

## CAD Department Course Outline

### DRFT 1244 – Engineering Graphics II (F, S)

#### ***Catalog Description:***

This course is a continuation of Engineering Graphics I and the concepts of visualization and communication of technical design. Topics include fastening devices and methods, dimensioning and tolerancing, axonometric and perspective drawings, descriptive geometry, intersections, developments and flat patterns, and architectural drawing elements. Drawing assignments will be completed using AutoCAD.

#### ***Prerequisites:***

DRFT 1234, 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. DRFT 1244 is non-transferable.

#### ***Student Learning Outcomes:***

Students will:

- Apply standard dimensioning and tolerancing practices used on technical drawings
- Recognize the various methods used to fasten materials and draw simplified representations of Unified National and metric threads
- Construct true-length lines, edge views, and true-size views of a plane
- Define and apply the principles of geometric intersections
- Identify, define, and create developments of various objects and transition pieces
- Create isometric sketches and drawings
- Create one-point and two-point perspective drawings
- Prepare standard floor plans, sections, details, and elevation views

#### ***Topics:***

- Fasteners and fastening methods
- Axonometric and oblique drawings
- Perspective drawings
- Descriptive geometry methods involving points, lines, and planes
- Intersections of objects and their representations
- Developments of prisms, cylinders, pyramids, and transition pieces
- Flat pattern development
- Components of architectural drawings

## ***Forms of Assessment:***

- Completion of several drawing assignments
- Portfolio
- Final Project

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