A SUGGESTED COURSE PLAN FOR:
MECHANICAL (PETROLEUM)

### FIRST YEAR

**FALL SEMESTER**
- MATH 125: Calculus I
- CHEM 105aL or MASC 110L
- ENGR 102

**SPRING SEMESTER**
- WRIT 150
- MATH 126
- PHYS 151L
- ITP 168

### SECOND YEAR

**FALL SEMESTER**
- AME 201: Statics
- MATH 226
- PHYS 152L
- AME 204 or CE 205

**SPRING SEMESTER**
- AME 204 or CE 205
- MATH 245
- PHYS 153L
- WRIT 340

### THIRD YEAR

**FALL SEMESTER**
- AME 301
- PTE 463
- MASC 310
- AME 341aL

**SPRING SEMESTER**
- AME 302
- AME 308
- AME 309
- PTE 464

### FOURTH YEAR

**FALL SEMESTER**
- PTE 461
- PTE 465
- AME 408
- AME 441aL

**SPRING SEMESTER**
- AME 331
- AME 409
- TECHNICAL ELECTIVE

### MATHEMATICS (16 UNITS)
- MATH 125: Calculus I
- MATH 126 or 129: Calculus II
- MATH 226 or 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 (7 UNITS)
- WRIT 150: Writing and Critical Reasoning
- WRIT 340: Advanced Writing

### ENGINEERING (66 UNITS)
- AME 201: Statics
- AME 204: Strength of Materials
- AME 301: Dynamics
- AME 303: Dynamic Systems
- AME 308: Comp.-Aided Analysis for Design
- AME 310: Engineering Thermodynamics I
- AME 331: Heat Transfer
- AME 341aL: Mechatronics Laboratory I
- AME 341bL: Mechatronics Laboratory II
- AME 408: Comp.-Aided Design of Mech Systems
- AME 409: Senior Design Project
- AME 441aL: Senior Projects Laboratory
- ENGR 102: Engineering Freshman Academy
- ITP 168: Introduction to MATLAB
- PTE 461: Formation Evaluation
- PTE 463L: Intro. to Transport Processing in Porous Media
- PTE 464L: Petroleum Reservoir Engineering
- PTE 465L: Drilling Technology
- MASC 310: Mechanical Behavior of Materials
- TECHNICAL ELECTIVE

### SPECIAL NOTES
- Courses with this symbol may be satisfied with AP, IB or A-Level exams. See page 17 for more information.

- 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 exam. Additionally, your GESM course should be taken in categories A, B, C, or D only. See pp. 16-17 for more information and consult your advisor for detailed assistance.

- OPTIONAL ELECTIVES: Consult with your academic advisor to explore optional elective courses. These courses are not required.

- TECHNICAL ELECTIVES: Any upper-division course in engineering, Chemistry, Physics, and Mathematics. See major advisor for exceptions/substitutions.