

DIY Printer- 3-Day Workshop

3D Printer

DAY - 1

- What is CAD?
- Purpose of 3D learning?
- What is 3d printer and its types?
- Components of 3d printer?
- Structure of 3D Printer
- Methodology and working principle of 3d printer
- X,Y and Z axis Assembly
- Extruder Asembly
- Preparings Ramps and Arduino
- Wiring Components
- Burn Firmware in Arduino
- Configuring Motors, End Stop and other Parts in Marlin

Fusion 360 / Solidworks

DAY - 2

- Introduction to Fusion 360/Solidworks
- User Interface
- Sketching
- Extrude and Revolve
- Mirror and Pattern
- Extrude and Revolve with Patch Model
- Mirror and Pattern

Project: Road Barrier Design

Cura and Printer Setup

DAY - 3

- Introduction to Cura
- Setting up your printer in cura
- Add Model and Manipulate it
- Printing Recommend Settings
- Printing Custom Settings
- Bed Levelling and Preheat Settings
- Getting print from Custom made printer

Semi-assembled- 3-Day Workshop

3D Printer

DAY - 1

- What is CAD?
- Purpose of 3D learning?
- What is 3d printer and its types?
- Components of 3d printer?
- Structure of 3D Printer
- Methodology and working principle of 3d printer
- Understanding Assembly of the Printer
- Recognising the wiring of the components
- Preheat Settings
- Pre-printing precautionary steps
- Bed Levelling
- Feed and Unfeed Filament

Fusion 360 / Solidworks

DAY - 2

- Introduction to Fusion 360/Solidworks
- User Interface
- Sketching
- Extrude and Revolve
- Draft and Rib
- Getting the Patch Environment
- Mirror and Pattern
- Modification Tools

Project: Road Barrier Design

Cura and Printer Setup

DAY - 3

- Introduction to Cura
- Add Your Custom Printer
- Add Model and Manipulate it
- Printing Recommend Settings
- Printing Custom Settings
- Troubleshoot Findings
- Print from Semi-assembled Kit