

**B.S. in AEROSPACE ENGINEERING  
(Aeronautics Concentration)**  
Suggested 3-Year Academic Flowchart for Transfer Students

Updated 5/9/2020

Please note: This flowchart is one example of how students can graduate in 3 years. We encourage students to use this as a tool in creating their own unique quarter by quarter graduation plan.

	YEAR 1			YEAR 2			YEAR 3			
	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	
<p><b>This Transfer Student Flowchart assumes equivalents for the courses below have been transferred to Cal Poly. Anything not transferred in needs to be added to this flowchart, which may result in an additional quarter/s. Check your DPR to verify credit:</b></p> <ul style="list-style-type: none"> <li>▫ MATH 141</li> <li>▫ MATH 142</li> <li>▫ MATH 143</li> <li>▫ MATH 241</li> <li>▫ MATH 244</li> <li>▫ PHYS 141</li> <li>▫ PHYS 132</li> <li>▫ PHYS 133</li> <li>▫ CHEM 124</li> <li>▫ EE 201</li> <li>▫ EE 251</li> <li>▫ MATE 210</li> <li>▫ ME 211</li> <li>▫ ME 212</li> <li>▫ ENGL 149 (A3)</li> <li>▫ BIO/BMED 213 (B2)</li> </ul>	<p><i>Aerospace Fundamentals</i> <b>AERO 121 (2)</b></p>	<p><i>Introduction to Aerospace Design</i> <b>AERO 215 (2)</b> <small>(AERO 121, MATH 143, IME 144. Recom: CSC 111)</small></p>	<p><i>Aerospace Thermodynamics</i> <b>AERO 299 (4)</b> <small>(ME 212; AERO 300+; Recom: AERO 215)</small></p>	<p><i>Aerospace Fluid Mechanics</i> <b>AERO 302 (4)</b> <small>(ME 212; AERO 300+. Rec: AERO 215; 299 or 301)</small></p>	<p><i>Aerospace Structural Analysis I</i> <b>AERO 331 (4)</b> <small>(AERO 300; CE 207 or 208; ME 212)</small></p>	<p><i>Aerospace Structural Analysis II</i> <b>AERO 431 (4)</b> <small>(AERO 331)</small></p>	<p><i>Experimental Stress Analysis</i> <b>AERO 433 (1)</b> <small>(AERO 331, 431)</small></p>	<p><i>Aerospace Systems Senior Laboratory</i> <b>AERO 465 (1)</b> <small>(AERO 303, 320, 431, Sr standing)</small></p>	<p><b>Aeronautics Approved Electives (4)*<sup>1</sup></b></p>	
	<p><i>Mechanics of Materials I</i> <b>CE 204 (3)<sup>2</sup></b> <small>(ME 211)</small></p>	<p><i>Aerospace Systems Engineering &amp; Integration</i> <b>AERO 220 (1)</b> <small>(AERO 121)</small></p>	<p><i>Aerospace Engineering Analysis</i> <b>AERO 300 (5)</b> <small>(AERO 215, MATH 244, ME 211, PHYS 133)</small></p>	<p><i>Fundamentals of Dynamics and Control</i> <b>AERO 320 (4)</b> <small>(AERO 300; ME 212. AERO 321+)</small></p>	<p><i>Aerospace Gas Dynamics and Heat Transfer</i> <b>AERO 303 (4)</b> <small>(AERO 299 or 301; 302)</small></p>	<p><i>Fundamentals of Systems Engineering</i> <b>AERO 350 (2)</b> <small>(AERO 220)</small></p>	<p><i>Aerospace Engineering Professional Preparation</i> <b>AERO 460 (1)</b> <small>(Sr standing)</small></p>	<p><b>Aeronautics Approved Electives (4)*<sup>1</sup></b></p>	<p><b>Aeronautics Approved Electives (4)*<sup>1</sup></b></p>	
		<p><i>Mechanics of Materials II</i> <b>CE 207 (2)<sup>2</sup></b> <small>(CE 204)</small></p>		<p><i>Experimental Sensors, Actuators &amp; Control</i> <b>AERO 321 (1)</b> <small>(AERO 320+)</small></p>	<p><i>Aircraft Dynamics &amp; Control</i> <b>AERO 420 (4)</b> <small>(AERO 306 and 320)</small></p>	<p><i>Experimental Aerodynamics</i> <b>AERO 307 (2)</b> <small>(AERO 302, 306, ENGL 149)</small></p>	<p><i>Aircraft Design I</i> <b>AERO 443 (3)</b> <small>(Sr Standing; IME 144, AERO 215, 306, 405, 420, 431. Concur: 401. Recom: 350)</small></p>	<p><i>Aircraft Design II</i> <b>AERO 444 (3)</b> <small>(AERO 443 &amp; Sr. Standing)</small></p>	<p><i>Aircraft Design III</i> <b>AERO 445 (3)</b> <small>(AERO 444 &amp; Sr. Standing)</small></p>	
		<p><i>Introduction to Design &amp; Manufacturing</i> <b>IME 144 (4)</b> <small>(Recom: IME 140 or ME 129)</small></p>			<p><i>Aerodynamics &amp; Flight Performance</i> <b>AERO 306 (4)</b> <small>(AERO 215; AERO 299 or 301. Concur: AERO 302)</small></p>	<p><i>Supersonic &amp; Hypersonic Aerodynamics</i> <b>AERO 405 (4)</b> <small>(AERO 303; AERO 306 or 355)</small></p>	<p><i>Propulsion Systems</i> <b>AERO 401 (5)</b> <small>(AERO 303, CHEM 124)</small></p>	<p>Any remaining support course or GE not transferred</p>	<p>Any remaining support course or GE not transferred</p>	
		<p><i>Statistical Methods for Engineers</i> <b>STAT 312 (4)</b> <small>(MATH 142) [B6]</small></p>	<p><b>Upper-Division GE C (4)**</b> <small>(combine with USCP requirement if still needed)</small></p>							
		<p>Any remaining support course or GE not transferred</p>	<p>Any remaining support course or GE not transferred</p>		<p><b>Graduation Writing Requirement GWR*</b> <small>(Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year)</small></p>			<p>Any remaining support course or GE not transferred</p>		
		13+	13+	13	13	12	12	10+	8+	11+

**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, D2, D Elective and E.

†Course can be taken previously or concurrently.

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

<sup>2</sup>CE 204 & 207 can be replaced by taking 208

**Legend:**

<i>Course Title</i> <b>Course # (Units)</b> <small>(Prerequisite)</small>		<b>Major</b>
		<b>Support</b>
		<b>Concentration</b>
		<b>General Ed.</b>