Homework 8

Engr 100A – Intro to Engineering

Create a 3D model using one of the CAD programs listed below. Create either the ANGLE BRACKET part below or any COOL 3D MODEL YOU WANT having at least 5 "features". Submit a SCREEN SHOT (jpg file) of your model.

MODEL OPTIONS:

1. ANGLE BRACKET PART - this is shown below. Use Solidworks, OnShape, or Inventor for this. This is an example of a model created in exacting detail with specific dimensions.

2. ANYTHING FUN YOU LIKE - create any cool 3D shape you want. You can use any of the programs listed. You must have at least 5 GEOMETRIC "FEATURES".

3D CAD PROGRAMS:

SOLIDWORKS - a true engineering program used by many engineering companies. I have posted a short video on how to create the "angle bracket" part in SW. Solidworks is available in the ACC (Academic Computing Center at SAC).

ON-SHAPE - a web-based (program is not installed on your computer) parametric 3D solid modeling program. This is also a professional-level software. You have to start an account with them. There is a free version.

TINKER-CAD - a free online program that allows you to create 3D objects using boolean-type operations (adding or subtracting of 3D shapes). TinkerCAD is owned by Autodesk the same company that makes AutoCAD. So if you have an Autodesk account, you can use it to log into TinkerCAD. If not, just create an account to use the program. Group all features with various choices of "solid" (add material) and "hole" (take away material). An example of a feature is a sphere.
Watch this useful guide:
https://www.youtube.com/watch?v=ZvDkf1CEpMY

Other options include Autodesk Inventor, AutoCAD (but using its 3D capabilities).