



BAKER COLLEGE
STUDENT LEARNING OUTCOMES

CAD2370A Computer Aided Design II
3 Semester Credit Hours

Student Learning Outcomes and Enabling Objectives

1. Summarize advanced applications
 - a. Explain foundational CAD concepts
 - b. Demonstrate the industry design through manufacturing process through teamwork and brainstorming
 - c. Demonstrate design validation with Simulation
 - d. Demonstrate reverse engineering methods

2. Construct advanced part models
 - a. Create reference geometry and features
 - b. Create 3D sketches
 - c. Create multi body parts
 - d. Apply design tables and configurations
 - e. Demonstrate use of variables and expressions

3. Construct advanced assemblies
 - a. Develop top-down and bottom-up assemblies
 - b. Create animated exploded assemblies

4. Construct advanced drawings according to standards
 - a. Produce advanced views for drawings
 - b. Produce working drawings (w/BOM) for production
 - c. Produce presentations for other industry uses

Big Ideas and Essential Questions

Big Ideas

- Preparing documentation packages
- Design complex parts
- Complex assemblies
- Applying industry/customer standards

Essential Questions

1. How are advanced CAD features used in design?
2. How can advanced tools be used to achieve complex designs?
3. How can advanced assembly tools be used to convey design intent?
4. How can CAD information be presented for different purposes?

These SLOs are approved for experiential credit.

Effective: Fall 2024