

# Mechatronics Engineering 2-Year Transfer Pathway 2025-2026

This four-semester transfer pathway is for students who have completed all prerequisite courses including:

Engineering: Introduction to Engineering, Intro to Machining, Statics, Materials Sci Engineering, Engineering Graphics, Strength of Materials, Circuit Analysis, (*NOTE: Strength of Materials can be completed after transfer without delay in graduation*)

Mathematics: Calculus 1, Calculus 2, Multivariate Calculus, Differential Equations and Linear Algebra

Physical Science: General Chemistry 1 with lab, Physics for Engineers 1 and 2

Computer Science: Programming 1 (C++ or Java), and a Data Structures course

Fall Junior Courses (15)		Course or GE Title	Units	GE/Major
ENGR 330 (prereq = ENGR 130 Statics)		Dynamics	3	Major
ENGR 340 (prereq = ENGR 260&260L Circuit Analysis)		Signals	3	Major
ENGR 370 (prereq = ENGR 260&260L Circuit Analysis)		Digital Logics	3	Major
Any GE area not completed previously		Any GE or Eng prereq still needed	3	As needed
Language other than English		Any language other than English	3	GE 3B
Spring Junior Courses (14)		Course or GE Title	Units	GE/Major
ENGR 301 (GE areas 1A, 1B, 1C and 2)		Technical Writing in Engineering	3	GWAR
ENGR 310 (prereq ENGR 260/L & ENGR 370 and preq/coreq ENGR 330)		Mechatronics	4	Major
ENGR 240 Strength of Materials (prereq ENGR 130)		Strength of materials if not done	3	Major
ENGR 375 (prereq ENGR 330 and 260/L or ENGR 340 and MATH 265 and CST 231)		Feedback Control Systems	3	Major
Fall Senior courses (18)		Course or GE Title	Units	GE/major
ENGR 380 (prereq ENGR 370)		Embedded Systems	3	Major
ENGR 480 (preq ENGR 310 & pre/coreq ENGR 320)		Mechatronics Design I	3	Major
ENGR 335 or 350 or ENGR 360 or 397 (check prereq)		Numerical methods, Thermodynamics or Fluid Dynamics or Independent Study	3	Major
ENGR Elective		Engineering Elective	3	Major
Upper-division service learning		Any upper-division service learning	3	UDSL
ENGR 320 (prereq ENGR 240 Strength of Materials)		Machine Design with upper-div GE	3	UD 5, major
Spring Senior Courses (16)		Course or GE Title	Units	GE/Major
ENGR 481 (prereq ENGR 480)		Mechatronics Design II	3	Capstone
ENGR 394 (prereq ENGR 301 and 310)		Engineering Internship	1	Major
UDC		Any UDC	3	UD GE area 3
Any UDD course, recommend HCOM 353 or HCOM 369 if US History not complete		Any upper-division GE area D course with US history if not done	3	UD area 4 (w/ US History)
Any U2&3 CSU US/CA state U local govt requirement		Civics- CSU American Institutions	3	US23
Elective		Elective if needed to reach 120 units	3	elective
		<b>Total Mechatronics Transfer</b>	<b>60</b>	