

PROJECTED ME COURSE OFFERINGS

Course Details											
COURSE NUMBER	COURSE NAME (Core courses shown in red color)	2017-18		2018-19		2019-20		2020-21		2021-22	
		Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
DESIGN											
"Design"	ME 401	Applied Stress Analysis I	■		■		■		■		■
	ME 408	Intermediate Vibration Theory		■		■		■		■	
	ME 411	Mechatronics I	■		■		■		■		■
	ME 412	Dynamic System Analysis I									
	ME 413	Dynamics of Mechanical Systems	■		■		■		■		■
	ME 416	Railroad Vehicle Dynamics									
	ME 449 (ECE)	Microdevices and Micromachining		■		■		■		■	
	ME 502	Stress Analysis II									
	ME 504	Multibody Systems I									
	ME 511	Mechatronics II		■		■		■		■	
	ME 540	Micro/Nanosystem Design									
	ME 541 (ECE)	Microelectronic Fabrication		■		■		■		■	
	ME 547	Advanced CAD									
	ME 594	Advanced Topics in Solid Mechanics	■				■				■
	ME 594	Motor Control									
	ME 594	Low-Dimensional Nanomaterials									
ME 594	Applications of Engineered Thin Films and Interfaces										
ME 594 (BioE)	Dynamic Elastography	■		■		■		■		■	
ME 594 (IE)	3D Printing and Additive Manuf.		■		■		■		■		
ME594	Characterization of Nano Devices & Systems										
FLUID/THERMAL											
Ma th & Sta t.	IE 442	Design and Analysis of Experiments	■		■		■		■		■
	ME 494	Math I									
	ME 594	Math II									
Fluid / Thermal/Materials	ME 415	Propulsion Theory		■		■		■		■	
	ME 417	Intermediate Fluid Mechanics									
	ME 419	Compressible Flow Theory									
	ME 421	Intermediate Heat Transfer	■		■		■		■		■
	ME 422	HVAC (ENER)	■		■		■		■		■
	ME 424	Energy Management (ENER)	■		■		■		■		■
	ME 426	Applied Combustion									
	ME 429	IC Engines (ENER)	■		■		■		■		■
	ME 450	Air Pollution (ENER)		■		■		■		■	
	ME 501	Advanced Thermodynamics									
	ME 515	Micro/Nano Transport Phenomena	■				■				■
	ME 518	Fundamentals of Turbulence									
	ME 521	Conduction and Radiation		■		■		■		■	
	ME 522	Convective Heat Transfer									
	ME 525	Multi-Phase Heat Transfer		■		■		■		■	
	ME 528	Numerical Heat Transfer									
ME 536	Chemically Reacting Flows	■				■		■		■	
ME 594	Computational Compressible Flow										
ME 594	Energy Storage		■		■		■		■		
ME 594	Introduction to Microfluids (and Biosensors)										
ME 594	Micro/ Nano Heat Transfer		■		■		■		■		
MATH											
	IE 442	Design and Analysis of Experiments	■		■		■		■		■
	ME 494	Math I									
	ME 594	Math II									

Notes MSME students who do not have a BSME must take: two of ME401, ME408, and ME413 (can use 502 for 401); two of ME415, ME417, ME419, ME421; and one ME math class.