Engineering Science: Mechanical 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  
(ENA101 or ENC101 depending on placement scores)  
ENG259 Technical Writing  

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

**Life and Physical Sciences: 4 credits**
SCC201 Fundamentals of Chemistry I  

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 SCC202 Fundamentals of Chemistry 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: 29 credits

**Math Engineering & Computer Science: 11 credits**
MAT203 Calculus III  
MAT204 Differential Equations  
MAT212 Linear Algebra & Vector Analysis  

**Mechanical Engineering Core: 10 credits**
MAE101 Engineering Lab I/Internship I  
MAE211 Engineering Mechanics: Statistics  
MAE213 Electrical Circuits  
MAE219 Thermodynamics  

**Natural Sciences: 8 credits**
SCP231 General Physics I  
SCP232 General Physics II  

Total credits: 63