

Five Year Plan Update

			Fall 2017	Spring 2018	Fall 2018	Spring 2019	Fall 2019	Spring 2020	Fall 2020	Spring 2021	Fall 2021	Spring 2022
Rotorcraft												
Staff	631	Helicopter Aerodynamics I	X		X		X		X		X	
Chopra	633	Helicopter Dynamics		X		X		X		X		X
Datta	636	Helicopter Dynamics II	X		X		X		X		X	
Chopra	634	Helicopter Design		X		X		X		X		X
Celi	635	Helicopter Stability & Control				X				X		
Flight Dynamics & Control												
Sanner	641	Linear System Dynamics	X		X		X		X		X	
Faruque	642	Atmospheric Flight Control		X				X				X
Paley/Bauchau	646*	Advanced Dynamics of Aero Systems		X		X		X		X		X
Bauchau	647	Flexible Multibody Dynamics			X				X			
Faruque	742	Robust Multivariable Control				X				X		
Paley	743	App. NL Control of Aerospace Vehicles		X				X				X
Staff	788B	Aircraft System Identification			X			X				
Sanner	788K	Est. & Control of Stochastic Systems	X		X		X		X		X	
Structures												
Chopra	651	Smart Structures	X		X		X		X		X	
Lee	652	Computational Structural Mechanics		X		X		X		X		X
Lee	653	Nonlinear Finite Element Analysis			X				X			
Wereley/Becnel	654	Mechanics of Composite Structures		X		X		X		X		X
Bauchau	655	Structural Dynamics	X		X		X		X		X	
Haas	656	Aeroelasticity				X				X		
Staff	757	Advanced Structural Dynamics		X				X				X
Flatau	788E	Electro-Mechanical System Modeling		X				X				X
Otte	788V	Motion Planning for Autonomous Systems		X		X		X		X		X
Wereley	788W	Smart Fluids and Applications		X				X				X
Bauchau	788P	Analysis of Structural Elements	X					X			X	
Aerodynamics & Propulsion												
Sedwick	663	Intro to Plasmas for Space Prop/Powr		X				X				X
Yu	665	Advanced Airbreathing Propulsion		X		X		X		X		X
Sedwick	667	Adv. Space Propulsion and Power			X				X			
Cadou	673	Aerodynamics of Incompressible Fluids	X		X		X		X		X	
Cadou	674	Aerodynamics of Compressible Fluids		X		X		X		X		X
Jones	675*	Unsteady and Inviscid Aerodynamics			X				X			
Martin	676	Turbulence				X				X		
Laurence	682	Hypersonic Aerodynamics		X				X				X
Laurence	683	High Temperature Gasdynamics				X				X		
Baeder	684	Computational Fluid Dynamics I	X		X		X		X		X	
Baeder	685	Computational Fluid Dynamics II		X		X		X		X		X
Oran	788A	Fundamentals of Explosions I	X		X		X		X		X	
Baeder	788I	Wind Energy Theory		X				X				X
Oran	788J/Y	Fundamentals of Explosions II		X		X		X		X		X
Space Systems												
Hartzell	601	Astroynamics	X		X		X		X		X	
Mitchell	602	S/C Attitude Dynamics & Control				X				X		
Hraster	691	Satellite Design				X				X		
Carignan/Akin	692	Intro to Space Robotics	X				X				X	
Israel	694	Spacecraft Communications		X				X				X
Silk	696	Spacecraft Thermal Design		X				X				X
Akin	697	Space Human Factors & Life Support				X				X		
Barbee	741	Interplanetary Navigation & Guidance				X				X		
Akin	788D	Advanced Space Systems Design	X		X		X		X		X	
Barbee	603*	Near-Earth Object Exploration	X		X		X		X		X	
Akin	788X	Planetary Surface Robotics			X				X			
Akin	791	Launch & Entry Vehicle Design		X				X				X
Other												
Celi	681	Engineering Optimization			X				X			
SUSPENDED	788O	Emerging Challenges in Aerospace										
*		ENAE646 formerly ENAE788G										
		ENAE647 formerly ENAE788Q										
		ENAE655 formerly ENAE672; ENAE603 formerly 788N										
NOTE: Schedule subject to change without notice.												