

# Drafting & Graphing

## DRA 130 Intro to Computer Aided Design (3 credit, 3 lecture, 0 lab)

An introduction to Computer Aided Design. Including programs and techniques used to develop designs and drawings via drafting software.

## DRA 133 3-D Computer Aided Design (3 credit, 3 lecture, 0 lab)

A continuation of Computer Aided Design involving actual three-dimensional design. **Pre-Requisite:** DRA 130 or instructor consent.

## DRA 134 Rendering 3-D Models (3 credit, 3 lecture, 0 lab)

Rendering 3-D models transforms conventional three-dimensional models into textured, colored and shaded three-dimensional shapes. **Pre-Requisite:** DRA 130 or DRA 136, DRA 133 or DRA 135, GRAP 121

## DRA 135 3-D Modeling (3 credit, 3 lecture, 0 lab)

An introduction to Computer Aided Design involving the use of Solidworks to produce three-dimensional models.

## DRA 136 2-D Drafting (3 credit, 3 lecture, 0 lab)

A continuation of Computer Aided Design including programs and techniques used to develop 2-D designs and drawings via Solidworks. **Pre-Requisite:** DRA 135 or concurrent enrollment.

## GRAP 121 Engineering Graphics I (3 credit, 2 lecture, 4 lab)

Introduction to engineering and design and graphics, including sketching, computer aided drafting, dimensioning, tolerancing, multi-view orthographic representations, auxiliary views, section views and working drawings. Students are required to use CAD in this course.