



Day 1 :

Session 1:

Welcome and course overview

- General introduction
- Basic and technologies in 3D printers
- History of 3D Printing
- How does a 3D-printer work?
- What are the different types of printers and materials you can use?
- Who uses 3D Printing and what for?
- What can you print with a 3D-printer?

Software: download and install needed tools

Why 3D Printing is an excellent tool for architects

- Applications
- Advantages and disadvantages
- Current and future opportunities

3D Printing technologies best suited for architects

- Technologies overview
- Extends and limitations
- Best use for each one
- Logistics and costs

Session 2:

Materials and finishes

- Materials overview
- Post-processing options

Traditional methods still have a place



Design for 3D Printing

- Hands-on design and print process
- Basic CAD software
- File sources & formats
- Modifying existing designs
- Making your own creation

Q&A

Day 2 :

Session 1:

Clear vision form the start

- Choosing scale
- Choosing level of detail
- Establishing project budget and timeframe

Design workflow: preparing your files for 3D Printing

- CAD workflow overview
- BIM workflow overview
- STL/OBJ file requirements
- VRML/X3D file requirements

Session 2:

Design workflow: preparing your files for 3D Printing

- File orientation, resolution and min. features
- Printability check tools
- File optimization and repairing



In-house or outsource logistics

- The design process
- The 3D Printing process
- How to choose a 3D Printer
- How to select a 3D Printing service provider

Practical Project

Modifying existing designs

Making your own creation

- Q&A