

Northwest Arkansas Community College
Business and Computer Information Systems Division

Discipline Code

DRFT

Course Number

2543

Course Title

Parametric Modeling II

Catalog Description

This course is a continuation of DRFT 2534 and emphasizes the more advanced features and concepts of 3D design with a parametric modeling program, such as Autodesk Inventor. Topics include creating adaptive parts, creating and using iParts and iMates, advanced modeling features such as surfaces, mold tools, weldments, and sheet metal tools, and presentation files.

Prerequisites

DRFT 2534-Parametric Modeling I

Credit Hours

3 Credit Hours

Contact hours

45 Contact Hours

Load hours

3 Load Hours

Semesters Offered

Spring

ACTS Equivalent

None

Grade Mode

A-F

Learning Outcomes

Students will:

- Create and modify surface features
- Create and modify molds
- Create and modify weldment assemblies
- Create and modify sheet metal parts and flat patterns
- Create and use iParts and iMates
- Create and modify exploded views in a presentation file

General Education Outcomes Supported

None

Standard Practices

Topics list

- Importing AutoCAD 2D data into a sketch
- Creating a 3D sketch
- Applying and editing mating, insert, and tangent constraints to assemblies
- Editing parts in place within an assembly
- Working with adaptive parts
- Using iParts and iMates
- Creating presentation files
- Surface modeling features for complex surfaces
- Making molds for injection or casting
- Making weldment structures
- Sheet metal parts

Learning activities

Assessments

- Technical drawing assignments
- Projects

Grading guidelines

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

Last Revision Date: Spring 2022