

Reviewed and updated May 2025

Subject	Course #	Title	Prerequisites	Course is prerequisite for MAE ____:	Quarter/s Usually Offered
MAE	3	Intro to Mechanical Design	Phys 2A	150, 156A	F, S
MAE	8	Matlab Programming for Eng. Analysis	Math 20A, Math 20B	107	F, W, S
MAE	11	Thermodynamics	Phys 2C, CHEM 6A	101B	F, W
MAE	20	Elements of Materials Science	Phys 2A, Chem 6A, Math 20C	160	F, W
MAE	30A	Statics and Intro to Dynamics	Math 20C, Phys 2A	30B, 131A, 150, 160	F, W
MAE	30B	Dynamics & Vibrations	MAE 30A	156A	S
MAE	40	Linear Circuits	Math 20D, Math 18, Phys 2B	170	F, W
MAE	101A	Intro Fluid Mechanics	Phys 2A, Math 20D, Math 20E	101B, 101C, 171A	F, W
MAE	101B	Advanced Fluid Mechanics	MAE 11, MAE 101A	101C	W, S
MAE	101C	Heat Transfer	MAE 101A, MAE 101B, MAE 105	156B	F
MAE	105	Intro to Mathematical Physics	Phys 2A, Phys 2B, Math 20D	101C, 131B	F, S
MAE	107	Computational Methods in Engineering	MAE 8, Math 18	150	F, S
MAE	131A	Solid Mechanics I	Math 20D, MAE 30A	131B, 156A, 160	F, S
MAE	131B	Fundamentals of Solid Mechanics II	MAE 131A, MAE 105	156B	W
MAE	143A	Signals and Systems	Math 20D, Math 20E, Math 18	143B	W
MAE	143B	Linear Control	MAE 143A	156B, 171A	S
MAE	150	Computational Methods/Design	MAE 3, MAE 107, MAE 30A	156A	F, W, S
MAE	156A	Fundamental Principles of Mech. Design I	MAE 3, MAE 30B, MAE 131A, MAE 150, MAE 170	156B	F, W
MAE	156B	Fundamental Principles of Mech. Design II	MAE 101C, MAE 143B, MAE 156A, MAE 131B or 160		W, S
MAE	160	Mechanical Behavior of Materials	MAE 20, MAE 30A, MAE 131A	156B	W
MAE	170	Experimental Techniques	Phys 2C & Phys 2CL (or MAE 40/140)	156A, 171A	F, S
MAE	171A	Mechanical Eng. Lab I	MAE 101A, MAE 143B, MAE 170		W

All courses must be taken for a letter grade (no P/NP) For more information, please contact a MAE undergraduate advisor: mae-ugradadm@ucsd.edu