

**J. Sargeant Reynolds Community College  
Course Content Summary**

**Course Prefix and Number:** DRF 232

**Credits:** 3

**Course Title:** Computer-Aided Drafting II

**Course Description:** Teaches advanced operations in computer-aided-drafting.  
Prerequisite: DRF 231. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

**General Course Purpose:** The course addresses intermediate to advanced level concepts in computer-aided design technology including an introduction to 3D graphics. Attribute definition and extraction are covered as well as 3D drawings. Course required for the Contemporary Technology for Design and Building Construction Management specializations of the Architectural and Engineering Technology AAS.

**Course Prerequisites/Co requisites:**

Prerequisite: DRF 231

**Student Learning Outcomes:**

Upon completing the course, the student will be able to

- a. Alter the basic dimension system of the CAD program to achieve special characteristics when dimensioning;
- b. Create and export non-graphic data (attributes) from a CAD drawing to outside applications;
- c. Create 3-dimensional representations of design solutions;
- d. Execute light and shadow renderings to achieve “realism” in 3D models; and
- e. Create .avi animations from 3D modeling scenes.

**Major Topics to Be Included:**

- a. Customization of the dimension system in CAD
- b. Creation and use of attributes in CAD
- c. Introduction to 3D drawing in CAD
- d. Animation creation

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