

Course discipline/number/title: CAD 2460: Surfacing and Advance Modeling

A. CATALOG DESCRIPTION

1. Credits: 2
2. Hours/Week: 1 lecture, 2 lab
3. Prerequisites (Course discipline/number): CAD 1039 or instructor's permission.
4. Other requirements: Students must receive a grade of C or better in all CAD courses.
5. MnTC Goals (if any): NA

B. COURSE DESCRIPTION: This course offers students the understanding of surface modeling using SolidWorks by designing real world products. It also addresses the concepts of advanced parametric modeling and design. This course will be taught using the latest release of SolidWorks. Students must receive a grade of C or better in all CAD courses.

C. DATE LAST REVISED (Month, year): May, 2022

D. OUTLINE OF MAJOR CONTENT AREAS:

1. Understanding Surfaces
2. Introduce and master Surfacing
3. Solid-Surface Hybrid Modeling
4. Repairing and Editing Imported Geometry
5. Advanced Surface Modeling
6. Blends and Patches
7. Master Model Techniques

E. LEARNING OUTCOMES (GENERAL): The student will be able to:

1. Create and learn basic surfacing concepts.
2. Understand surfacing capabilities.
3. Create Solid-surface materials.
4. Use edit and repair Imported Geometry.
5. Use advanced modeling concepts.
6. Create blends and patches.

F. LEARNING OUTCOMES (MNTC): NA

G. METHODS FOR EVALUATION OF STUDENT LEARNING: Methods may include but are not limited to:

1. Evaluation of electronic drawing files
2. Skill proficiency quizzes
3. Written test

H. RCTC CORE OUTCOME(S). This course contributes to meeting the following RCTC Core Outcome(s): Critical Thinking. Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.

I. SPECIAL INFORMATION (if any):

1. Tuition differential