

# COURSES

## ENGINEERING

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### **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