

ENGINEERING GENERAL (EGN)

EGN 1007 Engineering Concepts and Methodologies

Credit Hours: 1

Lab Fee: Yes

This course introduces students to the use of computer and application software for solving engineering problems. Students also explore engineering professionalism, ethics and teamwork to solve and present solutions to engineering problems.

EGN 2312 Engineering Analysis - Statics

Credit Hours: 3

Prerequisites: MAC 2311 and PHY 2048 - both courses with a grade of "C" or higher

This course covers the fundamental concepts of mechanics, including resultants of force systems, freebody diagrams, equilibrium of rigid bodies, analysis of structures, centroids, moments of area and inertia.

EGN 2322 Engineering Analysis - Dynamics

Credit Hours: 3

Prerequisites: EGN 2312 and MAC 2313- both courses with a grade of "C" or higher

Corequisites: MAP 2302

This course covers calculations involving particles and rigid bodies in motion. Topics covered include mass and acceleration, work and energy, impulse and momentum.

EGN 2440 Probability and Statistics for Engineers

Credit Hours: 3

Prerequisites: MAC 2312 with a grade of "C" or higher or consent of instructor

This course covers axioms of probability, measures of location and dispersion, sampling and sampling distributions, estimations and tests of hypotheses, probability distributions, combinatorial and geometrical probability, and engineering applications of those concepts.