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