

# eCraft2Learn Ultimaker 3D Printing Resources

## Teacher Specific Resources

- [Ultimaker 2+Unboxing Video](#)
- [Ultimaker 3 Unboxing Video](#)
- Getting Started Guide for Schools (PDF in folder)
- Ultimaker Troubleshooting Guide (PDF in folder)

## Resources Documents for All

These could be used by learners and teachers accessible through the UII:

### 1. Manuals (all PDFs in folder)

- Ultimaker 2+ User Manual
- Ultimaker 3 User Manual
- Ultimaker 3 Quick Start Guide
- Cura Quick Start Guide

### 2. Introduction to 3D Printing (doc in folder - Synyo to brand as eCraft2Learn)

This document includes:

- What is 3D printing
- Where is 3D printing used
- How does 3D printing work
- Overview of the 3D printing process

### 3. Extruding a 3D Model from a 2D Image (doc in folder - Synyo to brand as eCraft2Learn)

This document includes:

- Importing an image into Cura
- 2D to 3D examples

### 4. 3D CAD Modelling in TinkerCAD (doc in folder - Synyo to brand as eCraft2Learn)

This document includes:

- CAD software interface overview
- Links to TinkerCAD tutorials
- Designing for 3D printing - limitations and best practices.
- How to save/export design as an STL

### 5. Slicing and preparing a CAD model for 3D printing (doc in progress)

This document includes:

- Cura interface overview
- Print profiles
- Simple slicing settings
- Arranging multiple models on a single print bed
- Preparing and checking a 3D model for print and saving as gcode

## 3D Printing Resource Links for the UUI

### Ultimaker Online Manuals

- [Ultimaker 2+](#)
- [Ultimaker 3](#)
- [Cura 2](#)

### TinkerCAD

- [Tutorials](#)
- [Keyboard Shortcuts](#)

### 3D printing

- [How does 3D printing work](#)
- [Changing the filament on an Ultimaker 2/2+](#)
- [Calibrating/Levelling the Build Plat on an Ultimaker 2/2+](#)
- [Unblocking the Nozzle on an Ultimaker 2/2+ - The Atomic Method](#)
- [Ultimaker Schooling 3D Printing](#)

### Cura

- [Ultimaker Cura 2.7 Quick Start Guide Video](#)
- [Making 3D Models from JPEGs](#)
- [Getting Rid of Support Structures & Reducing 3D Print Time](#)

## CREATE Cura Video Resources

Series of short 2-3 minute videos with screencast and voiceover, each one introducing and explaining a concept. (videos in production Oct/Nov links to follow) Steve Cox producing.

- Designing for 3d printing - overhangs, bridging, orientation etc.
- Intro to slicing and Cura - what is slicing software, what does it do.
- Cura 2D to 3D - process, import settings, examples.
- The Cura Interface.
- Opening files and adjusting the view (zoom, pan, tilt).
- Selecting a printer, material and a recommended profile.
- Print setup (recommended and custom settings).
- Layers.
- Infill.
- Supports.
- Print speeds (what settings affect the speed of the print - also mention quality)
- Moving, (including sinking into bed), resizing, rotating (including laying flat) and mirroring a model
- Adding multiple models to the build plate (duplicating a model and importing different models)
- Checking models (x-ray and layers view) and saving.