Time Priority	Minimum Semesters to Graduation	Course	Description	Units	PRE-REQUISITES See the SJSU Catalog for most accurate and updated details.	Has prerequisite or corequisite relevance for
1	8	MATH 030	Calculus I	3	See details at https://catalog.sjsu.edu/preview_course_nopop.php?catoid=10&coid=41218	Math 31, Phys 50
2	7	MATH 031	Calculus II	4	MATH 30 or MATH 30X with a grade of B or better.	Math 32, Phys 51, CE 95, MatE 25
2	7	PHYS 050	Mechanics	4	See details at https://catalog.sjsu.edu/preview_course_nopop.php?catoid=10&coid=40939	Phys 51, CE 95, MatE 25
4	6	MATH 032	Calculus III	3	MATH 31 or MATH 31X with a grade of B or better.	Math 33A, ME 101, ME 111, ME 113
5	6	PHYS 051	Electricity and Magnetism	4	PHYS 50, MATH 31 or MATH 31X, both with grades of "C-" or better.	Phys 52, EE 98
6	6	ENGR 010	Introduction to Engineering	3	ENGL 1A with grades of C- or better and eligible for MATH 19	ME 20
7	5	PHYS 052	Heat and Light	4	PHYS 51 with grade of "C-" or better.	ME 113
8	5	CHEM 001A	General Chemistry	5	See details at https://catalog.sjsu.edu/preview_course_nopop.php?catoid=10&coid=40808	MatE 25
9	5	CE 095	Statics	3	MATH 31X or MATH 31, and PHYS 50.	CE 112, ME 101, ME 111
10	5	MATH 33A	Ordinary Differential Equatio	3	MATH 32 or MATH 32H or MATH 32X (with a grade of "C-" or better) or instructor consent.	EE 98, CE 112, ME 114, ME 130
11	4	MATE 025	Introduction to Materials	3	CHEM 1A, PHYS 50, and MATH 31 or MATH 31X; all with a grade of "C-" or better.	ME 154
12	4	ME 020	Design and Graphics	2	Coreq: ENGR 10.	ME 41, ME 154
12	4 or 2	ME 030	Computer Applications	3	(None)	ME 106
12	4 or 2	EE 098	Introduction to Circuit Analys	3	PHYS 51 with a C- or better. Coreq: MATH 33A or MATH 33LA.	ME 106
15	4	CE 112	Mechanics of Materials	3	CE 95 or CE 99, MATH 33A.	ME 120, ME 154
16	4	ME 101	Dynamics	3	CE 95 or CE 99, and MATH 32 or MATH 32X (each with a grade of "C-" or better).	ME 130, ME 154
16	4	ME 113	Thermodynamics	4	PHYS 52, and MATH 32 or MATH 32X (with a grade of 'C-' or better in each), Corequisite: ME 111	ME 114, ME 130
23	4	ME 111	Fluid Mechanics	3	CE 95 or CE 99, and MATH 32 or MATH 32X	ME 182, ME 113
18	3	ENGR 100W	Engineering Reports	3	ENGL 1B	ME 120, ME 195A, ENGR 195A
19	3	ME 041	Machine Shop Safety	1	ME 20, TECH 20A, CE 20 or equivalent.	ME 154
20	3	ME 154	Mechanical Engineering Desi	4	ME 20, ME 101, CE 112, MATE 25, all with a C- or better. Corequisite(s): TECH 41/ME 41	ME 157, ME 195A
20	3	ME 114	Heat Transfer	3	MATH 33A or MATH 33LA, and ME 113 (each with a grade of 'C-' or better).	ME 115, ME 182, ME 195A
22	3 or 2	ME 130	Applied Engineering Analysis	3	MATH 33A and ME 101 (each with a grade of "C-" or better). Pre/Corequisite(s): ME 113.	ME 120, 147, ME 157
24	3 or 1	ME 106	Fund. of Mechatronics Engr.	4	EE 98 and ME 30 (each with a grade of "C-" or better ).	ME 190
25	2	ME 120	Experimental Methods	2	CE 112 and ENGR 100W (with a grade of 'C-' or better in each). Corequisite: ME 130.	ME 195A
26	2	ME 195A	Senior Design Project I	3	ME 114, ME 154 ('C-' or better) and ENGR 100W ('C' or better). Corequisite: ME 120, capstone course	ME 195B, ENGR 195A
26	2	ENGR 195A	Global and Societal Issues	1	ENGR 100W with a C or better, and concurrent enrollment in ME 195A.	ENGR 195B
28	2 or 1	ME 147	Dynamic Syst. Vib. and Contr	3	ME 130 (with a grade of 'C-' or better).	ME 190
29	2	ME 190	Mechatronics System Design	3	ME 106 (with a grade of 'C-' or better). Corequisite: ME 147.	(none)
29	2	ME 157	Mechanical System Design (c	3	ME 130 (note: required officially, but not strictly enforced right now), ME 154 with 'C-' or better.	(none)
29	2	ME 182	Thermal Systems Design (cap	3	ME 114, and either ME 111 or AE 160 (with a grade of 'C-' or better in each).	(none)
32	1	ME 195B	Senior Design Project II		ME 195A with a C- or better.	Engr 195B
32	1	ENGR 195B	Global and Societal Issues	1	ENGR 195A (with a grade of "C" or better), and concurrent enrollment in ME 195B.	(none)
33	1	ME 115	Thermal Engineering Laborat	1	Pre/Corequisite(s): ME 114.	(none)
Last updated: 4/29/2025						