

Schedule of Graduate Courses - 2018			
Odd Years Spring	Odd Years Fall	Even Years Spring	Even Years Fall
411/511 Compressible Fluid Mechanics	432/532 Vehicle Dynamics	411/511 Compressible Fluid Mechanics	415/515 Energy Conversion
431/531 Fundamentals of Mechanical Vibrations	486/696 3D Printng & Additive Manufacturing	431/531 Fundamentals of Mechanical Vibrations	432/532 Vehicle Dynamics
441/541 Control Systems Design	486/696 Cognitive Systems Engineering	441/541 Control Sys Design	486/696 3D Printing & Additive Manufacturing
444/544 Robot Design Controls and Applications	486/696 Multiphysics Modeling of Eng. Sysgtems	444/544 Robot Design Controls and Applications	486/696 Materials for Extreme Environments
463/563 CAD/CAM	608 Thermodynamics	486/696 Discrete Event Simulation Modelling	600 Gas Dynamics
486/696 Fund. of Composite Mfg. and Mechanics	<i>609 Finite Element Analysis I (CE)</i>	486/696 Technology Startups	<i>609 Finite Element Analysis I (ME)</i>
486/696 Six Sigma	<i>610 Dynamics of Viscous Flow I</i>	<i>615 Conduction Heat Transfer</i>	<i>610 Dynamics of Viscous Flow I</i>
486/696 Technology Startups	<i>611 Computational Fluid Dynamics I</i>	618 Boiling Heat Transfer Two Phase Flows	<i>611 Computational Fluid Dynamics I</i>
<i>615 Conduction Heat Transfer</i>	<i>622 Continuum Mechanics</i>	625 Analysis of Mechanical Components	616 Convection Heat Transfer
623 Applied Stress Analysis I	624 Fundamentals of Fracture Mechanics	627 Advanced Materials and Manufac. Processes	<i>622 Continuum Mechanics</i>
<i>628 Mech Behavior of Materials</i>	<i>630 Vibrations of Discrete Systems</i>	<i>628 Mech Behavior of Materials</i>	626 Fatigue of Engineering Materials
<i>660 Engineering Analysis</i>	650 Tribology	635 Stress Waves in Solids and Fluids	<i>630 Vibrations of Discrete Systems</i>
661 Failure Analysis of Mechanical Systems	655 Micro- and Nano-Fluid Dynamics	<i>660 Engineering Analysis</i>	658 Mech. Behav. Nanostruc. Mater.
696 Atomistic & Multiscale Modeling	<i>666 Analysis of Manufacturing Systems</i>	664 Fundam. of Crystallization and Solidification	<i>666 Analysis of Manufacturing Systems</i>
696 Advanced Dynamics	671 Fundamental and Applications of MEMS	672 Design of Micro and Nano Devices	696 Data Acquisition & Filtering
696 Structural Analysis of Tires I	696 Advance Num. Modeling of Turb. Flows	694 Deform. and Failure of Polymers and Soft Mat.	696 Structural Analysis of Tires II
704 Finite Element Analysis II (ME)	696 Combustion	696 Structural Analysis of Tires I	
710 Dynamics of Viscous Flow II	696 Discovery to Marketing	696 Bio Heat and Mass Transfer	
711 Computational Fluid Dynamics II	696 Structural Analysis of Tires II	704 Finite Element Analysis II (CE)	

Italic: core course (offered every year)