## Schedule of Classes – Spring 2025 (updated 11/1/2024)

## **Applied Science and Technology**

• Select any Mech Eng 200 level course offered in spring 2025

#### Advanced Energy Technology

- Mech Eng 235 (4 units) Design of Microprocessor-Based Mechanical Systems
- Mech Eng 246 (3 units) Advanced Energy Conversion Principles
- Mech Eng 250A (3 units) Advanced Conductive and Radiative Transport
- Mech Eng 250B (3 units) Advanced Convective Transport and Computational Methods

#### **Aerospace Engineering**

- Mech Eng 227 (3 units) Mechanical Behavior of Composite Materials
- Mech Eng C231B / El Eng C220C (3 units)- Experiential Advanced Control Design II
- Mech Eng 260B (3 units) Advanced Fluid Mechanics II
- Mech Eng 262 (3 units) Hydrodynamic Stability and Instability (TENTATIVE)
- Mech Eng 263Z (3 units) Engineering Aerodynamics
- Mech Eng 280B (3 units) Finite Element Methods in Nonlinear Continua
- Mech Eng 287 (3 units) Graduate Introduction to Continuum Mechanics
- Mech Eng 292I (3 units) Flight Vehicle Structures and Aeroelasticity

#### **BioMechanics**

- Mech Eng C214 (3 units) Advanced Tissue Mechanics
- Mech Eng C225 (4 units) Deformation and Fracture of Engineering Materials

# Control of Robotic and Autonomous Systems (Formerly Experimental Advanced Control Systems Design)

- Mech Eng C231B / El Eng C220C (3 units)- Experiential Advanced Control Design II
- Mech Eng 233 (3 units)- Advanced Control Systems II
- Mech Eng 235 (4 units) Design of Microprocessor-Based Mechanical Systems
- Mech Eng 236C (4 units) Vehicle Dynamics & Control
- Mech Eng 276DS (4 units) Statistics and Data Science for Engineers (NEW)

#### **Fluids and Ocean**

- Mech Eng 260B (3 units) Advanced Fluid Mechanics II
- Mech Eng 262 (3 units) Hydrodynamic Stability and Instability (TENTATIVE)
- Mech Eng 263Z (3 units) Engineering Aerodynamics
- Mech Eng 292K (3 unit) Advanced Special Topics in Ocean "Mechanics of Offshore Systems"

### MEMS/Nano

- Mech Eng 218N (3 units) Introduction to Nanotechnology and Nanoscience
- Mech Eng C231B / El Eng C220C (3 units)- Experiential Advanced Control Design II
- Mech Eng 235 (4 units) Design of Microprocessor-Based Mechanical Systems

#### **Mechanics and Dynamics**

- Mech Eng 221 (3 units) Graduate Introduction to Lean Manufacturing Systems
- Mech Eng 227 (3 units) Mechanical Behavior of Composite Materials
- Mech Eng 273 (3 units) Oscillations in Linear Systems
- Mech Eng C279 (3 units) Statistical Mechanics of Elasticity
- Mech Eng 280B (3 units) Finite Element Methods in Nonlinear Continua

#### Modeling and Simulation of Advanced Manufacturing Processes

- Mech Eng 221 (3 units) Graduate Introduction to Lean Manufacturing Systems
- Mech Eng C225 (4 units) Deformation and Fracture of Engineering Materials
- Mech Eng 280B (3 units) Finite Element Methods in Nonlinear Continua

#### **Product Design**

- Mech Eng 227 (3 units) Mechanical Behavior of Composite Materials
- Mech Eng C231B / El Eng C220C (3 units)- Experiential Advanced Control Design II
- Mech Eng 292C (3 units) Advanced Product Development
- Mech Eng 235 (4 units) Design of Microprocessor-Based Mechanical Systems

## **Sports Engineering**

- Mech Eng 227 (3 units) Mechanical Behavior of Composite Materials
- Mech Eng C214 (3 units) Advanced Tissue Mechanics
- Mech Eng C225 (4 units) Deformation and Fracture of Engineering Materials
- Mech Eng 235 (4 units) Design of Microprocessor-Based Mechanical Systems