

COURSE SYLLABUS

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

COURSE:	DFT 152	COMPUTER AIDED DRAFTING II	

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 extended CAD applications. Emphasis is placed upon intermediate applications of CAD skills. Upon completion, students should be able to use extended CAD applications to generate and manage drawings.

PREREQUISITE(S): DFT 151

COREQUISITE(S): None

TEXTBOOK(S) & OTHER SPECIAL REQUIREMENTS:

To Be Determined

STUDENT LEARNING OUTCOMES:

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

- 1. Use the in-house CAD software to apply dimensioning and tolerance American Standard National Institute (ANSI), and the International Organization for Standardization (ISO) on 2-D and drawings of mechanical parts.
- 2. Use the in-house CAD software to draw the auxiliary views of inclined surfaces of 3-D and isometric drawings of mechanical parts. The goal is to show the true size and shape of those surfaces.
- 3. Use the in-house CAD software to draw different threads, fasteners, and springs in the English and Metric units.
- 4. Use the in-house CAD software to draw all types of welding symbols applied to 2-D, 3-D drawings, and riveted assemblies.
- 5. Apply the in-house CAD software commands to draw the needed orthographic views of 3-D and isometric drawings.
- 6. Describe and draw 2-D spur gears, cams profiles and drawings using the American National Standard Institute (ANSI), and the International Organization for Standardization (ISO).
- 7. Produce and plot, using the in-house plotter/printer, 2-D and isometric drawings, and in harmony with the ANSI and ISO scales and paper sizes.
- 8. 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.
- 9. Use the Internet to navigate through websites related to CAD applications, vendors' updated software releases, CAD related publications/ magazines, societies, and the
- 10. 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.

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