

School of Engineering - Course Catalog (Fall 2025)

Department Overview:

The School of Engineering fosters problem-solving skills and multidisciplinary design, preparing students for careers in industry, research, and development across electrical, mechanical, and systems engineering domains.

Course Listings

Course Code: ENGR 101

Course Title: Introduction to Engineering

Credits: 3

Description: Survey of engineering disciplines, professional practice, and design fundamentals.

Instructor: Dr. Karen Liu

Schedule: Mon/Wed 09:00 AM - 10:15 AM

Course Code: ENGR 102

Course Title: Engineering Mathematics

Credits: 4

Description: Calculus and linear algebra applications tailored for engineering problems.

Prerequisites: High school calculus

Instructor: Dr. Marco Rossi

Schedule: Tue/Thu 10:30 AM - 11:45 AM

Course Code: ENGR 103

Course Title: Materials & Mechanics

Credits: 3

Description: Basic material properties and mechanics of solids with laboratory demonstrations.

Instructor: Prof. Elena Petrova

Schedule: Fri 01:00 PM - 03:00 PM

Course Code: ENGR 201

Course Title: Statics and Dynamics

Credits: 3

Description: Analysis of forces on bodies at rest and in motion, vector methods in mechanics.

Prerequisites: ENGR 102

Instructor: Dr. Samuel Park

Schedule: Mon/Wed 11:00 AM - 12:15 PM

Course Code: ENGR 202

Course Title: Circuits and Electronics

Credits: 3

Description: Fundamentals of electrical circuits, semiconductors, and basic circuit analysis.

Prerequisites: ENGR 101

Instructor: Dr. Priya Nair
Schedule: Tue/Thu 01:00 PM - 02:15 PM

Course Code: ENGR 203
Course Title: Thermodynamics
Credits: 3
Description: Energy systems, laws of thermodynamics, and engineering applications.
Prerequisites: ENGR 102
Instructor: Dr. Omar Hassan
Schedule: Fri 09:00 AM - 10:30 AM

Course Code: ENGR 301
Course Title: Control Systems
Credits: 3
Description: Feedback system design, stability analysis, and controller implementation.
Prerequisites: ENGR 201
Instructor: Dr. Amina Farah
Schedule: Mon/Wed 02:30 PM - 03:45 PM

Course Code: ENGR 302
Course Title: Microprocessors and Embedded Systems
Credits: 3
Description: Microprocessor architecture, low-level programming, and embedded applications.
Prerequisites: ENGR 103
Instructor: Prof. Daniel Ortiz
Schedule: Tue/Thu 03:00 PM - 04:15 PM

Course Code: ENGR 303
Course Title: Signals and Systems
Credits: 3
Description: Time and frequency analysis of signals, linear systems, and transform methods.
Prerequisites: ENGR 201
Instructor: Dr. Nina Gupta
Schedule: Fri 11:00 AM - 12:30 PM