CAL POLY
SAN LUIS OBISPO

B.S. in AEROSPACE ENGINEERING
Suggested 4-Year Academic Flowchart

2017-2019 Catalog

FALL:
CEA Madrid, Spain
CEA Paris, France

SUMMER:
TECNUN, Spain
Cal Poly Affiliated Program

SUMMER:
TECNUN, Spain
Munich, Germany
Cal Poly Affiliated Program

Updated 6/14/2017

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR		
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring
Aerospace Fundamentals **AERO 121 (2)**	General Physics **PHYS 131 (4)* or 141 (4)*** [Add'l Area B]	*General Physics II* **PHYS 132 (4)** (PHYS 131, HNRS 131, or PHYS 141)	*Introduction to Aerospace Design* **AERO 215 (2)** (AERO 121, MATH 143, IME 144. Recom: CSC 111)	*Mechanics of Materials I* **CE 204 (3)** (ME 211)	*Mechanics of Materials II* **CE 207 (2)** (CE 204)	*Aerospace Fluid Mechanics* **AERO 302 (4)** (ME 212; AERO 300†. Rec: AERO 215; 299 or 301)	*Aerospace Structural Analysis I* **AERO 331 (4)** (AERO 300, CE 207, ME 212)	*Aerospace Structural Analysis II* **AERO 431 (4)** (AERO 331)	*Experimental Stress Analysis* **AERO 433 (1)** (AERO 331, 431)	*Aerospace Systems Senior Laboratory* **AERO 465 (1)** (AERO 303, 320, 431, Sr standing)	
Calculus I **MATH 141 (4)** * [B1]	*Calculus II* **MATH 142 (4)** (MATH 141 w/min C-) [B1]	*Calculus III* **MATH 143 (4)** (MATH 142 w/min C-) [Add'l Area B]	*Calculus IV* **MATH 241 (4)** (MATH 143)	*Aerospace Systems Engineering & Integration* **AERO 220 (1)** (AERO 121)	*Aerospace Engineering Analysis* **AERO 300 (5)** (AERO 215, MATH 244, ME 211, PHYS 133)	*Fundamentals of Dynamics and Control* **AERO 320 (4)** (AERO 300, ME 212)	*Aerospace Gas Dynamics and Heat Transfer* **AERO 303 (4)** (AERO 299 or 301; 302)	**Concentration (2)**	*Aerospace Engineering Professional Preparation* **AERO 460 (1)** (Sr standing)	**Concentration (4)**	**Concentration (3)**
Introduction to Design & Manufacturing **IME 144 (4)** (Recom: IME 140 or ME 129)			*General Physics III* **PHYS 133 (4)** (PHYS 131 or 141, or HNRS 131; MATH 142. Recom: MATH 241)	*Materials Engineering* **MATE 210 (3)** (CHEM 111, 124, or 127. Recom: concur MATE 215)	*Aerospace Thermodynamics* **AERO 299 (4)** (ME 212; AERO 300†; Recom: AERO 215)	*Experimental Sensors, Actuators & Control* **AERO 321 (1)** (AERO 320†)	**Concentration (4)**	**Concentration (4)**	**Concentration (5)**	**Concentration (3)**	**Concentration (4)**
	General Chemistry for Physical Science & Engineering I **CHEM 124 (4)** * [B3/B4]		*Engineering Statics* **ME 211 (3)** (MATH 241†, PHYS 131 or 141)	*Engineering Dynamics* **ME 212 (3)** (MATH 241; ME 211 or ARCE 211)	*Electric Circuit Theory & Lab* **EE 201 (3)** (MATH 244, PHYS 133) AND **EE 251 (1)** (EE 201)	*Statistical Methods for Engineers* **STAT 312 (4)** (MATH 142) [B6]	**Concentration (4)**	**Concentration (4)**	**Concentration (4)**		**GE (4)** **
Expository Writing **ENGL 133/134 (4)**** [A1]											
Oral Communication **COMS 101/102 (4)**** [A2]			Take concurrently: **BIO 213 (2)*** AND **BMED/BRAE 213 (2)*** [B2]	*Linear Analysis I* **MATH 244 (4)** (MATH 143)		**Concentration (4)**	**GE (4)** **	**GE (4)** **	**GE (4)** **	**GE (4)** **	**GE (4)** **
GE (4) **		**GE (4)** **									
Technical Writing for Engineers **ENGL 149 (4)** [A3] (Completion of GE A1 w/min C- (Recom: completion of GE A2) 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)					
18	16	16	17	14	15	17	16	18	15	12	15
										TOTAL:	189

SUMMER:
Cal Poly Affiliated Program

SUMMER 1st Yr: Cal Poly Affiliated Program
FALL 2nd Yr: CEA Madrid Engineering: PHYS 133, MATH 244, ME 211, ME 212, MATE 210; 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 CE Tech Electives (2 units)
Cal Poly Affiliated Program
SUMMER 3rd Yr: TECNUN, Spain: GE C1 or C2 and CE Tech Electives (2 units)
Munich, Germany: GE C1 or C2 and Tech Electives (6 units)
Cal Poly Affiliated Program

*Please visit the International Center to learn about Cal Poly affiliated programs and the types of courses that can be taken abroad.
Because AERO course are offered once a year, summer programs tend to work the best to stay on track. If you are extending your graduation, meet with an IEP advisor to discuss your options.