

Department of Mechanical and Aerospace Engineering  
Planned Offering of Undergraduate Courses 2009-2014

SUB	CRS	TITLE	09F	10S	10M	10F	11S	11M	11F	12S	12M	12F	13S	13M	13F	14S	14M	14F	
MAE	100	Introduction to Mechanical and Aerospace Engineering	X	X		X	X		X	X		X	X		X	X		X	
MAE	110	Introduction to Engineering Computer Aided Design	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MAE	115	Introduction to Machining	X	X		X	X		X	X		X	X		X	X		X	
MAE	200	Principles of Aeronautics and Astronautics	X	X		X	X		X	X		X	X		X	X		X	
MAE	271	Statics	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MAE	272	Dynamics	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MAE	285	Numerical Methods and Computation I	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MAE	310	Fluid Mechanics I	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MAE	311	Principles of Measurement and Instrumentation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MAE	341	Thermodynamics I	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MAE	342	Thermodynamics II	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MAE	364	Kinematics and Dynamics of Machines		X	X	X	X		X	X		X	X		X	X		X	
MAE	370	Mechanics of Materials	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MAE	371	Aerospace Structures	X		X	X	X		X	X		X	X		X	X		X	
MAE	378	Materials and Manufacturing Processes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MAE	385	Numerical Methods and Computation II	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MAE	395	Selected Topics in Mechanical and Aerospace Engineering	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MAE	410	Fluid Mechanics II	X		X	X		X	X		X	X		X	X		X	X	
MAE	411	Fluid Mechanics Laboratory	X		X	X	X		X	X		X	X		X	X		X	
MAE	420	Compressible Aerodynamics		X	X		X	X		X	X		X	X		X	X		
MAE	430	Fundamentals of Aerodynamics	X		X	X		X	X		X	X		X	X		X	X	
MAE	431	Introduction to Plasma Dynamics																	
MAE	440	Rocket Propulsion I	X		X	X			X		X	X			X		X	X	
MAE	441	Airbreathing Propulsion	X			X		X						X	X			X	
MAE	442	Internal Combustion Engines																	
MAE	444	Introduction to Electric Propulsion		X						X						X			
MAE	445	Heat Distribution System Design																	
MAE	446	Solar Energy Systems																	
MAE	448	Energy Conversion and Power Generation																	
MAE	450	Introduction to Heat and Mass Transfer	X	X		X	X		X	X		X	X		X	X		X	
MAE	454	Electric Propulsion		X						X						X			
MAE	455	Design of Thermal Systems		X	X		X	X		X	X		X	X		X	X		
MAE	461	Vibrations of Elastic Systems	X						X						X				
MAE	463	Intermediate Dynamics				X						X						X	
MAE	466	Mechanics and Design of Machine Elements	X		X	X		X	X		X	X		X	X		X	X	
MAE	468	Elements of Spacecraft Design		X	X		X		X	X		X			X	X			
MAE	471	Adv. Aerospace Structures and Materials	X	X		X	X		X	X		X	X		X	X		X	
MAE	474	Applied Mechanics of Solids		X			X		X				X			X			
MAE	476	Mechanics and Fabrication of Composite Materials																	
MAE	477	Experimental Techniques in Solid Mechanics	X			X			X						X			X	
MAE	480	Aircraft Stability and Control		X			X	X		X		X	X		X	X		X	
MAE	485	Numerical Methods and Computation III																	
MAE	488	Analysis of Engineering Systems	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MAE	489	Computer-Aided Engineering	X	X		X	X		X	X		X	X		X	X		X	
MAE	490	Introduction to Engineering Design	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MAE	491	Mechanical Engineering Design <sup>1</sup>	X	X		X	X		X	X		X	X		X	X		X	
MAE	492	Aerospace Design <sup>1</sup>	X	X		X	X		X	X		X	X		X	X		X	
MAE	493	Rocket Design <sup>1,2</sup>	X				X			X			X			X			
MAE	494	Aircraft Design <sup>1,2</sup>					X			X			X			X			
MAE	495	Selected Topics in Mechanical and Aerospace Engineering	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MAE	496	Independent Study in Mechanical and Aerospace Engineering	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MAE	499	Undergraduate Thesis	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

<sup>1</sup> Either MAE 491, 492, 493 or 494 can be taken to fulfill the Senior Design requirement

<sup>2</sup> MAE 493 & 494 Require instructor permission and possibly additional pre-requisites.