

COURSES

ENGINEERING

EGR-150 Intro to Engineering

Lec 1 Lab 2 Clinic 0 Credit 2

This course is an overview of the engineering profession. Topics include goal setting and career assessment, ethics, public safety, the engineering method and design process, written and oral communication, interpersonal skills and team building, and computer applications. Upon completion, students should be able to understand the engineering process, the engineering profession, and utilize college resources to meet their educational goals.

Co-Requisites: None

Pre-Requisites: None

EGR-220 Engineering Statics

Lec 3 Lab 0 Clinic 0 Credit 3

This course introduces the concepts of engineering based on forces in equilibrium. Topics include concentrated forces, distributed forces, forces due to friction, and inertia as they apply to machines, structures, and systems. Upon completion, students should be able to solve problems which require the ability to analyze systems of forces in static equilibrium.

Co-Requisites: MAT-272

Pre-Requisites: PHY-251

EGR-225 Engineering Dynamics

Lec 3 Lab 0 Clinic 0 Credit 3

This course introduces the concepts of engineering based on the analysis of motion in Cartesian, cylindrical, and spherical coordinate systems. Topics include the two and three dimensional motion of particles and rigid bodies, the forces associated with that motion, and relative motion between two coordinate systems. Upon completion, students should be able to solve problems which require the ability to analyze the motion and forces involved in a dynamic system.

Co-Requisites: MAT-273

Pre-Requisites: EGR-220