

**B.S. in MECHANICAL ENGINEERING
(Mechatronics Concentration)**
Suggested 2-Year Academic Flowchart for Transfer Students

For a 3 year flowchart option see: <https://eadvise.calpoly.edu/transfer-students/>

	YEAR 1			YEAR 2			
	Fall	Winter	Spring	Fall	Winter	Spring	
<p>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:</p> <p>MATH 141, 142, 143, 241 & 244; PHYS 141, 132 & 133; CHEM 124 & 125; MATE 210 & 215; EE 201 & 251; CSC 231; ME 211, 212 & 228; CE 204 & 207; ENGL 149; BIO/BMED 213; GE AREAS A1, A2, C1, C2, C3, D1, D2, D3, & D4</p>	<p><i>Measurement & Engineering Data Analysis</i></p> <p>ME 236 (3)</p> <p>(Recom: CHEM 125, ENGL 149, & PHYS 132)</p>	<p><i>Design for Strength & Stiffness</i></p> <p>ME 328 (4)</p> <p>(BMED 212 or ME 234; CE 207; CSC 231 or 234; MATE 210; ME 212 & 251; IME 141† or ITP 341†)</p>	<p><i>Mechanical Systems Design</i></p> <p>ME 329 (4)</p> <p>(ME 328)</p>	<p><i>Heat Transfer</i></p> <p>ME 350 (4)</p> <p>(CPE/CSC 101 or CSC 231 or 234; MATE 360 & 380, or ME 236 & 302 & 341)</p>	<p><i>Mechanical Control Systems</i></p> <p>ME 422 (4)</p> <p>(ME 318)</p>	<p><i>Thermal System Design</i></p> <p>ME 420 (4)</p> <p>(ME 303; ME 347; & ME 343 or 350)</p>	
	<p><i>Intro to Mechanical Engineering for Transfers</i></p> <p>ME 229 (2)</p>	<p><i>Thermodynamics I</i></p> <p>ME 302 (3)</p> <p>(ME 212 & PHYS 132)</p>	<p><i>Thermodynamics II</i></p> <p>ME 303 (3)</p> <p>(ME 302)</p>	<p><i>Fluid Mechanics II</i></p> <p>ME 347 (4)</p> <p>(ME 236, ME 341, ME 302 or Instr. consent)</p>	<p><i>Mechatronics</i></p> <p>ME 405 (4)</p> <p>(ME 305 & ME 329†; or CPE/EE 329)</p>	<p><i>Senior Design Project III</i></p> <p>ME 430 (2)¹</p> <p>(ME 429)</p>	
	<p><i>Philosophy of Design</i></p> <p>ME 234 (3)</p> <p>(Soph standing)</p>	<p><i>Fluid Mechanics I</i></p> <p>ME 341 (3)</p> <p>(MATH 242 or 244; ME 212)</p>	<p><i>Mechanical Vibrations</i></p> <p>ME 318 (4)</p> <p>(ME 326, MATH 344. Recom: EE 201)</p>	<p><i>Introduction to Mechatronics</i></p> <p>ME 305 (4)</p> <p>(EE 321 & EE 361)</p>	<p><i>Senior Design Project II</i></p> <p>ME 429 (2)¹</p> <p>(ME 428)</p>	<p><i>Senior Design Project III</i></p> <p>ME 430 (2)¹</p> <p>(ME 429)</p>	
	<p><i>Intro to Detailed Design w/ Solid Modeling</i></p> <p>ME 251 (2)</p> <p>(ME 228. Recom: IME 143)</p>	<p><i>Intermediate Dynamics</i></p> <p>ME 326 (4)</p> <p>(ME 212; CSC 231 or 234, MATH 244†)</p>	<p><i>Electronics and Electronics Lab</i></p> <p>EE 321 (3) & EE 361 (1)</p> <p>(EE 201, EE 251)</p>	<p><i>Senior Design Project I</i></p> <p>ME 428 (2)¹</p> <p>(ME 329. Coreq: ME 318 & 350)</p>	<p>Concentration (4)</p>	<p>Select one: IME 356 (4)* or IME 416 (3)* or ME 506 (4)* or ME 507 (4)*</p>	
	<p><i>Linear Analysis II</i></p> <p>MATH 344 (4)</p> <p>(MATH 206 & 242; or 241 & 244)</p> <p>[B6]</p>	<p><i>Manuf. Processes Elective</i></p> <p>IME 141 (1) OR ITP 341 (4)*</p>		<p><i>Manufacturing Processes: Material Removing</i></p> <p>IME 143 (2)</p>			
	<p><i>Manufacturing Processes: Material Joining</i></p> <p>IME 142 (2)</p>						<p>GE C4 (4)**</p> <p>(combine with USCP requirement if still needed)</p>
		<p align="center">Graduation Writing Requirement GWR*</p> <p align="center">(Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year)</p>					
	16	15	15	16	14	16	

Notes:

- * Refer to current catalog for prerequisites.
- ^ Transfer students take ME 228 & 229 in lieu of ME 128, 129, 130 and 163
- 1 ENGR 459, ENGR 460, and ENGR 461 (6 units) may substitute for ME 428, ME 429, and ME 430 (6 units).
- **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: C3, C4, D1, D3, or D4.
- *** Refer to current catalog for course selection. ME 470, ME 471, ME 570 and ME 571 are variable topics courses and may or may not count as ME electives. Please contact instructor for additional information. ME 400 and ME 500 are independent study classes and may be acceptable for technical elective credit. A course substitution form is required. Exceptions to this policy are possible through consultation with the department chair.
- † Course can be taken previously or concurrently.

Legend:

Course Title	Major
Course # (Units)	Support
(Prerequisite)	Concentration
[GE Area]	General Ed.