

Tentative Spring 2025 Technical Electives: Updated 10/25/24

Catalog #	Title	Pre-Requisites	Instructor	Schedule	
AE 5361	Flight Dynamics-Stability & Control	AE 3361	Paul	TTh 9:30-10:45 AM	D
ME/AE 5001	Smart and Multifunctional Materials	CE 2210	Lee	TTh 12:30-1:45 PM	
ME/AE 5234	Stability of Engineering Structures	CE 2210, Math 3304, ME/AE 2360	Birman	W 4:00-6:30 PM	D
ME/AE 5282	Intro to Composite Materials & Structures	CE 2210	Chandrashekhara	TTh 9:30-10:45 AM	D
ME/AE 5449	Robotic Manipulators and Mechanisms	Cmp Sci 1570/1970/1972/1981 & ME 3313	Bristow	MWF 8:00-8:50 AM	
ME/AE 5478	Mechatronics	ME 4479	Song	MWF 2:00-2:50 PM	
ME/AE 5479	Machine Learning for Manufacturing Automation	Cmp Sci 1570/1970/1972/1981 & ME 3313/AE 3361	Krishnamurthy	MWF 10:00-10:50 AM	D
ME/AE 5525	Intermediate Heat Transfer	ME 3525	Liang	T 4:00-6:30 PM	
ME/AE 5760	Probabilistic Engineering Design	ME 3708 or AE 3361	Du	TTh 2:00-3:15 PM	
ME/AE 5830	Applied Computational Methods	Cmp Sci 1570/1970/1972/1981 & Math 3304	Hosder	TTh 11:00 AM-12:15 PM	
ME 3653	Manufacturing	ME 2653, CE 2211, & 'C' or better in CE 2210	Okafor (101)	MWF 1:00-1:50 PM	
ME 3653	Manufacturing	ME 2653, CE 2211, & 'C' or better in CE 2210	Miller (102)	MWF 10:00-10:50 AM	
ME 5001	Neuromechanics of Human Movement	ME 4479	Song	TTh 12:30-1:45 PM	
ME 5420	Signal Processing for Instrumentation & Control	ME 3411, Math 3304	Bristow	MWF 9:00-9:50 AM	D
ME 5537	Fuel Cell Principles	ME 3521	Koylu	TTh 11:00 AM-12:15 PM	
ME 5543	Energy Efficiency of Vehicles	Math 2222 & Phys 2135	Carroll	MWF 10:00-10:50 AM	D
ME 5575	Mechanical Systems for Environmental Control	ME 3521 & ME 3525	Williams	M 4:00-6:30 PM	
ME 5653	CNC of Manufacturing Processes	Acc/prec by Mech Eng 3653	Okafor	MW 11:00-11:50 AM (lec)	
ME 5656	Design for Manufacture	ME 3708 & ME 3653	Appelman	Th 7:00-9:30 PM	D
AE 6614	Advanced Astrodynamics	AE 5614	Pernicka	TTh 12:30-1:45 PM	
ME/AE 6001	Advanced Computational Thermofluids	ME/AE 5131, ME/AE 5139	Homan	MWF 2:00-2:50 PM	
ME/AE 6212	Advanced Finite Element Analysis	ME/AE 5212	Chandrashekhara	TTh 11:00 AM-12:15 PM	D
ME/AE 6307	Advanced Vibrations	ME/AE 5307	Stutts	MWF 1:00-1:50 PM	
ME/AE 6410	Optimal Control & Estimation	ME/AE 5581	Sarangapani	TTh 9:30-10:45am	D
ME/AE 6657	Laser Aided Manufacturing & Materials Processing	ME 5525	Park	M 4:00-6:30 PM	
ME 6653	Advanced CNC of Manufacturing Processes & Engineering Metrology	Math 5653	Okafor	M 2:20-4:00 PM	D
ME 6659	Advanced Topics in Design & Manufacturing	ME 5655 or ME 5708	Liou	TTh 2:00-3:15 PM	D
ME 6663	Advanced Digital Design & Manufacturing	ME 5708 or ME 5757 or ME 5763	Leu	TTh 9:30-10:45 AM	D