

# **Fall 2025 ME Career Gateway Electives**

#### **Energy Systems Engineering**

- REQUIRED: ME 343: Thermal Fluid Systems
- ME 337C: Introduction to Nuclear Power Systems

# **Nuclear & Radiation Engineering**

- ME 336P: Concepts in Nuclear & Radiation Engineering
- ME 337C: Introduction to Nuclear Power Systems
- ME 337F: Nuclear Environmental Protection

## **Advanced Materials Engineering**

- REQUIRED: ME 336: Materials Processing
- REQUIRED: ME 378K: Mechanical Behavior of Materials
- ME 350: Machine Tool Operations for Engineers

## **Automotive & Vehicle Systems Engineering**

• ME 379N: Engineering Acoustics

## **Design & Manufacturing**

- ME 336: Materials Processing
- ME 350: Machine Tool Operations for Engineers
- ME 368C: Additive Manufacturing
- ME 371D: Medical Device Design & Manufacturing
- ME 372C: Theory & Design of Mechanical Measurement
- \*\* ES 277: Humanitarian Product Design (2 semesters)
- \*\* ES 277K+L: Projects with Underserved Communities

## **Dynamic, Vibrations, Acoustics & Controls**

- ME 348E/ME 392Q.6: Advanced Mechatronics I
- ME 364L: Automatic Control System Design
- ME 372C: Theory & Design of Mechanical Measurement

## **Industrial Engineering & Management**

• ME 369P: Programming for Engineers

# **Biomedical & Biomechanical Engineering**

- ME 354M: Biomechanics of Human Movement
- ME 371D: Medical Device Design & Manufacturing

## **Humanitarian Engineering**

- ME 337F: Nuclear Environmental Protection
- ME 354M: Biomechanics of Human Movement
- ME 371D: Medical Device Design & Manufacturing
- ME 378F: Enhanc Sustablty Thru Tribology
- \*\* ES 277: Humanitarian Product Design (2 semesters)
- \*\* ES 277K+L: Projects with Underserved Communities

## **Robotics & Mechatronics**

- REQUIRED ROBOTICS COURSES:
  - O NO ROBOTICS COURSES OFFERED FALL 2025
- REQUIRED MECHATRONICS COURSE:
  - o ME 348E/ME 392Q.6: Advanced Mechatronics I
- ELECTIVES (max 6 hours allowed):
  - ME 364L: Automatic Control System Design
  - ME 369P: Application Programming for Engineers

## **Sustainable Engineering**

- ME 336P Concepts in Nuclear and Radiation Engineering
- ME 337F Nuclear Environmental Protection
- ME 378F Enhancing Sustainable Tribology

## **Custom Track ONLY**

• ME 379M – Qualitative Research Methods in ENGR

<sup>~</sup>Updated 03/03/2025~

<sup>\*\*</sup>Requires application and admission