

COURSE SYLLABUS

PO Box 1189 1042 W. Hamlet Avenue Hamlet, NC 28345 (910) 410-1700 www.richmondcc.edu

COURSE:	DFT 151	COMPUTER AIDED DRAFTING I	

HOURS: Lecture: <u>2</u> Lab/Shop: <u>3</u> Work Exp/Clinical: <u>0</u> Credits: <u>3</u>

COURSE DESCRIPTION:

This course introduces CAD software as a drawing tool. Topics include drawing, editing, file management, and plotting. Upon completion, students should be able to produce and plot a CAD drawing.

PREREQUISITE(S): DMA 010-030 or MAT 060 or MAT 003 or BSP 4003, DRE 097 or RED 080 or ENG 002 or BSP 4002 or ENG 111

COREQUISITE(S): None

TEXTBOOK(S) & OTHER SPECIAL REQUIREMENTS:

Open Educational Resources (OER) are listed in the course Moodle

STUDENT LEARNING OUTCOMES:

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

- 1. Use the in-house CAD software commands to draw 2-D and isometric drawings.
- 2. Use the in-house CAD software commands to Dimension 2-D and isometric drawings.
- 3. Use the in-house CAD software commands to edit 2-D and isometric drawings.
- 4. Use the in-house CAD software commands to save and manage all drawing files.
- 5. Apply the in-house CAD software commands and "Design Center" to draw 2-D electrical and electronic diagrams, and related isometric components and equipments.
- 6. Describe and draw 2-D and isometric drawings using the American National Standard Institute (ANSI), and the International Organization for Standardization (ISO).
- 7. Describe and dimension isometric drawings applying the ANSI and ISO drafting standards.
- 8. Produce and plot, using the in-house plotter/printer, 2-D and isometric drawings, and electrical/electronics diagrams in harmony with the ANSI and ISO scales and paper sizes.
- 9. Use the American dimensioning units system (English) and the International dimensioning units system (Metric) of the 2-D and isometric drawings.
- 10. Use the Internet to navigate through websites related to CAD applications, vendor's updated software releases, CAD related publications/ magazines, societies, and the American Design and Drafting Association (ADDA).
- 11. Collect and apply standard drafting practices, as part of the preparation process, for the National Certification Exam with ADDA.
- 12. Discuss the use the CAD software (written in 16 languages) in other countries and its impact on products drawings, design, manufacturing, employment, and the economy.

***Please refer to the online version of the Richmond Community College Program & Course Catalog and the Student Handbook for current academic and general information.