Department of Mechanical and Aerospace Engineering Graduate Five Year Projected Offerings 2014-2018

SUB	CRS	TITLE	14S	14M	14F	15S	15M	15F	16S	16M	16F	17S	17M	17F	18S	18M	18F
MAE	520	Compressible Aerodynamics	Х	Х		Х	Х		Х	Х		Χ	Х		Х	Χ	
MAE	530	Fundamentals of Aerodynamics		Χ	Χ		Χ	Χ		Χ	Χ		Χ	Χ		Χ	Χ
MAE	531	Introduction to Plasma Dynamics	Offered on demand														
MAE		Rocket Propulsion I		Χ	Х			Χ		Χ	Х			Χ		Χ	Χ
MAE	541	Airbreathing Propulsion			Х		Χ	Χ			Χ		Χ	Χ			Χ
MAE	542	Internal Combustion Engines						0	ffered	d on d	lemar	nd					
MAE		Introduction to Electric Propulsion	Х						Χ						Χ		
MAE	545	Heat Distribution System Design						0	ffered	d on d	lemar	nd					
MAE	546	Solar Energy Systems	Offered on demand Offered on demand														
MAE	548	Energy Conversion and Power Generation						0	ffered	d on d	emar	nd					
MAE	561	Vibrations of Elastic Systems						Χ						Χ			
MAE		Intermediate Dynamics			Χ						Χ						Χ
MAE		Elements of Spacecraft Design	X	Χ		Χ			Χ	Χ		Χ			Χ	Χ	
MAE		Applied Mechanics of Solids	X			Χ			Χ			Χ			Χ		
MAE		Mechanics and Fabrication of Composite Materials	Offered on demand														
MAE	577	Experimental Techniques in Solid Mechanics	Offered on demand														
MAE	580	Aircraft Stability and Control	X			Χ	Χ		Χ		Χ	Χ		Χ	Χ		Χ
MAE		Numerical Methods and Computation III						Χ						Χ			
MAE	589	Computer-Aided Engineering	Х		Χ	Χ		Χ	Χ		Χ	Χ		Χ	Χ		Χ
MAE		Rocket Design				Χ			Χ			Χ			Χ		
MAE	594	Aircraft Design				Χ			Χ			Χ			Χ		
MAE	595	Selected Topics in Mechanical and Aerospace Engineering	Х	Χ	Χ	Χ	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
MAE	623	Computational Fluid Dynamics I			Χ			Χ			Χ			Χ			Χ
MAE	631	Rotorcraft Design I	Χ			Χ			Χ			Χ			Χ		
MAE	632	Rotorcraft Design II								d on d							
MAE	633	Tactical Missile Design I								d on d							
MAE	634	Tactical Missile Design II								d on d							
MAE	635	Aerospace Systems Engineering								d on d							
MAE	639	System Safety						U	ttered	d on d	emar	_	Ī		1	-	
MAE	640	Rocket Propulsion II				Х		ļ.,			\ ,	Χ		.,			
MAE	641	Advanced Thermodynamics			X			Χ			X			Χ			X
MAE	643	Advanced Heat and Mass Transfer			Х						Х						Х
MAE	644	Advanced Solid Rocket Propulsion	Х						Χ						Χ		
MAE	645	Combustion I						X		<u>. </u>				Χ			
MAE	647	Uncertainty Analysis in Experimentation								d on d							
MAE	649	Transport Phenomena				1		_	ttered	d on d		nd					
MAE	651	Viscous Fluid Mechanics			Χ			X	,,		Х			Χ			Χ
MAE	657	Helicopter Theory	+							d on d							
MAE		Rotordynamics	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		1	T	1	U		d on d	emar	ıa			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1	
MAE	660	Structural Dynamics	Х			<u> </u>		$\overline{}$	X						Χ		Щ
MAE		Advanced Dynamics	Offered on demand														
MAE		Nonlinear Dynamics and Chaos	X X X											_ X			
MAE		Astrodynamics	Offered on demand														
MAE		Continuum Mechanics	-	Х	X	Х		Х	Х		X	Χ		Х	Х		X
MAE	672	Elasticity			Χ						Χ						Х
MAE	673	Plasticity				Χ						Χ					i

Department of Mechanical and Aerospace Engineering Graduate Five Year Projected Offerings 2014-2018

SUB	CRS	TITLE	14S	14M	14F	15S	15M	15F	16S	16M	16F	17S	17M	17F	18S	18M	18F
MAE	674	Finite Element Analysis I						Х						Х			
MAE	676	Viscoelasticity	Χ						Χ						Χ		
MAE	677	Optical Techniques in Solid Mechanics	Offered on demand														
MAE	678	Mechanics of Composite Materials	Offered on demand														
MAE	680	Performance Flight Testing	Offered on demand														
MAE	681	Missile Trajectory Analysis	Offered on demand														
MAE	683	Graduate Seminar	X												Χ		
MAE	684	Aerospace Systems Seminar	Offered on demand														
MAE	692	Graduate Engineering Analysis I			Χ			Х			Х			Χ			Χ
MAE	693	Graduate Engineering Analysis II	Χ			Χ			Χ			Х			Χ		
MAE	695	Selected Topics in Mechanical and Aerospace Engineering	Χ	Χ	Χ	Χ	Χ	Х	Χ	Χ	Х	Х	Χ	Χ	Χ	Χ	Χ
MAE	699	Master's Thesis	Χ	Χ	Χ	Χ	Х	Х	Χ	Χ	Х	Х	Χ	Χ	Χ	Χ	Χ
MAE	723	Computational Fluid Dynamics II	Χ			Χ			Χ			Х			Χ		
MAE	724	Computational Fluid Dynamics III		Χ			Х			Χ			Χ			Χ	
MAE	726	Rotorcraft Computational Fluid Dynamics															
MAE	740	Aerothermodynamics				Χ						Х					
MAE	741	Statistical Thermodynamics				Χ									Χ		
MAE	745	Combustion II	Χ						Χ						Χ		
MAE	746	Convective Heat Transfer	Offered on demand														
MAE	748	Radiative Transfer	Offered on demand														
MAE	749	Mass Transport	Offered on demand														
MAE	751	Boundary Layer Theory	Offered on demand														
MAE		Mechanics of Rarefied Gases	Offered on demand														
MAE	753	Magneto-Gas Dynamics						С	Offered	d on d	lemar	nd					
MAE	754	Hypersonic Flow			Χ						Х						Χ
MAE	755	Advanced Aerodynamics				Χ						Х					
MAE		Numerical Simulations of Magnetohydrodynamics						С	offered	d on d	lemar	nd					
MAE		Optical Techniques in Fluid Mechanics						С	ffere	d on d	lemar	nd					
MAE	758	Turbulence				Χ						Χ					
MAE	760	Analytical Methods in Nonlinear Dynamics						С	ffered	d on d	lemar	nd					
MAE	762	Wave Motion of Continuous Elastic Bodies						С)ffered	d on d	lemar	nd					
MAE	765	Random Vibration of Elastic Systems						С)ffered	d on d	lemar	nd					
MAE	768	Dynamics of Space Vehicles						С	ffere	d on d	lemar	nd					
MAE	772	Theory of Structural Stability			Χ						Χ						Χ
MAE	773	Theory of Shells						С	offered	d on d	lemar	nd					
MAE	774	Finite Element Analysis II						С)ffered	d on d	lemar	nd					
MAE	776	Theory of Finite Elasticity and Finite Viscoelasticity	Offered on demand														
MAE	778	Fracture Mechanics						Χ						Χ			
MAE	780	Theory of Acoustics			Χ						Х						Χ
MAE	781	Nonlinear Effects in Plasma	Offered on demand														
MAE	782	Plasma Turbulence	Offered on demand														
MAE	795	Selected Topics in Mechanical and Aerospace Engineering	Х	Χ	Χ	Χ	Х	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х
MAE		Doctoral Dissertation	Х	Χ	Χ	Х	Х	Х	Х	Х	Х	Х	Х	Χ	Χ	Χ	Χ
		•						•				•					