

# Introduction to 3D printing at CNC

prepared by John Makowsky of [vectorfinesse.com](http://vectorfinesse.com)

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Additive manufacturing, as 3D printing is known in the technical world, deserves every bit of the hype it's been receiving in the last couple years. It's been around for at least 25 years, with the first patents being filed in the mid to late 80's, but it's only started to become accessible in the last five years or so. What does this mean?

The biggest advantages of using additive processes (starting with nothing, building the part up in layers) are the ability to easily reproduce very complex shapes that are nearly impossible to make otherwise, and producing pieces with moving parts, no assembly required. Check out the display in Media Services at the library to see some samples.

In a college setting like CNC, access opens up massive flexibility in the world of creative problem solving for students and faculty. Typically, one would need special physical skills in carving, moulding, soldering, or fabrication to give physical form to their ideas and design concepts, but with access to a 3D printer, a singular tool in eager hands can replace an entire workshop, or a madman's laboratory when creating a physical prototype, or testing an idea.

The only thing you need is a 3D model of your piece in the .STL file format, and we'll take care of the rest. Currently, most people shy away because they perceive the learning curve of 3D design to be very steep. That's not true, with sites like [Thingiverse](http://Thingiverse), [YouMagine](http://YouMagine) and [TinkerCad Things](http://TinkerCad Things) holding libraries with tens of thousands of freely downloadable, ready to print models at your fingertips, you don't even need to learn to design right away.

When the inevitable happens, and you need to make something yourself, try out [Blender](http://Blender) or [TinkerCAD](http://TinkerCAD) or similar software. If you can use MS Paint, you can make models in TinkerCAD, it's that easy. Follow their quick tutorials, and you'll be modelling away in an hour or less.

When you do have your .STL files ready, bring them to CNC Media Services Lab and we will help you with the 3D printing process. Please note, there is a charge for this service. It is based on printing time. If you create a 3D model or download a copy of a model, the file will come with an estimated printing time. We charge a flat rate of \$5.00 per hour, with a minimum charge of \$5.00. Special projects are priced on a project basis. Click here to see our complete [Media Services Price list](#).

The only limit is your imagination; bring life to your ideas today!