Northwest Arkansas Community College

Business and Computer Information Systems Division

Discipline Code
DRFT

Course Number
2154

Course Title
AutoCAD II

Catalog Description
This course is a continuation of DRFT 2114 and introduces students to the advanced 2D commands and concepts and 3D commands and concepts of AutoCAD used for engineering and building design. Advanced concepts and commands are explored including dimensioning and tolerancing techniques, graphic patterns and hatching, parametric constraints, blocks with attributes and dynamic blocks, and annotative objects, navigating a 3D space, and creating and editing 3D objects. 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 AutoCAD 1

Credit Hours
4 Credit Hours

Contact hours
60 contact hours

Load hours
4 load hours

Semesters Offered
Fall, Spring

ACTS Equivalent
None

Grade Mode
A-F

Learning Outcomes

Students will:

- Apply dimensions and tolerances properly to architectural structures and mechanical parts
- 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
- Correctly apply annotative properties to objects
- Define User Coordinate Systems as needed to construct solid models
- Create primitive and composite solid models of objects
- Edit details of solid models using 3D edit commands
- Edit faces, edges, and bodies of solid models
- Create 3D model assemblies
- Create 2D drawings from 3D models

General Education Outcomes Supported

None

Standard Practices

Topics list

- 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
- Defining and displaying annotative objects on multi-view drawings
- User Coordinate System navigation
- Creating Primitive objects
- Boolean tools for uniting solid models
- 3D creation tools

Learning activities

Assessments

- Drawing assignments which demonstrate the ability to use 2D commands
- Creative Projects
- Final Project

Grading guidelines

- A = 90-100%
- B = 80-89%
- C = 70-79%
- D = 60-69%
- F = 0-59%