# Mechanical Engineering

## Mathematics (16 units)
- MATH 125: Calculus I*
- MATH 126 or MATH 129: Calculus II*
- MATH 226 or MATH 229: Calculus III
- MATH 245: Mathematics of Phys. and Engr.

## Physics (12 units)
- PHYS 151L: Mechanics and Thermodynamics
- PHYS 152L: Electricity and Magnetism
- PHYS 153L: Optics and Modern Physics

## Chemistry/Materials Science (4 units)
- CHEM 105aL: General Chemistry*
- MASC 110L: Materials Science

## General Education (32 units)
- GE A: The Arts (1 course)*
- GE B: Humanistic Inquiry (2 courses)
- GE C: Social Analysis (2 courses)
- GE D: Life Sciences (1 course)*
- GE E: Physical Sciences (1 course)*
- GE F: Quantitative Reasoning (1 course)*
- GE G,H: Global Perspectives (2 courses)*
- GESM: General Education Seminar (1 course)

## Writing (8 units)
- WRIT 150: Writing and Critical Reasoning
- WRIT 340: Advanced Writing

## Engineering (68 units)
- AME 101L (MATH 125): Introduction to Mechanical Engineering
- AME 201: Statics
- AME 204: Mechanics of Materials & Structures
- AME 208: Mathematical Methods in Engineering
- AME 301: Dynamics
- AME 302a: Systems
- AME 308: Computer-Aided Engineering
- AME 309: Dynamics of Fluids
- AME 310: Engineering Thermodynamics I
- AME 341aL: Measurement & Instrumentation Laboratory
- AME 341bL: Measurement & Instrumentation Laboratory
- AME 431: Heat Transfer
- AME 441aL: Senior Projects Laboratory
- AME CAPSTONE ELECTIVE
- ENGR 102: Engineering Freshman Academy
- ITP 168: Introduction to MATLAB
- MASC 310L: Materials Behavior & Processing

## Special Notes
- Courses with the * symbol may be satisfied with AP, IB or A-Level exams. See page 18 for more information.
- GESM#: GESM can be taken from GE categories: A, B, C, or D. Courses listed in the guide are options for a four-year course plan.
- GE: Engineering students are encouraged to satisfy GE-G and GE-H with a course that also satisfies a Core Literacy. GE-H may be satisfied by AP/IB. Additionally, your GESM course should be taken in categories A, B, C, or D only. See page 17 for more information and consult your advisor for detailed assistance.
- PHYSICS REQUIREMENT: PHYS 161-163 and PHYS 171-173 are acceptable towards this requirement.
- AME CAPSTONE: See academic advisor for approved list of courses.
- TECHNICAL ELECTIVES: Any upper-division course in engineering, chemistry, physics or mathematics.
- OPTIONAL ELECTIVES: Consult with your academic advisor to explore optional elective courses. These courses are not required.