

Student Outcomes and Related Courses

Course	Title	1. Have the advanced engineering skills and knowledge to fill positions compatible to their training in aerospace engineering, or to continue graduate studies.	2. Be able to apply their knowledge to performing research, solving problems and providing creative solutions to aerospace challenges.	3. Have the skills to clearly communicate technical work in oral and written formats and be able to work collaboratively.	4. Be engaged in lifelong learning to keep their technical knowledge current and relevant.	5. Have an understanding of the ethical norms and societal responsibilities in the engineering profession.	Faculty
AE 601	Computational Fluid Mechanics	X	X	X	X		GJ
AE 612	Compressible Fluid Flow	X	X	X	X		PP
AE 620	Incompressible Aerodynamics	X	X	X	X		PP
AE 644	Turbulent Flow	X	X	X	X		GJ
AE 696	Experimental Fluid Mechanics	X	X	X	X		XL
AE 530	Rocket and Space Propulsion	X	X		X		PP
AE 550	Viscous Flow	X	X	X	X		XL
AE 596	Turbomachinery Design and Aerothermodynamics	X	X	X	X	X	GJ
ME 653	Combustion						
ME 656	Conduction Heat and Mass Transfer						
ME 657	Convection Heat Transfer						
AE 670	Optimal Control	X	X		X		PL
AE 678	State Space Flight Control	X	X	X			JC
AE 520	Spacecraft Attitude Dynamics and Control	X	X				ABY
AE 540	Aircraft Stability and Control II	X	X		X		PL
AE 546	Aerospace Guidance and Navigation	X	X	X	X		PL
AE 596 (AE676-tentative)	Advanced Astrodynamics	X	X				ABY
ME 532	Robot Modeling and Control						
Math 542	Introduction to Computational ODEs						
Math 543	Numerical Matrix Analysis						
Math 693A	Advanced Computational Optimization						
AE 510	Finite Element Methods	X	X	X			SV
AE 535	Mechanics of Composite Structures	X	X	X	X		MC
AE 600	Non-Destructive Evaluation	X	X	X	X	X	MC
AE 611	Vibrations of Elastic Solids	X	X	X	X		LD
AE 621	Theory of Elasticity	X	X	X			SV
AE 631	Analysis of Elastic Plates	X	X	X	X		LD
AE 641	Structural Optimizations	X	X	X	X		SV
AE 651	Theory of Elastic Stability	X	X	X			SV
ME 645	Mechanical Behavior of Materials						
Math 693A	Advanced Computational Optimization						
AE 731	Aeroelasticity	X	X	X	X		LD
AE 797	Research	X	X	X	X	X	
AE 798	Special Study	X	X	X	X	X	
AE 799A	Thesis	X	X	X	X	X	

