

**ENGINEERING
(NATURAL SCIENCES DIVISION)**

ENGR-105 ENGINEERING GRAPHICS (2 cr.) Engineering Graphics emphasizes computer aided graphical analysis and transmission of information. Study of computer designing and drafting systems is presented using various CAD software applications with specialization in the AUTOCAD program. Included will be freehand and computer generated engineering graphics, 2D, and 3D graphics in orthographic and pictorial projections in sections and various views, graphical analysis of data, and measurements dimensioning. Course Fee.

ENGR-120 ENGINEERING FUNDAMENTAL ANALYSIS & DESIGN (3 cr.) This course provides both an introduction to the engineering profession through design projects, research, and guest speakers along with development of college success skills for an engineering academic program including time management and study skills, critical thinking, problem solving skills, communication skills, ethics, and an introduction to basic computer programs.

ENGR-210 ENGINEERING STATICS (3 cr.) Engineering application of the principles of mechanics, force systems, equilibrium, structures, distributed forces, moments of inertia, and friction with an emphasis on problem solving.
Pre-requisite: Grade of "C" or better in MATH 170. Course Fee.

ENGR-220 ENGINEERING DYNAMICS (3 cr.) Engineering application of principles of particle and rigid body kinematics, force-mass-acceleration relations, work and energy, impulse and momentum, and moments of inertia and mass with an emphasis on problem solving. Pre-requisite: Grade of "C" or better in Math 175 and PHYS 211. Course Fee.

ENGR-292 SPECIAL TOPICS IN ENGINEERING (3 cr.)