Salient Features

⇒ An important educational aspect of this program is its focus on development of theoretical and practical/hands-on skills.

⇒ Every graduate goes through integral laboratory component/activities in all technical courses designed for this major.

⇒ The curriculum incorporates advanced/latest technology in Automation, Robotics, Controls, Machine Vision, Instrumentation and Sensors, Computing and Processing etc.

⇒ An internship in industry and capstone project to solve real-world problems are part of this program.

⇒ Graduating students are qualified with strong analytical, theoretical and practical/hands-on skills for future.
Program Overview

The Robotics and Mechatronics Engineering Technology (RMET) program of study will require undergraduate work including senior capstone project requirement and an internship in industry. RMET program major requirements has introductory to advance Robotics and Mechatronics courses that prepare students in engineering mechanics, modeling and simulation, electric machines, electronics, control systems, programmable controllers, embedded systems design, data acquisition & processing, fluid power systems, mechanisms for automation, machine vision, instrumentation and sensors, computing and processing etc.

Career Outcomes

Graduates can expect to be qualified for wide variety of job opportunities, including, but not limited to:

- Robotics Engineer
- Controls Engineer
- Automation Engineer
- Manufacturing Engineer
- Control Systems Programmer
- Instrumentation Specialist

Course Requirements

ROBO 110  Intro to Robotics and Mechatronics
ROBO 220  Parametric Modeling and Simulation
ROBO 240  Electric Machines
ROBO 260  Programmable Controllers
ROBO 280  Embedded Systems Design
ROBO 310  Data Acquisition & Processing
ROBO 330  Fluid Power Systems
ROBO 350  Applied Control Systems I
ROBO 370  Mechanisms for Automation
ROBO 380  Mechatronics
ROBO 460  Applied Control Systems II
ROBO 470  Robotics Systems Engr. & Analysis
ROBO 480  Industrial Robotics
ROBO 496  Industrial Internship
ROBO 497  Capstone: Senior Project
CET 236  Circuits Analysis
CET 243  Analog I
CET 363  Digital Circuits
ET 251  Applied Mechanics I - Statics
ET 252  Applied Mechanics II - Dynamics
ET 357  Strength of Materials
ETM 358  Applied Thermodynamics
MATH 221  Calculus II
MATH226  Linear Algebra
MATH 355  Intro to Differential Equations
MFG 216  Manufacturing Processes

General Education Requirements

Study Area I: Arts & Humanities
Study Area II: Social Sciences
Study Area III: Behavioral Sciences
Study Area IV: Natural Sciences
Skill Area I: Communication Skills
Skill Area II: Mathematics
Skill Area III: Foreign Language
Skill Area IV: University Requirement