

**NorthWest Arkansas Community College
Business & Computer Information Division**

DRFT 2154-AutoCAD II (F, S)

Catalog Description:

This course is a continuation of DRFT 2114 and introduces students to the advanced 2D commands and concepts of AutoCAD used for engineering and building design. Advanced concepts and commands including dimensioning and tolerancing techniques, pictorial drawings, graphic patterns and hatching, blocks with attributes and dynamic blocks, XRFES, and annotative objects are explored and students will create projects that use these commands. Emphasis is placed on effectively using CAD from the design planning process through production and development of working drawings.

Prerequisites:

DRFT 2114

Credit hours/Contact Hours/Load hours:

4/4/4

Target Audience/Transferability:

This course is one of the foundation courses for all degree options in CAD and is a prerequisite for most of the courses in this department. DRFT 2154 is transferable to some 4-year institutions.

Student Learning Outcomes:

Students will:

- Apply dimensions and tolerances properly to architectural structures and mechanical parts
- Create graphic patterns to
- Create pictorial drawings with dimensions that can be used by manufacturing
- Create blocks with attributes and display them in a table format
- Develop dynamic blocks for a variety of uses
- Place and manage external references on drawings
- Correctly apply annotative properties to objects
- Plot a drawing (layout)with multiple scales on a sheet

Topics:

- Advanced dimensioning practices including tolerancing fundamentals and GD&T applications
- Graphic patterns and hatching
- Creating pictorial drawings with text and dimensions
- Creating and using blocks and dynamic blocks
- Defining and documenting attributes in drawings
- Creating Layouts for plotting
- Working with external references
- Defining and displaying annotative objects on multiview drawings
- Creating and using Sheet Sets

Forms of Assessment:

- Drawing assignments
- Portfolio of semester work with reflection
- Final Project submitted electronically and on paper