Engineering Science: Electrical Engineering  AS Degree

Pathways Common Core:
This program has a waiver to require specific courses in the Common Core.

A. Required Core: 14 credits

**English: 6 credits**
ENG101 English Composition I 3
(ENA101 or ENC101 depending on placement scores)
ENG259 Technical Writing 3

**Mathematical and Quantitative Reasoning: 4 credits**
MAT201 Calculus 4

**Life and Physical Sciences: 4 credits**
SCP231 General Physics I 4

B. Flexible Core: 20 credits
Select six courses from the five flexible core categories. Note: Student can select only two courses from any one discipline. Only one course can be selected from a category with the exception of Scientific World.

- World Cultures and Global Issues
- US Experience in its Diversity
- Creative Expression
- Individual and Society
- Scientific World – Students are required to select MAT202 Calculus II and SCP232 General Physics II.

Students are advised to select one Urban Study course to complete college requirement.

To complete the degree requirements from the Flexible Core, students are advised to select courses from the recommended course selections listed in the program handbook.

Program Core: 28 credits

**Math Engineering & Computer Science: 15 credits**
MAT203 Calculus III 4
MAT204 Differential Equations 4
MAT212 Linear Algebra & Vector Analysis 3
MAT221 Probability 4

**Electrical Engineering Core: 9 credits**
Freshman Seminar 0
Coop-Prep for Engineering Students 0
MAE101 Engineering Lab/Internship I 1
MAE103 Engineering LabII/Internship 2
MAE213 Electrical Circuits 3
MAE219 Thermodynamics 3

**Natural Sciences: 4 credits**
SCC201 Fundamentals of Chemistry I 4

Total credits: 62