

NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY

CAD 202 - COMPUTER AIDED DRAFTING AND DESIGN II (4 CR.)

Course Description

Teaches production drawings and advanced operations in computer aided drafting. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

General Course Purpose

The course purpose is to build upon the student's knowledge of technical drawings in the fields of architecture and/or engineering using Computer Aided Drafting and Design (CAD). Skills acquired in previous drafting classes will be transferred to the computer to prepare the student for employment in the drafting and design fields. The course will use CAD system extensively and will provide drafting students hands-on skills and experiences in generating design drawings using a CAD system.

Course Prerequisites/Corequisites

Prerequisite: CAD 201

Course Objectives

- Upon completion of the course the student will be able to:
- Use advanced CAD functions to generate technical drawings
- Set-up drawings for plotting using both Model and Paper Space features
- Incorporate embedded part information using Attributes
- Generate and organized linked multiple drawings using external reference features
- Create 3D Surface and Solid Models
- Create and use different coordinate system (World and User) to facilitate 3D modeling
- Generate and plot 3D models

Major Topics to Be Included

- View ports and paper space
- Attributes and their application, editing attributes
- External Reference and its application
- Introduction to AutoCAD 3D
- Viewing 3D drawings
- User Coordinate System
- Creating 3D surface and solid models
- Rendering
- Plotting 3D Models
- Overview of Customization