MECHANICAL ENGINEERING
128 CREDIT HOURS REQUIRED FOR GRADUATION

Information appearing in this guide is subject to change. Please talk with your departmental adviser about degree requirements on a regular basis.

freshman year – fall

ENGL 101 Composition .................................................... 3  
MATH 121 Calculus I .......................................................... 5  
ME 228 Computer Graphics ............................................. 3  
CHEM 150 Chemistry for Engineers ................................. 5  
TOTAL HOURS ......................................................... 16

freshman year – spring

ENGL 102 Critical Reading & Writing ............................... 3  
MATH 122 Calculus II ...................................................... 5  
ME 208 Intro to Digital Comp. Methods in Mech. Engr. ...... 3  
PHSX 211 General Physics ............................................. 4  
PHSX 216 General Physics I Laboratory ............................. 1  
TOTAL HOURS ......................................................... 16

sophomore year – fall

MATH 220 Applied Differential Equations ....................... 3  
MATH 290 Elementary Linear Algebra ............................. 2  
ME 211 Statics & Intro. to Mechanics ............................... 3  
ME 312 Basic Engineering Thermodynamics .................... 3  
PHSX 212 General Physics II ........................................ 3  
PHSX 236 General Physics II Laboratory .......................... 1  
TOTAL HOURS ......................................................... 15

sophomore year – spring

COMS 130 Speaker-Audience Communication .................. 3  
EECS 316 Circuits, Electronics & Instrumentation ............. 3  
EECS 318 Circuits & Electronics Laboratory ..................... 1  
ME 311 Mechanics of Materials ..................................... 3  
ME 320 Dynamics ..................................................... 3  
ME 321 Dynamics Simulations ....................................... 1  
ME 510 Fluid Mechanics ............................................... 3  
TOTAL HOURS ......................................................... 17

junior year – fall

MATH 365 Elementary Statistics ..................................... 3  
ME 306 Science of Materials ......................................... 3  
ME 307 Engineering Materials Lab .................................. 2  
ME 412 Thermal Systems ............................................. 3  
ME 508 Numerical Analysis ......................................... 3  
ME 612 Heat Transfer .................................................. 3  
TOTAL HOURS ......................................................... 17

junior year – spring

ECON Economics Elective * ............................................. 3  
ME 501 Mechanical Engineering Design Process .......... 2  
ME 628 Mechanical Design ......................................... 3  
ME 661 Finite Element Method for Stress Analysis ....... 3  
PHIL Ethics Elective ** ................................................. 3  
TOTAL HOURS ......................................................... 14

senior year – fall

ME 455 Mechanical Measurements & Experimentation .... 4  
ME 682 System Dynamics & Control Systems ............... 3  
General Elective **** ................................................ 3  
KU Core Elective † .................................................... 1  
TOTAL HOURS ......................................................... 17-18

senior year – spring

ME Capstone Design Option *** ..................................... 2-3  
ME Advanced Engineering Elective ............................... 3  
General Electives **** ................................................ 4  
KU Core Electives † .................................................... 6  
TOTAL HOURS ......................................................... 15-16

Biomechanics Concentration

A student pursuing a biomechanics concentration chooses electives from the biomechanics courses offered. These electives are:
1) One of the following: BIOL 150/151, BIOL 152/153, BIOL 240, or BIOL 246;
2) ME 633;
3) ME 643; and
4) One of the following: ME 750, ME 751, ME 752, ME 753, ME 754, ME 755, ME 756, ME 757, ME 760, or ME 765.
Consult the Department of Mechanical Engineering for more information.

Premeedical Plan

143 credit hours
Chemistry – Take CHEM 130 and CHEM 135 instead of Chem 150;
Advanced Chemistry – CHEM 330, CHEM 331, CHEM 335, CHEM 336;
Biological Science – BIOL 150, BIOL 152;
Biochemistry I, BIOL 636, is required for application to some medical school programs.

Combined Mechanical Engineering and Business

A student who wants to combine business with engineering may enroll in a program leading to a bachelor's degree in both fields. Full-time enrollment and careful planning enables a student to earn the two degrees in five years. Consult the Department of Mechanical Engineering for more information.