Technical Elective Options in Aerospace Engineering (Minimum 2 courses**)**

AE 500+ (not including required AE courses)
AE 481 (up to 3-hrs, subject to department document guidelines)

Technical Elective Options outside Aerospace Engineering (No more than 1 course**)**

Biomedical Engineering

BME 452. Biomechanics (3)
BME 477. Introduction to Biomaterials (3)
BME 771. Polymer Processing and Technology (3)

Computer Science

CS 581. Programming for Computing (3)

Electrical and Computer Engineering

ECE 463. Applied Engineering Electromagnetics (3)
ECE 596. Renewable Energy Engineering (3)
ECE 711. Optimization Techniques for Cyber-Physical Systems (3)

Industrial and Manufacturing Engineering

IME 762. Smart Manufacturing (3)

Mathematics and Statistics

MATH 415. An Introduction to Advanced Mathematics (3)
MATH 511. Linear Algebra (3)
MATH 548. Introduction to Complex Variables (3)
MATH 751. Numerical Linear Algebra (3)
MATH 757. Partial Differential Equations for Engineers (3)
MATH 758. Complex and Vector Analysis for Engineers (3)
STAT 460. Elementary Probability and Mathematical Statistics (3)
STAT 571. Statistical Methods I (3)
STAT 572. Statistical Methods II (3)

Mechanical Engineering

ME 439. Mechanical Engineering Design I (3)
ME 502. Thermodynamics II (3)
ME 660. Polymer Materials and Engineering (3)
ME 709. Injury Biomechanics (3)
ME 762. Polymeric Composite Materials (3)

Physics

PHYS 551. Topics in Modern Physics (3)
PHYS 555. Modern Optics (3)
PHYS 621. Analytical Mechanics (3)
PHYS 631. Electricity and Magnetism (3)
PHYS 641. Thermophysics (3)
PHYS 761. Environmental Physics (3)
PHYS 795. Earth and Space Physics (3)