

## AY 2023-24 ME Electives

Course	Option	Schedule*
<b>Extended Core</b>		
MECE-317 Numerical Methods	-AERO-AUTO-BIO-EE	SP
MECE-350 Strengths of Materials II	-AERO-AUTO	FA/SP
MECE-352 Thermodynamics II	-AUTO-EE	FA/SP
MECE-355 Fluid Mechanics II	-BIO-EE	FA
<b>Applied Electives</b>		
MECE-401 Heating, Air Conditioning, and Refrigeration	-EE	SP
MECE-402 Turbomachinery	-EE	FA
MECE-403 Propulsion	-AERO	SP
MECE-405 Wind Turbine Engineering	-EE	SP
MECE-406 Advanced Computer Aided Design		FA/SP
MECE-409 Aerodynamics	-AERO	FA
MECE-421 Internal Combustion Engines	-AUTO	SP
BIME-340 3D-Technologies for Prosthetic Applications	-BIO	FA/SP
BIME-407 Medical Device Design	-BIO	FA
BIME-510 Bioanalytical Microfluidics	-BIO	SP
<b>Applied Electives-UGRD/GRAD Cross Listed</b>		
MECE-510/610 Flight Dynamics	-AERO	SP
MECE-511/611 Orbital Mechanics	-AERO	FA
MECE-520/620 Introduction to Optimal Design		SP
MECE-523/623 Powertrain Systems and Design	-AUTO	FA
MECE-524/624 Vehicle Dynamics	-AUTO	SP
MECE-529/629 Renewable Energy	-EE	FA
MECE-543/643 Classical Controls	-AERO-AUTO	FA/SP
MECE-544/644 Intro to Composite Materials	-AERO-AUTO	SP
MECE-550/650 Sustainable Energy Use in Transportation	-AUTO-EE	SP
MECE-555/655 Biomechatronics	-BIO	SP (EVEN AY)**
MECE-557/657 Applied Biomaterials	-BIO	SP (ODD AY)**
MECE-558/658 Introduction to Engineering Vibrations	-AERO	FA
MECE-570/670 Manufacturing Processes & Engineering	-AUTO	
ISEE-684 Engineering and the Developing World	-EE	SP
MCSE-610 Applied Biofluid Mechanics and Microcirculation	-BIO	FA
<b>Graduate Electives</b>		
MECE-605 Finite Elements		FA
MECE-606 Systems Modeling		SP
MECE-731 Computational Fluid Dynamics	-AERO-BIO	FA
MECE-738 Ideal Flows	-AERO	SP
MECE-743 Digital Control Systems		SP
MECE-744 Nonlinear Control Systems		SP
MECE-755 Microfluidics		FA
MECE-756 Boiling and Condensation		FA
MECE-758 Intermediate Vibrations		SP
MECE-785 Mechanics of Solids		FA

\* For planning purposes only. Course names, numbers, schedule subject to change

\*\* Taught every other year