AERONAUTICS CONCENTRATION

AERO 306    Aerodynamics and Flight Performance    4
AERO 307    Experimental Aerodynamics    2
AERO 401    Propulsion Systems    5
AERO 405    Supersonic and Hypersonic Aerodynamics    4
AERO 420    Aircraft Dynamics and Control    4
AERO 443    Aircraft Design I    4
AERO 444    Aircraft Design II    3
AERO 445    Aircraft Design III    3

Aeronautics Approved Electives. 1

Select from the following: 12

AERO 311    Aircraft Development History
AERO 351    Introduction to Orbital Mechanics
AERO 353    Spacecraft Environment
AERO 360    Creative Problem Solving in Engineering Design 2
AERO 406    Applied Computational Fluid Dynamics
AERO 407    Reentry Aerodynamics
AERO 409    Flight Test
AERO 421    Spacecraft Attitude Dynamics and Control
AERO 425    Aircraft Performance
AERO 432    Advanced Composite Structures Analysis
AERO 434    Aerospace Structural Analysis III
AERO 435    Aerospace Numerical Analysis
AERO 450    Introduction to Aerospace Systems Engineering
AERO 452    Spaceflight Dynamics II
AERO 446    Introduction to Space Systems
AERO 470    Selected Advanced Topics
AERO 510    Systems Engineering I
AERO 511    Systems Engineering II
AERO 512    Aerospace Vehicle Software Application
AERO 513    Applications of Unmanned Aircraft Systems
AERO 515    Continuum Mechanics
AERO 517    Multidisciplinary Design and Optimization
AERO 519    Fundamentals of Vehicle Dynamics and Control
AERO 522    Boundary-Layer Theory
AERO 523    Turbulence
AERO 525    Computational Fluid Dynamics
AERO 526    Spacecraft Thermal/Fluid Control
AERO 528    Laminar Flow Aircraft Development

AERO 532    Advanced Aerospace Composite Design
AERO 533    Finite Elements for Aerospace Structural Analysis
AERO 534    Aerospace Structural Dynamics Analysis
AERO 535    Advanced Aerospace Structural Analysis
AERO 540    Elements of Rocket Propulsion
AERO 541    Air Breathing Propulsion
AERO 551    Global Positioning Satellite Navigation Systems
AERO 553    Advanced Control Theory
AERO 557    Advanced Orbital Mechanics
AERO 560    Advanced Spacecraft Dynamics and Control
AERO 561    Vehicle Integration and Testing
AERO 562    Space Operations
AERO 565    Advanced Topics in Aircraft Design
AERO 566    Advanced Topics in Spacecraft Design
AERO 567    Launch Vehicle and Missile Design
AERO 568    Aerodynamic Research and Development I
AERO 569    Aerodynamic Research and Development II
AERO 570    Selected Advanced Topics 2
AERO 571    Selected Advanced Topics Laboratory 2

Total units 41

1 Consultation with advisor is recommended prior to selecting approved electives; bear in mind your selections may impact pursuit of postbaccalaureate studies and/or goals.

2 Require a petition.