 341)	Technical Elective (4) ***				
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-) [Add'l Area B]	General Physics III PHYS 133 (4) (PHYS 131, 141, or HNRS 131; MATH 142. Recom: MATH 241)	Mechanics of Materials I CE 204 (3)[^] (ME 211)	Mechanics of Materials II CE 207 (2)[^] (CE 204)	Electric Circuit Theory and Lab EE 201 (3) & EE 251 (1) (MATH 244, PHYS 133)	Electronics and Electronics Lab EE 321 (3) & EE 361 (1) (EE 201, EE 251)	Senior Design Project I, II, and III ME 428 (2)¹ ME 429 (2)¹ ME 430 (2)¹ (ME 329. Coreq: ME 318 & 350)				
General Physics IA PHYS 141 (4) * [Add'l Area B]			General Physics II PHYS 132 (4) (PHYS 131 or HNRS 131 or PHYS 141)	Select one: Programming for Engin. Stud. CSC 231 (2) (MATH 142; PHYS 121, 131, or 141) OR C & Unix CSC 234 (3) (MATH 142)			Intermediate Dynamics ME 326 (4) (ME 212; CPE/CSC 101 or CSC 231 or 234; MATH 244f)	Select One: Implementation of Mech Controls ME 418 (4) (ME 322) OR Advanced Control Systems ME 419 (4) (ME 322, ME 236)				
Expository Writing ENGL 133 or 134 (4)** [A2] Can be taken anytime during Freshman Year			Gen. Chem. For Phys Sci & Engineering I CHEM 124 (4) * [B1 & B3]	Gen. Chem. For Phys Sci & Engineering II CHEM 125 (4) (CHEM 124)			Intermediate Dynamics ME 326 (4) (ME 212; CPE/CSC 101 or CSC 231 or 234; MATH 244f)			Select One: Implementation of Mech Controls ME 418 (4) (ME 322) OR Advanced Control Systems ME 419 (4) (ME 322, ME 236)		
Oral Communication COMS 101 or 102 (4)** [A1] Can be taken anytime during Freshman Year			Gen. Chem. For Phys Sci & Engineering II CHEM 125 (4) (CHEM 124)			Intermediate Dynamics ME 326 (4) (ME 212; CPE/CSC 101 or CSC 231 or 234; MATH 244f)			Select One: Implementation of Mech Controls ME 418 (4) (ME 322) OR Advanced Control Systems ME 419 (4) (ME 322, ME 236)			
GE (4) **			Technical Writing ENGL 149 (4) [A3] (Completion of GE A2 with a C- or better, Recom: Completion of GE A1) Can be taken anytime between Winter of Freshman and Winter of Sophomore Years			GE (4) Rec: ECON 201 **			GE (4) **			
GE (4) **			Technical Writing ENGL 149 (4) [A3] (Completion of GE A2 with a C- or better, Recom: Completion of GE A1) Can be taken anytime between Winter of Freshman and Winter of Sophomore Years			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) **			
13-16	18	18	17	17	15-16	18	16	15	13-14	18	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, C1, C2, Lower-Division C Elective, Upper-Division C, D1, D2, Area D Elective, E. 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. ME 470, ME 471, ME 570 and ME 571 are variable topics courses and may or may not count as ME electives.

Please contact instructor for additional information. ME 400 and ME 500 are independent study classes and may be acceptable for technical elective credit. A course substitution form is required. Exceptions to this policy are possible through consultation with the department chair.

[†] 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, 460, and 461 (6 units) or ENGR 463, 464, and 465 (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.

Legend:

Course Title Course # (Units) (Prerequisite)	Major (55)
[GE Area]	Support (76-80)
	Concentration (25-26)
	General Ed. (40)