



## DRFT 2630

**Division:** Career and Technical Education

**Department:** Drafting Technology

**Course:** DRFT 2630

**Title:** CAD - TurboCAD

**Catalog Description:**

This is an introductory course to the application of TurboCAD in creating drawing files. This course provides a basic background to the commands, procedures, and practical application of TurboCAD operations in creating objects for working drawings.

**General Education Requirements:** N/A

**Semesters Offered:** TBA

**Credit/Time Requirement:** Credit: 2; Lecture: 1; Lab: 2

**Clock/Hour Requirements:** 45

**Offered for Non-Credit:** No

**Prerequisites:** DRFT 1310

**Corequisites:** None

**Justification:**

This course is approved by the program advisory committee.

**Student Learning Outcomes:**

Upon successful completion of the course, students will be able to:

- learn the basic concepts of the TurboCAD operating system
- know the basic TurboCAD commands and how to use them in setting up and creating drawings
- apply print and plot files from a drawing
- know how to edit and change drawings created with TurboCAD
- know how to create and insert different objects into drawings created with TurboCAD
- understand the principles of formatting objects
- learn how to customize the drawing desktop for personal use
- understand and apply the principle of geometric editing to objects drawn
- know how to use menu displays and dialog boxes in TurboCAD
- work with multiple displays and dialog boxes.

**Content:**

Course objectives will be achieved by providing students with instructional and hands-on experiences in the following areas:

- getting started - understanding the basic principles of TurboCAD

- learning the basic drawing features
- learning about file management and printing and plotting drawings
- editing objects
- understanding the drawing environment
- learning to manage the workplace
- creating and inserting objects in drawings
- using different formats in creating objects
- customizing the desktop and data management
- geometric editing
- option menus and dialog boxes
- working with multiple windows.

### **General Education Outcomes:**

2) Write clearly, informatively, and persuasively.

Students are required to complete descriptive term-sheets which provide information about the vocabulary and terminology used in this specific area. The descriptions are reviewed, graded, and returned to students for improvement.

6) Apply computational skills to a variety of contexts.

The field of drafting requires the combination of basic math, geometry, and algebra skills. Students will utilize these skills when producing drawings, cost estimates, and material lists.

8) Apply ethical reasoning to a variety of contexts.

The client-designer relationship requires an understanding of ethical behaviors in design and consultation. Draftsmen often work in teams where the individuals are each required to fulfill responsibilities under the direction of a team leader. This experience is modeled throughout the program.

### **Key Performance Indicators:**

#### **In class:**

- Students will demonstrate mastery of course competencies by completing assignments/projects, tests, and quizzes. Assignments/projects are worth 75%, tests are worth 15%, and quizzes are worth 10% of the final grade.

#### **Following Class:**

- Students will be able to demonstrate the ability to quickly adapt to TurboCAD software applications used in industry.

### **Representative Text and/or Supplies:**

- *TurboCAD*, current edition, IMSI Publishers.

**Optimum Class Size:** 12

**Maximum Class Size:** 20

**Signatures:**

I hereby submit this course syllabus:

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Craig Conder, ,

I hereby find this course consistent with the goals and resources of the Drafting Technology Department:

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Craig Conder, , , Chair

I hereby find this course consistent with the goals and resources of the Career and Technical Education Division:

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Michael P. Medley, MBA, Assistant Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

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Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

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Michelle Olsen, MLS, Campus Librarian (Richfield Campus)