**AAE PROGRAM EQUIVALENT COURSES**

*ME Courses that count as “Program Equivalent Courses” for the Aerospace Engineering Graduate Program.*

**Structures**
- ME 5068 - Introduction to the Finite Element Method
- ME 5139 - Applied Finite Element Method
- ME 5144 - Engineering Fracture Mechanics
- ME 5168 - Introduction to the Finite Element Method
- ME 5162 - Introduction to Laminated Composite Materials
- ME 7040 - Elasticity
- ME 7100 - Introduction to Continuum Mechanics
- ME 7101 - Constitutive Models in Continuum Mechanics
- ME 7163 - Advanced Strength of Materials and Elasticity Theory
- ME 8100 - Advanced Topics in Continuum Mechanics
- ME 8230 - Nonlinear Dynamics

**Fluids**
- ME 6505 - Intermediate Fluid Dynamics
- ME 6507 - Intermediate Numerical Methods
- ME 6510 - Intermediate Heat and Mass Transfer
- ME 6515 - Intro to Micro and Nanofluidics
- ME 6526 - Combustion
- ME 7510 - Advanced Heat Transfer
- ME 7511 - Computational Fluid Dynamics
- ME 7513 - Turbulence
- ME 7520 - Wave Dynamics in Fluids
- ME 7526 - Advanced Combustion
- ME 7527 - Jet Propulsion
- ME 7538 - Advanced Nuclear Reactor Thermal Hydraulics
- ME 8503 - Statistical Thermodynamics
- ME 8504 - Physical Gas Dynamics
- ME 8514 - Optical Techniques for Flow Measurements

**Dynamics and Controls**
- ME 5240 - Vibration and Acoustic Design
- ME 5372 - Design and Control of Mechatronic Systems
- ME 7230 - Advanced Dynamics
- ME 7250 - Vibrations in Discrete Systems
- ME 7290 - Digital Control Engineering
- ME 7292 - Control System Labs
- ME 7380 - Lumped Parameter Modeling and Systems Analysis
- ME 8250 - Vibrations of Continuous Systems
- ME 8260 - Advanced Engineering Acoustics

4/17/14