

General Education

Foundations: (13 Credits)

Oral Communication (3 Credits)

Written Communication (3 Credits)

ENGL 1200 College Composition

Quantitative Reasoning (4 Credits)

MATH 2410 Analytical Geometry and Calculus I

Technological Literacy (3 Credits)

CMSC 1380 Introduction to Programming in Python

Discoveries: (Credits 28)

Art/Humanities (9 Credits)

ENGL 2230 Writing and the Natural Sciences

Social Sciences (9 Credits)

Natural Sciences & Technology (10 Credits)

PHYS 1500 General Physics I Lecture

MATH 2420 Analytical Geometry and Calculus II

Program Elective: (3 Credits)

ENGT 1100 Introduction to Engineering Technology

Competencies:

Quantitative Applications

MECH 4200 Machine Design and Kinematics

Applied Methodologies

MECH 3100 Principles of Automatic Control

Intercultural Fluency

MECH 4910 Senior Project Implementation

Ethical Reasoning

MECH 4900 Senior Project Design

Information Literacy

MECH 4900 Senior Project Design

Writing Intensive

MECH 3100 Principles of Automatic Control

ENGL 2230 Writing and the Natural Sciences

Keystone Experience

MECH 4910 Senior Project Implementation

Program Requirements

Required Major Courses: (66 Credits)

ECET 1110 Electric Circuits I

ECET 2160 Electric Circuits II

ECET 2535 Digital Electronics Design

ECET 3325 Introduction to Electric Power

PHYS 1510 General Physics I Laboratory

MECH 2000 Manufacturing Processes

MECH 2200 Statics

MECH 2300 Fundamentals of Programmable Logic Controllers

MECH 2400 Engineering Graphics and Computer Aided Design

MECH 3100 Principles of Automatic Control

MECH 3200 Dynamics

MECH 3210 Fluid Power

MECH 3220 Properties and Strength of Materials

MECH 3300 Advanced PLCs and Integration

MECH 3500 Numerical Solution of Engineering Problems

MECH 4000 Computer Integrated Manufacturing

MECH 4100 Process Control

MECH 4200 Machine Design and Kinematics

MECH 4900 Senior Project Design

MECH 4910 Senior Project Implementation

PHYS 1600 & PHYS 1610 General Physics II Lecture and Lab

Major Electives: (3 Credits)

Choose one of the below courses:

CMSC 3380 Python, CMIS 3250 CISCO CCNA 1, CMIS 3600 Systems Project Management, ECET 2570 Introduction to Microprocessors, ITE 3050 OSHA Industrial Safety, ITE 3750 Principles of Production, ITE 3850 Industrial Cost Estimating, ITE 4200 Production Analysis, ITE 4610 Supply Chain Fundamentals, ITE 4710 Project Management, MECH 4950 Mechatronics Internship, ROBO 2100 Robotics Teaming

Free Electives: (7 Credits)

Suggested Four Year Course Sequence

Year 1

Fall Semester

ENGT 1100 Introduction to Engineering Technology
Discoveries: Arts and Humanities
MATH 2410 Analytical Geometry and Calculus I
ENGL 1200 College Composition
CMSC 1380 Intro. To Programming in Python

Spring Semester

ECET 1110 Electric Circuits I
MATH 2420 Analytical Geometry and Calculus II
MECH 2400 Engineering Graphics and Computer Aided Design
ENGL 2230 Writing and the Natural Sciences
Foundations: Oral Communication

Year 3

Fall Semester

MECH 2300 Fund. Of PLCs
MECH 3200 Dynamics
MECH 3500 Numerical Solution of Engineering Problems
Discoveries: Natural Sciences and Technology
Discoveries: Social Sciences

Spring Semester

MECH 3210 Fluid Power
MECH 3220 Properties and Strength of Materials
MECH 3300 Adv. PLCs and Integration
Discoveries: Arts and Humanities
Discoveries: Social Sciences

Year 2

Fall Semester

ECET 2535 Digital Electronics Design
MECH 2000 Manufacturing Processes
PHYS 1500 General Physics I
PHYS 1510 General Physics I Lab
ECET 2160 Electric Circuits II

Spring Semester

MECH 2200 Statics
MECH 3100 Principles of Automatic Control
PHYS 1600 General Physics II
PHYS 1610 General Physics II Lab
Discoveries: Social Sciences
Suggested: ECON 2100 Principles of Microeconomics
Free Elective

Year 4

Fall Semester

MECH 4100 Process Control
MECH 4200 Machine Design and Kinematics
MECH 4900 Senior Project Design
ECET 3325 Introduction to Electric Power

Spring Semester

MECH 4000 Computer-Integrated Manufacturing
MECH 4910 Senior Project Implementation
Major Elective
Free Elective

