

FALL:
CEA Madrid, Spain
CEA Paris, France

FALL:
Swinburne, Australia
TECNUN, Spain
Lucerne, Switzerland

SPRING:
Munich, Germany

Updated 6/14/2017

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR		
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring
Introduction to Materials Engineering Design I MATE 110 (1)	Introduction to Materials Engineering Design II MATE 120 (1) (MATE 110)	Introduction to Materials Engineering Design III MATE 130 (1) (MATE 120)	Materials, Ethics, and Society MATE 232 (4) (MATE 210)	Materials Laboratory III MATE 235 (1) (MATE 225)	Metallurgical Materials Systems MATE 360 (4) (MATE 232 & 235)	Electronic Materials Systems MATE 340 (4) (MATE 210, PHYS 133)	Materials Selection Life Cycle MATE 222 (4) (MATE 210)	Noncrystalline Material Systems MATE 310 (4) (MATE 210, 340, & STAT 312. Concur: MATE 350)	Senior Project I MATE 482 (1) ⁶ (IME 144; Sr. Standing)	Senior Project II MATE 483 (2) ⁶ (MATE 482)	Senior Project III MATE 484 (2) ⁶ (MATE 483)
Introduction to Design & Manufacturing IME 144 (4) (Recom: IME 140 or ME 129)			Materials Laboratory II MATE 225 (1) (MATE 215, Concur: MATE 232)	Thermodynamics & Physical Chemistry MATE 380 (4) (CHEM 125, PHYS 133, MATH 143, MATE 210 & 215)		Kinetics of Materials & Process Design MATE 370 (4) (MATE 360 & 380)	Structural Materials Systems MATE 350 (4) (MATE 360 Coreq; CE 204. Concur: MATE 310)	Composite Materials Systems MATE 330 (4) (MATE 350)	Technical Elective (4) ^{1,2,5}	Technical Elective (4) ^{1,2,5}	Technical Elective (4) ^{1,2,5}
Calculus I MATH 141 (4) ⁴ * [B1]	Calculus II MATH 142 (4) ⁴ (MATH 141 w/min C-) [B1]	Materials Laboratory I MATE 215 (1) (Prereq or concur: MATE 210)	Calculus IV MATH 241 (4) (MATH 143)	Linear Analysis I MATH 244 (4) (MATH 143)	Programming for Engineering Students CSC 231 (2) (MATH 142; PHYS 121, 131, or 141)	Electric Circuit Theory & Lab EE 201 (3) & EE 251 (1) (MATH 244, PHYS 133)	Eng Economics IME 314 (3) ³ (MATH 241) OR Eng Test Design... IME 326 (4) (STAT 321 w/min C-)	Mechanics of Materials I CE 204 (3) (ME 211)	Technical Elective (4) ^{1,2,5}	Approved Elective/ Technical Breadth Elective (4) ^{1,2,3,5}	Approved Elective/ Technical Breadth Elective (4) ^{1,2,3,5}
General Chem for Physical Science & Engineering I CHEM 124 (4) ⁴ * [B3/B4]	General Chem for Physical Science & Engineering II CHEM 125 (4) (CHEM 124)	Calculus III MATH 143 (4) ⁴ (MATH 142 w/min C-) [Add'l Area B]	General Physics III PHYS 133 (4) (PHYS 131, 141, or HRRS 131; MATH 142, Rec: MATH 241)	General Physics II PHYS 132 (4) (PHYS 131, HRRS 131, or PHYS 141)	Statistical Methods for Engineers STAT 312 (4) ⁴ (MATH 142) [B6]		Heat Transfer ME 310 (4) (CPE/CSC 101, 231, or 234; MATH 141, 142, 143, 241, 244, 245, 246 & 380, or ME 236, 302, & 341)	Transport Phenomena I, II, & III MATE 325 (1), 326 (1), & 327 (1) ³ (MATE 325 prereq: PHYS 132 & MATH 141; MATE 326 prereq: MATH 141 & ME 211; MATE 327 prereq: CHEM 124 & PHYS 133)			
	GE (4) **	General Physics IA PHYS 141 (4) ⁴ * [Add'l Area B]		Engineering Statics ME 211 (3) (PHYS 131 or 141. Prereq or concur: MATH 241.)	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **
Expository Writing ENGL 133 or 134 (4)** [A1] Can be taken anytime during Freshman Year											
Oral Communication COMS 101 or 102 (4)** [A2] Can be taken anytime during Freshman Year											
	Technical Writing for Engineers ENGL 149 (4) ⁴ [A3] (Completion of GE A1 with a C- or better. Recommended: Completion of GE A2). Can be taken anytime between Winter of Freshman and Winter of Sophomore Years										
17	17	17	13	16	14	17	16-17	16	13	14	14
											TOTAL: 184-186

SUMMER:
TECNUN, Spain

SUMMER:
TECNUN, Spain
Munich, Germany

FALL 2nd Yr: CEA Madrid, Spain: PHYS 133, EE 201/251, CSC 231, MATE 210/215, MATH 244, ME 211, ME 212; GE C1 or C2

CEA Paris, France: MATH 241, ME 211, GE C1 or C2, C4

SUMMER 2nd Yr: TECNUN, Spain: GE C1 or C2 and Tech Electives (2 units)

FALL 3rd Yr: Lucerne, Switzerland: MATE 130, MATE 232, Tech electives

Swinburne, Australia: EE 201/251, MATE 210/215, ME 341, IME 314, Tech electives

TECNUN, Spain: CE 204, EE 201/251, IME 314, Tech Electives

SPRING 3rd Yr: Munich, Germany: Tech electives

SUMMER 3rd Yr: TECNUN, Spain: GE C1 or C2 and Tech Electives (2 units)

Munich, Germany: GE C1 or C2 and Tech Electives (6 Units)