TADD 3448: Tech Toolbox II: Fusion 360

A. COURSE DESCRIPTION
 Credits: 2
 Lecture Hours/Week: 0
 Lab Hours/Week: 0
 OJT Hours/Week: *
 Prerequisites: None
 Corequisites: None
 MnTC Goals: None

This course introduces students to the use and application of Autodesk Fusion 360 software, which is the key to instant 3D creativity, used by designers, model makers, engineers, and other makers. Students will learn to use Fusion 360 to turn ideas into designs that flow into 3D printing, CNC milling, or injection molding.

B. COURSE EFFECTIVE DATES: 08/20/2022 - Present

C. OUTLINE OF MAJOR CONTENT AREAS
 1. Parametric vs. T-spline modeling
 2. Joints and movement
 3. Rendering techniques
 4. Creating basic shapes
 5. Using Fusion 360 environments
 6. Sketching
 7. Extruding profiles to create objects
 8. Sculpting
 9. Surface modeling
 10. Editing via the timeline
 11. Editing and combining shapes
 12. Analyzing your work
 13. Rendering
 14. Exporting models

D. LEARNING OUTCOMES (General)
 1. design and create a 3D design in Fusion 360.
 2. illustrate import and export functions.
 3. make use of basic modeling, rendering, application of joints, and animation.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
 None

F. LEARNER OUTCOMES ASSESSMENT
 As noted on course syllabus
G. SPECIAL INFORMATION

None noted