

FALL:  
CEA Madrid, Spain  
CEA Paris, France

FALL:  
Swinburne, Australia  
TECNUN, Spain  
Lucerne, Switzerland  
CEA Madrid, Spain

SPRING:  
Munich, Germany

FALL:  
Lucerne, Switzerland  
KTH, Sweden  
TECNUN, Spain

Updated 7/5/17

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR		
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring
Intro. to Industrial & Manufacturing Eng IME 101 (1)	Intro. To Design & Manufacturing IME 144 (4) <small>(Recom: IME 140, ME 129)</small>	Manufacturing Processes: Materials Joining IME 142 (2)		Process Improvement Fundamentals IME 223 (4) <small>(MATH 141, Recom: IME 101)</small>		Fundamentals of Manufacturing Engineering IME 330 (4) <small>(IME 141 or ITP 341; IME 142; CE 204; MATE 210; 215; IME 144 or 143 &amp; ME 251)</small>	Computer-Aided Manufacturing I IME 335 (4) <small>(MATH 244; IME 144 or 143 &amp; ME 251; &amp; CSC 101, 231, 232, or 234)</small>	Manufacturing Process & Tool Engineering IME 450 (4) <small>(Math 244, IME 330, Recom: IME 335)</small>	Approved Technical Elective (4) ***	Product-Process Design IME 418 (4) <small>(Sr. standing, Recom: IME 450)</small>	Approved Technical Elective (3) ***
Graphics Communication & Modeling IME 140 (2)	General Chemistry for Physical Science & Engineering I CHEM 124 (4)* [B3/B4]	Gen. Chem...II CHEM 125 (4) <small>(CHEM 124)</small>	Engineering Statics ME 211 (3) <small>(PHYS 131 or 141, MATH 241)</small>	Engineering Dynamics ME 212 (3) <small>(MATH 241; ME 211 or ARCE 211)</small>	Probability and Statistics for Engineers and Scientists STAT 321 (4) <small>(MATH 142)</small>	Test Design & Analysis in Manufacturing Engineering IME 327 (4) <small>(STAT 321 w/min C- or Instr. consent; or ME 236)</small>	Manufacturing Systems Integration IME 342 (4) <small>(MATH 241 &amp; IME 223, Recom: STAT 321)</small>	Manufacturing Automation IME 356 (4) <small>(EE 321)</small>	Approved Technical Elective (4) ***	Quality Engineering IME 430 (4) <small>(IME 326, 327, 503, STAT 302 or 312)</small>	Approved Technical Elective (3) ***
Manufacturing Processes: Net Shape IME 141 (1)	General Physics IA PHYS 141 (4) <small>(MATH 141 w/min C-, MATH 142 or 1821) [Add'l Area B]</small>	General Physics II PHYS 132 (4) <small>(PHYS 131, HNRS 131, or PHYS 141)</small>	General Physics III PHYS 133 (4) <small>(PHYS 131, HNRS 131, or PHYS 141; MATH 142, Recom: MATH 241)</small>		Take concurrently: BIO 213 (2) & BMED 213 (2) <small>(MATH 142, Recom: CHEM 124) [B2]</small>	Electric Circuit Theory EE 201 (3) <small>(MATH 244 &amp; PHYS 133)</small>	Thermodynamics I ME 302 (3) <small>(PHYS 132; ME 212 or CHEM 128)</small>	Engineering Economics IME 314 (3) <small>(MATH 241)</small>	Supply Chain & Logistics Management IME 417 (4) <small>(IME 342 or 410)</small>	Senior Design Project I IME 481 (2) <sup>1</sup> <small>(Sr. Standing &amp; Instr. consent)</small>	Senior Design Project II IME 482 (3) <sup>1</sup> <small>(IME 481)</small>
Basic Electronics Manufacturing IME 156 (2)	Calculus II MATH 142 (4) <small>(MATH 141 w/min C-) [B1]</small>	Calculus III MATH 143 (4) <small>(MATH 142 w/min C-) [Add'l Area B]</small>	Calculus IV MATH 241 (4) <small>(MATH 143)</small>	Linear Analysis I MATH 244 (4) <small>(MATH 143)</small>	Materials Engineering MATE 210 (3) <small>(CHEM 111, 124, or 127, Recom: MATE 2151)</small>	Electric Circuits Laboratory EE 251 (1) <small>(Concurrent: EE 201)</small>	Electronics EE 321 (3) <small>(EE 201)</small>				
	Expository Writing ENGL 133/134 (4)** [A1]			GE (4) **	Materials Laboratory I MATE 215 (1) <small>(MATE 2101)</small>	GE (4) **		GE (4) **		GE (4) **	GE (4) **
	Oral Communication COMS 101/102 (4)** [A2]			GE (4) **				GE (4) **	GE (4) **	GE (4) **	GE (4) **
						Graduation Writing Requirement <small>(Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year)</small>					
14	20	17	15	19	15	16	14	15	16	14	17
											TOTAL: 192

FALL-SPRING:  
CSU IP Queretaro, Mexico

SUMMER:  
TECNUN, Spain

SUMMER:  
TECNUN, Spain  
Munich, Germany

FALL 2<sup>nd</sup> Yr: CEA Madrid, Spain: PHYS 133, EE 201/251, MATE 210/215, MATH 244, ME 211, ME 212, ME 302; GE C1 or C2

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

FALL-SPRING 2<sup>nd</sup> Yr: CSU IP Queretaro, Mexico: CE 204, MATH 241, MATH 244, ME 211, ME 212, ME 341; GE C1 or C2

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

FALL 3<sup>rd</sup> Yr: CEA Madrid, Spain: EE 201/251, MATE 210/215, ME 212, ME 302; GE C1 or C2

Lucerne, Switzerland: CSC 232, EE 201, EE 251, EE 321, Tech Electives

TECNUN, Spain: CE 204, EE 201/251, EE 321, IME 314, IME 417, Tech Electives

Swinburne, Australia: MATE 210, BIO 213, EE 201, Tech Electives

SPRING 3<sup>rd</sup> Yr: Munich, Germany: EE 321, IME 417, MATE 210, ME 302, Tech Electives

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

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

FALL 4<sup>th</sup> Yr: KTH, Sweden: IME 330, IME 417, IME 450, Tech Electives

Lucerne, Switzerland: CSC 232, EE 201, EE 251, EE 321, Tech Electives

TECNUN, Spain: CE 204, EE 201/251, EE 321, IME 314, IME 417, Tech Electives