



AE	4803	Team Design - Space	AE Option																	
AE	4803/8803	Numerical Analysis and Algorithms	AE Option		X					X									X	
AE	4803	Advanced Aircraft Propulsion	AE Option	X			X			X			X						X	
AE	4803	Robotics and Autonomy	AE Option	X			X			X			X						X	
AE	4803	Team Design - Vertical Lift	AE Option																	
AE	4803	TD1: Team Design - Fixed Wing Aircraft	AE Option		X			X			X			X					X	
AE	4803	TD2: Team Design - Aircraft Competition	AE Option					X			X			X					X	
AE	6009	Viscous Fluid Flow	PhD Quals	X			X			X			X						X	
AE	6012	Turbulent Flows	PhD Quals		X			X			X			X					X	
AE	6015	Advanced Aerodynamics	PhD Quals		X			X			X			X					X	
AE	6030	Unsteady Aerodynamics	Elective				X						X						X	
AE	6042	Computational Fluid Dynamics	Elective		X			X			X			X					X	
AE	6050	Gas Dynamics	PhD Quals			X			X			X			X				X	X
AE	6060	Aeroacoustics	Elective	X						X									X	
AE	6070	Rotary Wing Aerodynamics	Elective		X						X									
AE	6080	Dynamics of Turbulence	Elective					X											X	
AE	6100	Structural Stability I	Elective				X						X							
AE	6101	Structural Stability II	Elective								X									
AE	6114	Fundamentals of Solid Mechanics	PhD Quals	X			X			X			X						X	
AE	6115	Fundamentals of Aero Structural Analysis	PhD Quals		X			X			X			X					X	
AE	6165	Principles of Fracture and Fatigue	Elective				X												X	
AE	6170	Structural Optimization	Elective				X						X							
AE	6210	Advanced Dynamics I	PhD Quals		X			X			X			X					X	
AE	6220	Rotorcraft Structural Dynamics and Aeroelasticity	Elective					X						X						
AE	6230	Structural Dynamics	PhD Quals	X			X			X			X						X	
AE	6252	Smart Structure & Structural Control	Elective																	
AE	6310	Optimization for the Design of Engineered Systems	PhD Quals		X			X			X			X					X	
AE	6333	Rotorcraft Design I	PhD Quals	X			X			X			X						X	
AE	6334	Rotorcraft Design II	Elective		X						X								X	
AE	6343	Aircraft Design I	PhD Quals	X			X			X			X						X	
AE	6344	Aircraft Design II	Elective		X			X			X			X					X	
AE	6353	Orbital Mechanics	PhD Quals	X			X			X			X						X	
AE	6354	Advanced Orbital Mechanics	Elective																	
AE	6355	Planetary Entry, Descent and Landing	Elective						X							X				X
AE	6361	Air Breathing Propulsion System Design I	Elective		X			X			X			X					X	
AE	6362	Safety by Design	Elective																	
AE	6372	Aerospace Systems Engineering	Elective	X			X			X			X						X	
AE	6373	Advanced Design Methods I	Elective	X			X			X			X						X	
AE	6383	Applied Design Laboratory (FW)	Elective	X			X			X			X						X	
AE	6383	Applied Design Laboratory (Rotorcraft)	Elective																	
AE	6393	Introduction to System of Systems Engineering Principles	Elective	X			X			X			X						X	
AE	6394	System of Systems Engineering Applications	Elective		X			X			X			X					X	
AE	6410	Combustion Dynamics	Elective		X						X									
AE	6412	Turbulent Combustion	Elective					X						X					X	
AE	6450	Rocket Propulsion	Elective		X						X									
AE	6451	Electric Propulsion	Elective					X						X						

AE	6503	Helicopter Stability and Control	Elective	X						X							
AE	6505	Random Processes and Kalman Filtering	Elective					X					X				
AE	6511	Optimal Guidance & Control	Elective					X									X
AE	6520	Advanced Flight Dynamics	PhD Quals		X			X					X				X
AE	6530	Multivariable Linear Systems and Control	PhD Quals	X				X					X				X
AE	6531	Aerospace Robust Control I	Elective		X					X							X
AE	6551	Cognitive Engineering	Elective	X						X							X
AE	6561	Reliable Control Software for Aerospace and Embedded Applica	Elective														
AE	6580	Nonlinear Control	PhD Quals		X			X					X				X
AE	6705	Introduction to Mechatronics	Elective		X			X					X				X
AE	6721	Evaluation of Human Integrated Systems	Elective					X					X				
AE	6760	Acoustics I	Elective	X				X					X				X
AE	6761	Acoustics II	Elective		X			X					X				X
AE	6762	Applied Acoustics	Elective		X												
AE	6765	Kinetics & Thermodynamics of Gases	PhD Quals	X				X					X				X
AE	6766	Combustion	PhD Quals		X			X					X				X
AE	6769	Linear Elasticity	Elective	X				X					X				X
AE	7772	Fund-Fracture Mechanics	Elective	X				X					X				X
AE	7785	Intro Robotics Research	Elective	X													
AE	8750	Robotics Research Fundamentals I	Elective	X	X			X	X				X	X			X
AE	8751	Robotics Research Fundamentals II	Elective	X	X			X	X				X	X			X
AE	8801	AE Graduate Seminar		X	X			X	X				X	X			X
AE	8803	Nonlinear Stochastic Optimal Control	Elective		X					X							X
AE	8803	Advanced Aerodynamics for Vertical Lift	Elective	X				X					X				X
AE	8803	Satellite Orbit Determination	Elective		X					X							X
AE	8803	Intelligent Cyber Physical Systems	Elective		X					X							X
AE	8803	Optical Diagnostics for Reacting Flows	Elective					X									X
AE	8803	Spacecraft Attitude Estimation and Control	Elective											X			
AE	8803	Optimal Transport Theory and Applications	Elective											X			
AE	8803	Optimization-Based Learning Control and Games	Elective	X						X							X
AE	8803	Math Principles of Planning and Decision-Making for Autonomy	Elective	X				X					X				