BAKER COLLEGE
PROGRAM OUTCOMES

ME2450 Introduction to CAE

2 Semester Hours

Student Learning Outcomes and Enabling Objectives

1. Create part models for engineering applications.
   a. Develop geometry for analysis.
   b. Modify geometry for analysis.

2. Develop FEA process for models to inform design.
   a. Modify part geometry, characteristics, and process relative to analysis
   b. Predict stress, strain and deformation for a given system
   c. Recommend engineering direction based on FEA analysis

3. Interface model files with other systems and processes.
   a. Generate necessary file formats including those for 3D printer (STL), post-processing, and translation/conversion.
   b. Import native files and other file formats.

4. Integrate advanced areas of application
   a. Calculate beam and frame data based on analysis
   b. Develop thermal models for a given system
   c. Simulate shell models for a given system

Effective: SP21