

## 3D Printing at MMU – All you need to know

### How does it work?

We provide two types of 3D print technology on campus:

#### **Powder Printing**

Our 660 colour powder printers can provide full colour, high detail prototypes, ideal for architectural presentations and visual prototypes that require colour information and fine structures. The finished model is robust but not strong enough for real world applications.

#### **Plastic extrusion printing**

Our CubePro printers provide good rapid prototyping and can produce objects like toys and phone cases that can be used straight off the printer in material that are ready to use in real world applications.

### How much does it cost?

While 3D Printing is becoming more and more affordable and our prices are subsidised for staff and students, the costs for 3D printing do vary greatly. Unfortunately, we can't publish a breakdown of prices as we do for our other Print Services, as we'll first need to assess the design and provide a quote.

Costs depend on the size and volume of the model. Complexity isn't an issue, the main factor is volume. For example, a solid cube will cost more than a wireframe cube of the same size. The volume of material used is multiplied against a fixed price point. Additional charges are applied for file fixing and finishing time.

### How do I pay?

Payment can be made using your [MET Card](#) or a standard debit / credit card.

### How long does it take?

A model will usually take 24 to 48 hours from submission to completion. To reduce the overall cost, you should produce print ready models in order to keep the file fixing to a minimum.

The ProJet 660 prints at approximately 25mm per hour in the Z direction (height).

The CubePro™ print speed refers to extruded volume – 15mm per second. A 'typical' model will take several hours complete.

## What software do I need to use?

Typical file types that can be submitted include AutoCAD, Revit, 3ds Max, Inventor, and SketchUp. Ideally, files should be submitted using the .stl format but the following formats are also accepted .fbx, .obj, .3ds, .3dm, .skp, .dwg.

## Where can I get help?

Visit MMU 3D Print Services at the John Dalton Shed for professional, face-to-face advice.

Alternatively, you can email us: [3Dprintservices@mmu.ac.uk](mailto:3Dprintservices@mmu.ac.uk) or call us: **0161 247 6464**

## Is it going to be available on other campuses?

There are currently no plans to make 3D printing available to other campuses. The new 3D print service will be subject to ongoing evaluation. If in the future, there is enough demand for 3D printing at other campuses, we'll work to make it happen.

## When is it open?

3D Print Services at the Shed will be available from Monday to Friday, between 9am and 6pm.

## I don't understand jargon – can someone please translate?

[Check out this handy glossary](#) of all of the most frequently used 3D printing terms.