CAL POLY SAN LUIS OBISPO

B.S. in AEROSPACE ENGINEERING (Aeronautics Concentration)

Suggested 4-Year Academic Flowchart

Updated 2/18/20 **FRESHMAN SOPHOMORE JUNIOR SENIOR** Fall **Spring** Fall Winter Spring Spring Fall Winter Spring Fall Winter Winter Aerospace Gas Aerospace Experimental Introduction to Mechanics of Mechanics of Aerospace Fluid Aerospace Aerospace Systems General Physics IA General Physics II Dynamics and Structural Fundamentals Aerospace Design Materials I Materials II Mechanics Stress Analysis Senior Laboratory Heat Transfer Analysis II **AERO 121 (2)** PHYS 141 (4) $CE 204 (3)^2$ $CE 207 (2)^2$ **AERO 215 (2) AERO 302 (4) AERO 303 (4) AERO 431 (4)** AERO 433 (1) PHYS 132 (4) **AERO 465 (1)** (AERO 121; MATH 143; (ME 212; AERO 300+ (AERO 299 or 301; PHYS 131, HNRS 131 AERO 303; 320; 431; IME 144. Recom: CSC Recom: AERO 215; 299 (AERO 331) (AERO 331; 431) (ME 211) (CE 204) or PHYS 141) Sr Standing) or 301) 111) [Area B Elective] Aerospace Fundamentals of Fundamentals of Aerospace Systems Aerospace Engineering Aerospace Calculus IV Aircraft Design III Calculus II Calculus I Calculus III Engineering & Dynamics and Structural Analysis Systems Aircraft Design II Professional Thermodynamics Integration Control Engineering Preparation **AERO 445 (3) AERO 320 (4)** MATH 142 (4) **AERO 220 (1) AERO 331 (4) AERO 350 (2) AERO 444 (3)** MATH 141 (4) MATH 143 (4) MATH 241 (4) **AERO 299 (4) AERO 460 (1)** (MATH 142 w/min C-) (MATH 141 w/min C-) (ME 212; AERO 300+ AERO 300; ME 212. AERO 300; CE 207 or (AERO 443; Sr (AERO 444; Sr (MATH 143) (AERO 220) (AERO 121) (Sr Standing) Recom: AERO 215) AERO 321†) 208; ME 212) Standing) Standing) [B4] ΓB41 [Area B Elective] General Chemistry Experimental Aerospace Aircraft Dynamics Materials Experimental **Aeronautics Aeronautics** for Physical Science General Physics III Engineering Sensors, Actuators Aircraft Design I & Control Engineering Aerodynamics **Approved** Approved & Engineering I & Control Analysis **Electives Electives CHEM 124 (4)** PHYS 133 (4) **AERO 420 (4) AERO 443 (3)** $(4)^{1}$ $(4)^1$ **MATE 210 (3) AERO 300 (5) AERO 321 (1) AERO 307 (2)** Sr Standing; IME 144, (PHYS 131, 141, or HNRS (CHEM 111, 124, or AERO 215; MATH 244; (AERO 302; 306; AERO 215, 306, 405, 131; MATH 142. Recom: 127. Recom: concur (AERO 320†) (AERO 306; 320) ME 211; PHYS 133) 420, 431. Concur: 401 ENGL 149) MATH 241) MATE 215) [B1 & B3] Recom: 350) Introduction to Design & Manufacturing Electric Circuit Supersonic & Statistical Methods IME 144 (4) Propulsion Engineering Theory & Lab Engineering Statics Hypersonic (Recom: IME 140 or ME 129) Dynamics for Engineers Systems Aerodynamics EE 201 (3) Expository Writing ME 211 (3) ME 212 (3) (MATH 244; PHYS 133 STAT 312 (4) **AERO 405 (4) AERO 401 (5)** ENGL 133/134 (4)** (MATH 142) (MATH 241+; PHYS 131 MATH 241; ME 211 or (AERO 303; AERO EE 251 (1) (AERO 303; CHEM 124) [A2] **GE (4) GE (4)** or 141) ARCE 211) 306, 353, or 355) Upper-Division B] Oral Communication COMS 101/102 (4)** Take concurrently: [A1] Aerodynamics & **GE (4) GE (4) GE (4) GE (4) Aeronautics** Linear Analysis I Flight Performance BIO 213 (2)* Approved **Electives** BMED/BRAE 213 **GE (4) GE (4)** MATH 244 (4) **AERO 306 (4)** (4)¹ $(2)^*$ AERO 215; 299 or 301 (MATH 143) Concur: AERO 302) [B2] Technical Writing for Engineers ENGL 149 (4) [A3] Graduation Writing Requirement GWR³ (Completion of GE A2 w/min C-, Recom: completion of GE A1) (Students can attempt to fulfill the requirement after 90 earned units; Can be taken anytime between Winter of Freshman and Winter of Sophomore Years students should complete the requirement before senior year) 16 17 14 15 16 14 16 18 16 17 16 15 TOTAL: 190

Notes:

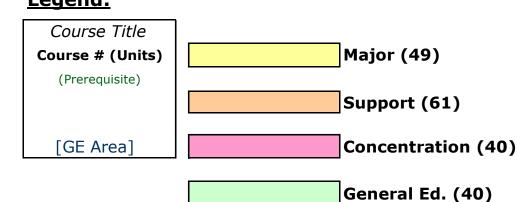
MOST GENERAL EDUCATION COURSES CAN BE TAKEN IN ANY ORDER AS LONG AS PREREQUISITES ARE MET

* Refer to current catalog for prerequisites.

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, D3, Upper-Division D, or E.

Legend:



^{**}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).

[†] Course can be taken previously or concurrently.

¹ Consultation with advisor is recommended prior to selecting approved electives; bear in mind your selections may impact pursuit of postbaccalaureate studies and/or goals.

²CE 204 & 207 can be replaced by taking 208