CONTOURING

Material and Technology
Prof. Dr. Manuel Kretzer

MATERIABILITY

What you are about to learn:

In this tutorial, you will learn how to contour your 3D model so that it can be producible as stackable slices.

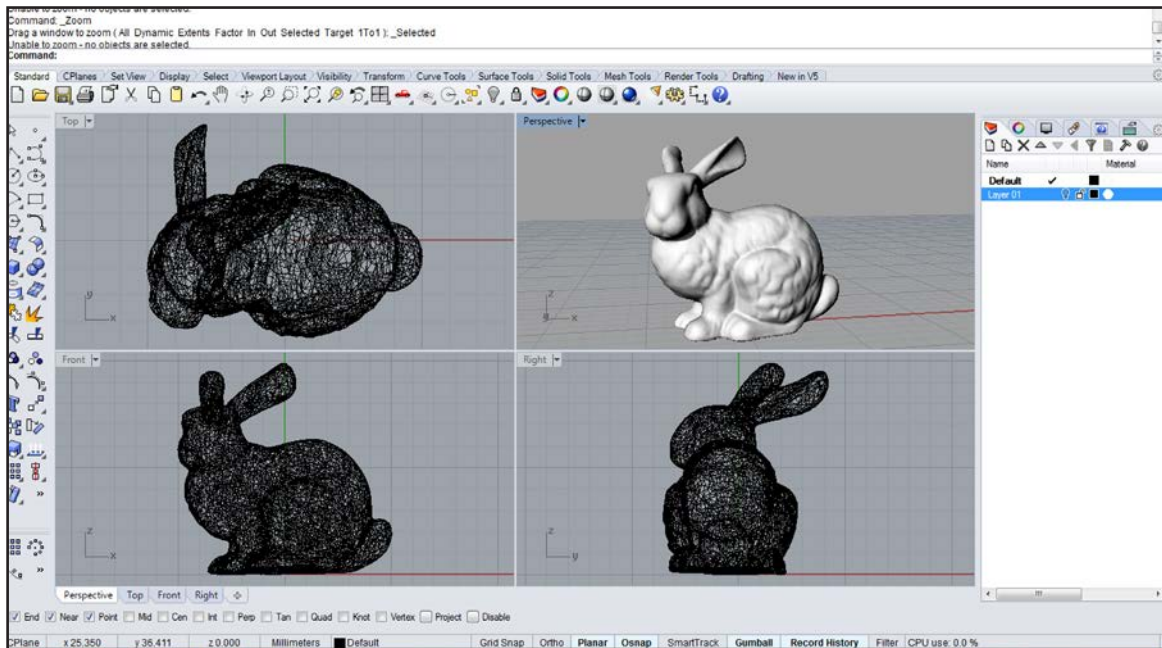You will generate the slices for laser cutting.
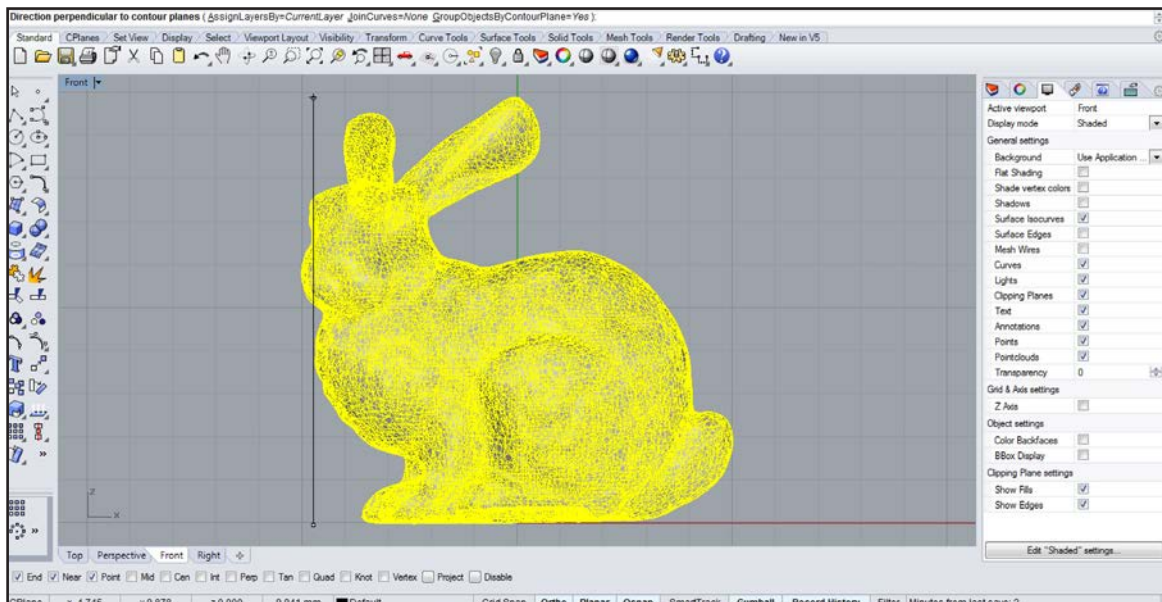
Further info and credits

For more tutorials visit:
https://www.rhino3d.com/learn/
https://www.rhino3dhelp.com/
Youtube is also a great source for Rhino tutorials.

**1** Draw or import your geometry into the Rhino workspace.

2 Switch to Front View. Use the command _Contour and select your object. Draw a vertical line starting just below the geometry and press Enter.

3 Now define the distance in between contour lines, which should be equal to the material thickness you are going to use
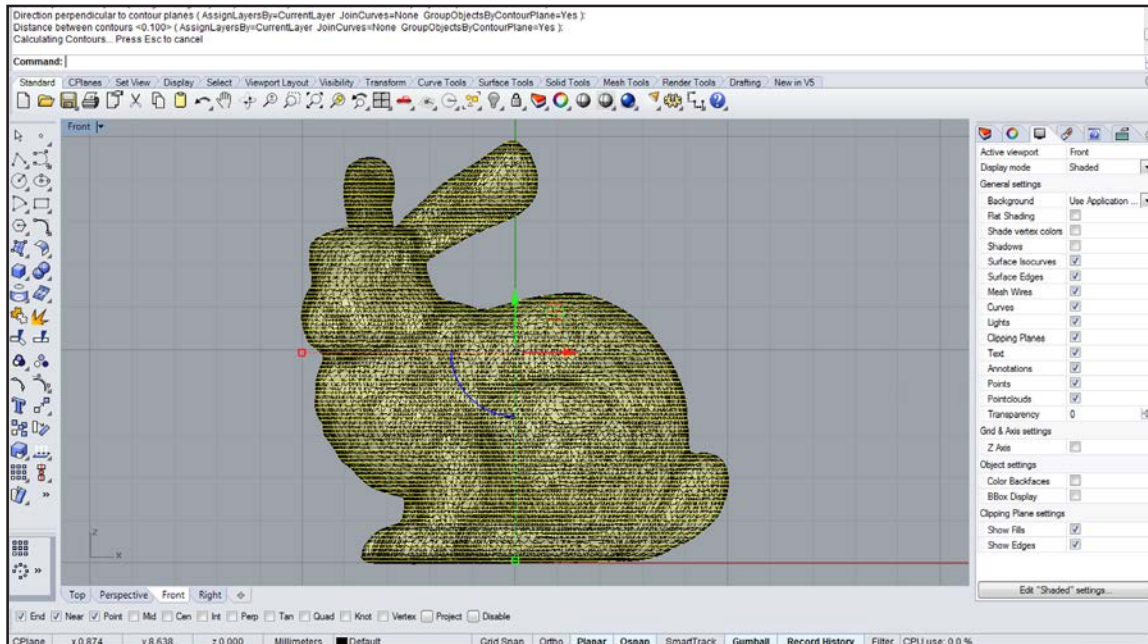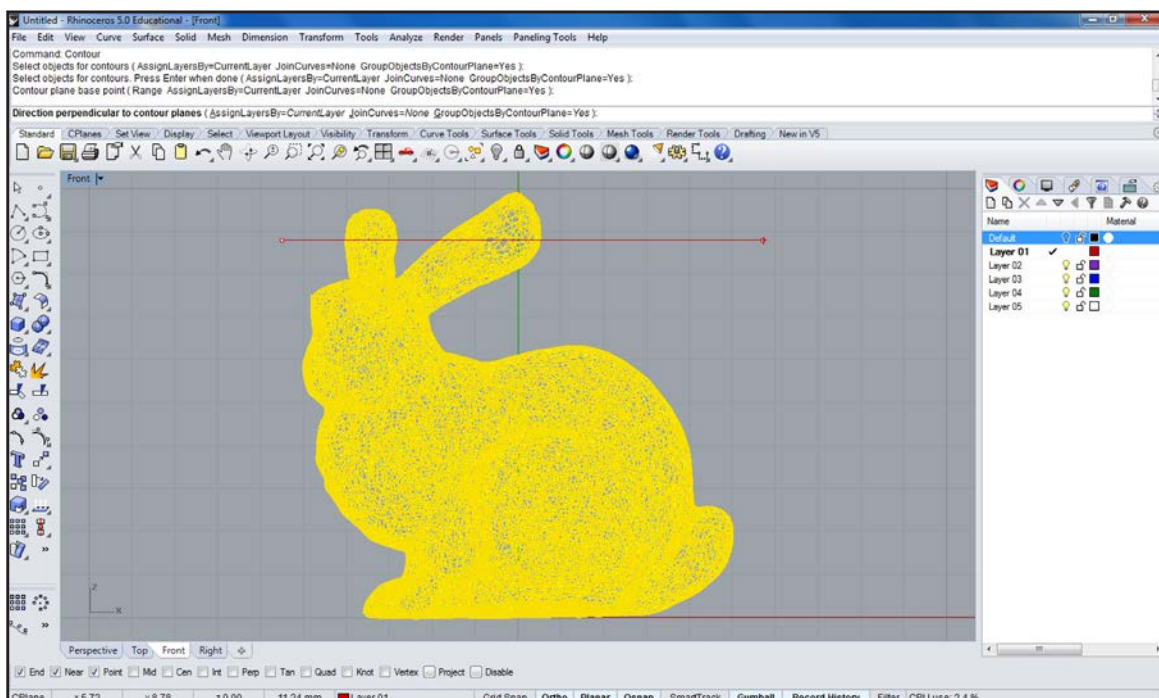

4 Remaining in Front View and while having contour lines still selected type the command _Shear. Again draw a vertical line next to your geometry.
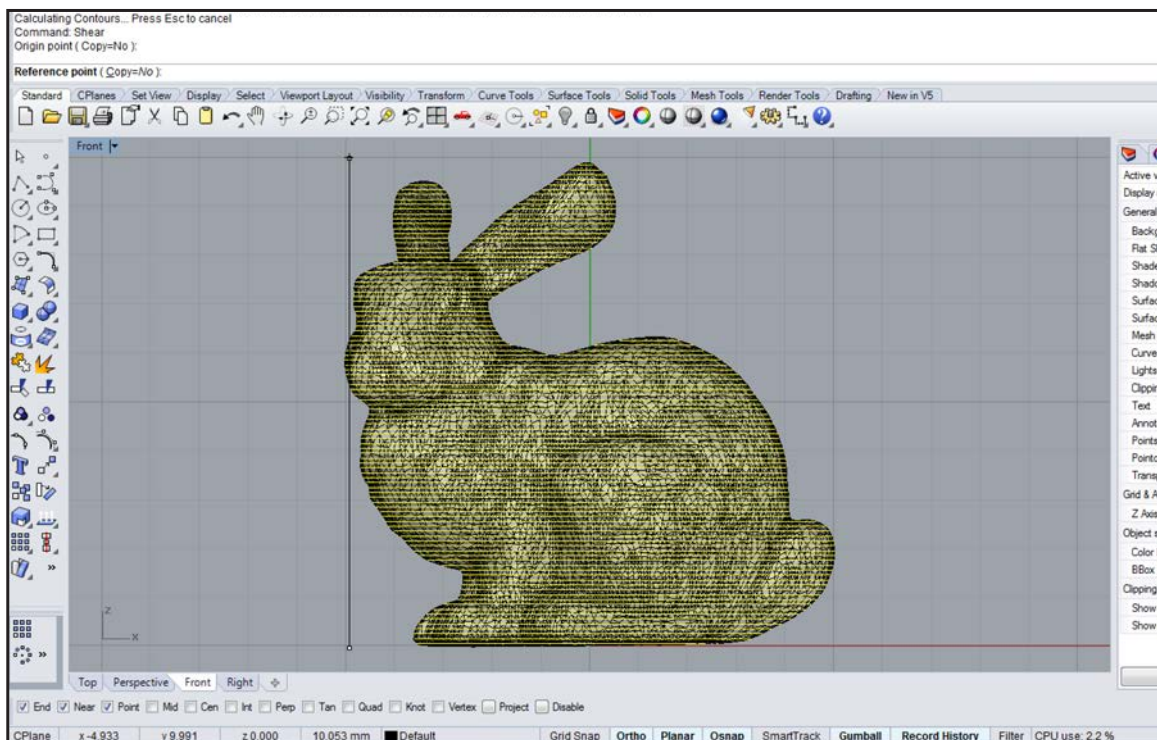
5 While the _Shear command is still active switch back to all four windows and zoom out of Front and Top View. In the Front View window move your mouse to the right until in Top View the layers don't overlap any more. Turn off Osnap if necessary.
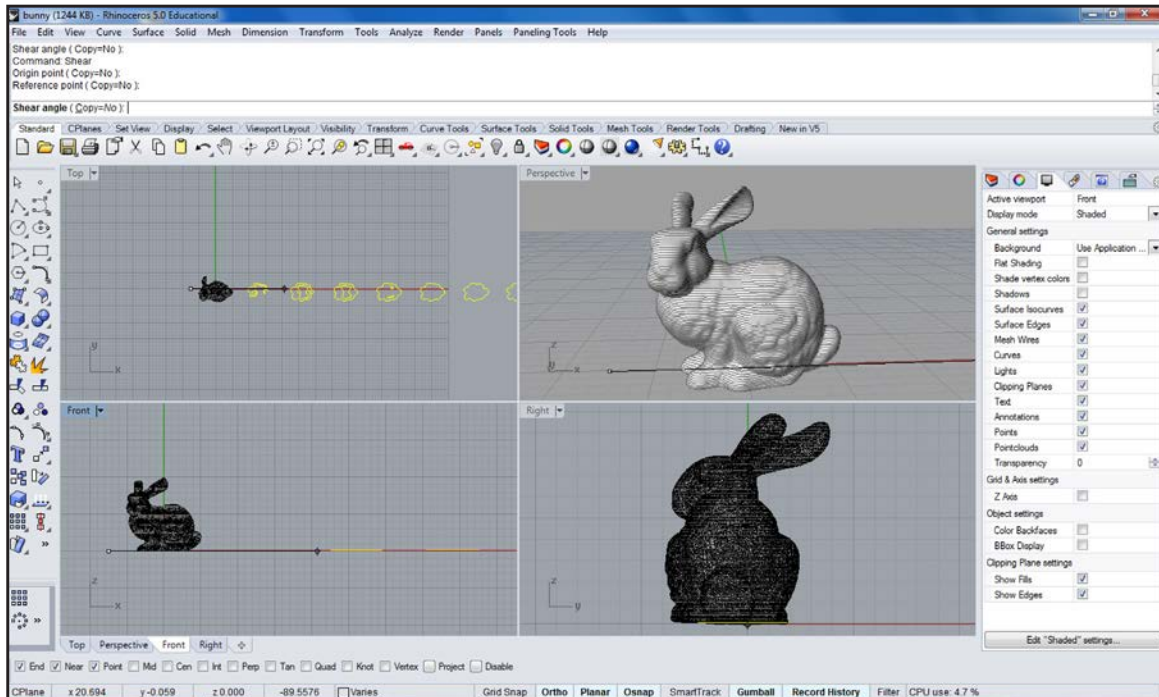
6 Switch to Top View and use the command _ProjectToCplane. Choose 'Delete input objects? Yes'. Arrange all lines so they can be sent to a laser cutter. In case certain lines need to be deleted the shapes might have to be ungrouped (_Ungroup) first. Labels can be added by using the command _TextObject (Curves, Allow Single Stroke Fonts). Single stroke fonts allow for faster manufacture. Here are some fonts that work well for engraving: http://wiki.mcneel.com/rhino/engravingfonts

Finished object.

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