

### MAE Graduate Course Projection

Course	Course num	Course Name	FA 22	SP 23	FA 23	SP24	FA24	SP25	FA25	SP26	FA26	SP27
BME	5216C	Mechanics of Biostructures I	x		x		x		x		x	
BME	5217C	Mechanics of Biostructures II		x		x		x		x		x
BME	5267	Biofluid Mechanics	x		x		x		x		x	
BME	5742	Modeling Techniques and Methodologies in Bio	x		x		x		x		x	
BME	6215	Advanced Biomechanics		x		x		x		x		x
BME	6231	Continuum Biomechanics		x		x		x		x		x
BME	6268	Applied Computational Biofluids		x		x		x		x		x
BME	6500C	Bio-instrumentation	x		x		x		x		x	
BME	6525	Methods in Neural Nachine Interface		x		x		x		x		x
BME	6935	Topics in BME	x		x		x		x		x	
			5	5	5	5	5	5	5	5	5	5
EAS	5123	Intermediate Aerodynamics		x		x		x		x		x
EAS	5157	VSTOL Aerodynamics and Performance							x			
EAS	5211	Aeroelasticity			x		x		x		x	
EAS	5302	Direct Energy Conversion		x								
EAS	5315	Rocket Propulsions	x			x			x			x
EAS	5407C	Mechatronic Systems	x		x		x		x		x	
EAS	5535	Engineering Design for Aero Vehicles				x				x		
EAS	6138	Advanced Gas Dynamics		x			x			x		
EAS	6185	Turbulent Flow			x			x			x	
EAS	6222	Non-Destructive Evaluation (NDE)	x					x				x
EAS	6250	Structural & Dynamic Stability		x				x				x
EAS	6405	Advanced Flight Dynamics		x				x			x	
EAS	6414	Estimation of Dynamical Systems				x				x		
EAS	6415	Guidance, Navigation and Control	x			x			x			x
EAS	6507	Topics of Astrodynamics			x					x		
EAS	6722	Multi-Disciplinary Optimization (MDO)										
EAS	6808	Space Environment and Payload Inst.					x				x	
EAS	6807C	Aero/Thermal/Fluid Measurements										
			4	5	4	5	5	5	5	5	5	5
EGM	6653	Theory of Elasticity and Plasticity			x				x			
EML	5060	Mathematical Methods	x	x	x	x	x	x	x	x	x	x
EML	5066	Computational Methods in MAE										
EML	5090	MAE Seminar	x	x	x	x	x	x	x	x	x	x
EML	5105	Gas Kinetics & Statistical Thermodynamics										
EML	5152	Intermediate Heat Transfer		x		x		x		x		x
EML	5224	Acoustics										
EML	5228	Modal Analysis		x				x				x
EML	5237	Intermediate Mechanics of Materials	x		x		x		x		x	
EML	5245	Tribology										
EML	5271	Intermediate Dynamics		x		x		x		x		x
EML	5290	Introduction to MEMS			x		x		x		x	
EML	5291	MEMS Materials										
EML	5311	Systems Control	x		x		x		x		x	
EML	5402	Turbomachinery (Spring only)				x				x		
EML	5403	Science and Technology of Fuel Cell										
EML	5456	Turbines for Sustainable Power	x		x		x		x		x	
EML	5546	Engineering Design with Composite	x		x				x			
EML	5713	Intermediate Fluid Mechanics	x		x		x		x		x	
EML	5937	SP: Advanced Composites Engineering					x				x	
EML	5937	SP: Advanced Manufacturing	x									
EML	6062	Boundary Element Method in Engineering										
EML	6067	Finite Element I		x		x		x		x		x
EML	6068	Finite Element II			x				x			
EML	6085	Research Methods	x	x	x	x	x	x	x	x	x	x
EML	6104	Classical Thermodynamics		x		x		x		x		x
EML	6124	Two-Phase flow										
EML	6131	Combustion Phenomena	x			x			x			x
EML	6144	Boiling and Condensation Heat Transfer										
EML	6154	Conduction Heat Transfer		x			x			x		
EML	6155	Convection Heat Transfer		x			x			x		
EML	6157	Radiation Heat Transfer	x			x			x			x
EML	6158	Gaseous Radiation Heat Transfer										
EML	6211	Continuum Mechanics		x		x		x		x		x

EML	6223	Advanced Vibration Systems	x		x		x		x		x	
EML	6226	Analytical Dynamics										
EML	6227	Nonlinear Dynamics and Vibrations										
EML	6233	Fundamentals in Fatigue Analysis			x			x				
EML	6238	Plates and Shells		x			x					x
EML	6295	Sensor & Actuator Micro Mech				x			x			
EML	6296	MEMS Mechanism and Design										
EML	6297	MEMS Characterization										
EML	6299	Advanced Topics in Miniaturiation	x					x				x
EML	6305	Experimental Mechanics						x				
EML	6547	Engineering Fracture Mechanics in Design	x				x					x
EML	6572	Probabilistic Methods in Mech. Design	x									
EML	6712	Mechanics of Viscous Flow (Spring only)		x		x		x		x		x
EML	6725	CFD I			x				x			
EML	6726	CFD II	x				x					x
EML	6808	Analysis and Control of Robot Manipulators										x
EML	5026C	Advanced Engineering Design Practice										
EML	5430C	Design for manufacturing in turbomachinery										
EML	5431C	Design for Integrity & Reliability in Turbomachinery										
EML	5532C	CAD/CAM										
			16	13	14	13	14	13	16	13	13	14
			25	23	23	23	24	23	26	23	23	24