

729

Computer- Aided Analysis of Mech Sys

749

Applications of Finite Element Methods in ME


469

Energy Conversion

502

Thermal Design Electives (3 credits)  
 Thermodynamics 2


**Mechanical Design Electives (3 credits)**


**Mechanical Electives (3 credits)**

<b>ME 541</b>	Mechanical Engineering Design 2
<b>ME 581</b>	Intro of Corrosion
<b>ME 602</b>	Engineering for the Environment
<b>ME 637</b>	Computer – Aided Engineering
<b>ME 644</b>	Design of HVAC Systems
<b>ME 650V</b>	Conduction of Heat Transfer
<b>ME 650W</b>	Intro to Micro-electro-mech Sysytems
<b>ME 651</b>	Biomaterials
<b>ME 660</b>	Polymer Material and Engineering
<b>ME 664</b>	Introduction to Fatigue and Fracture
<b>ME 665</b>	Selection Mats Design/ Manufacturing
<b>ME 667</b>	Mech Props of Materials
<b>ME 670</b>	Intro to Nano Tech
<b>ME 672</b>	Manufacturing of Composites
<b>ME 673</b>	Recovery of Engineering Materials
<b>ME 680</b>	Laser Applications in Manufacturing
<b>ME 702</b>	Energy and Sustainability
<b>ME 709</b>	Injury Biomechanics
<b>ME 719</b>	Basic Combustion Theory



<b>ME 709</b>	Injury Biomechanics
<b>ME 719</b>	Basic Combustion Theory
<b>ME 725</b>	Mechanical Vibrations and Acoustics
<b>ME 728</b>	Advanced Electronic Materials
<b>ME 729</b>	Computer – Aided Analysis of Mech Sys
<b>ME 730</b>	Appl Finite Element Methods
<b>ME 731</b>	Advanced Design of Heat Exchangers
<b>ME 737</b>	Robotics and Control
<b>ME 739</b>	Advanced Machine Design
<b>ME 745</b>	Design of Thermal Systems
<b>ME 747</b>	Microcomputer Based Mechanical Systems
<b>ME 749</b>	Applications of Finite Element Methods in ME
<b>ME 750K</b>	Six Sigma Engineering
<b>ME 752</b>	Failure Analysis Methods and Tools
<b>ME 753</b>	Advanced Materials for Energy Systems
<b>ME 755</b>	Intermediate Thermodynamics
<b>ME 758</b>	Non Linear Ctrl Electro- Mech Systems
<b>ME 759</b>	Neural Networks for Control
<b>ME 760</b>	Fracture Mechanics
<b>ME 762</b>	Polymeric Composite Materials
<b>ME 764</b>	Thermodynamics of Solids
<b>ME 766</b>	SEM and EDAX
<b>ME 767</b>	X-Ray Diffraction
<b>ME 769</b>	Impact Dynamics
<b>ME 782</b>	Engineering Appl of Computational Fluid Dynamics and Heat Transfer
<b>BIOL 418</b>	General Ecology
<b>CHEM 514</b>	Inorganic Chemistry

## Open Electives - Continued

<b>AE 508</b>	Systems Dynamics
<b>AE 525</b>	Flight Structures I
<b>AE 527</b>	Numerical Methods in Engineering
<b>AE 716</b>	Compressible Fluid Flow
<b>AE 719</b>	Computational Fluid Dynamics
<b>AE 722</b>	Finite Element Analys of Structures I
<b>AE 731</b>	Theory of Elasticity
<b>AE 733</b>	Advanced Mechanics of Materials
<b>AE 737</b>	Mechanics of Damage Tolerance
<b>AE 753</b>	Mech Laminated Composites
<b>AE 773</b>	Intermediate Dynamics
<b>AE 777</b>	Vibration Analysis
<b>EE 383</b>	Signals and Systems
<b>EE 463</b>	Appl Engr Electromagnetics
<b>EE 488</b>	Electric Machines/Transformers
<b>EE 492</b>	Electron Circuits I
<b>EE 493</b>	Electron Circuits II
<b>EE 588</b>	Advanced Electric Motors
<b>EE 598</b>	Electric Power Systems Analysis
<b>EE 784</b>	Digital Controls Systems
<b>IME 524</b>	Engr Probability/ Statistics I
<b>IME 556</b>	Information Systems
<b>IME 557</b>	Safety Engineering
<b>IME 558</b>	Manuf Methods/ Materials 2
<b>IME 658</b>	Forming Process
<b>IME 664</b>	Engineering Management
<b>IME 676</b>	Aircraft Manufacturing & Assembly
<b>IME 724</b>	Statistical Methods for Engineers
<b>IME 754</b>	Reliability/ Maintainability
<b>IME 755</b>	Design of Experiments
<b>IME 768</b>	Metal Machining: Theory & Applications
<b>IME 775</b>	Computer Integrated Manufacturing
<b>IME 778</b>	Computer Integrated Manufacturing
<b>BME 335</b>	Biomedical Computer Apps
<b>BME 452</b>	Biomechanics
<b>BME 462</b>	Intro to Bio fluids
<b>BME 477</b>	Introduction to Biomaterials
<b>BME 480</b>	Bioinstrumentation
<b>BME 482</b>	Design of Bio devices
<b>BME 779</b>	Tissue Engineering