

## Workshop on “How to 3-D Print? by Amrita Centre for Automation and Robotics (A-CAR)

Amrita Centre for Automation and Robotics (ACAR), Amrita College of Engineering and Technology, proposes to conduct a workshop on "How to 3D Print." This course is an offline course intended for *anyone* interested in converting their ideas into solid objects. No prerequisites are expected.

### Workshop Objectives:

- Development of a 3D printed working prototype using Fused Deposition Modeling (FDM). This course will demonstrate how to use 3D printing software to create digital designs turned into physical objects.

This course is hands-on and will provide step-by-step instructions to use the popular 3D modelling program [Tinkercad](#) and [Slicing Software](#).

### Workshop Outcome:

Participants who complete this course will be able to

- Design a variety of objects using Tinkercad for both personal and professional use.
- Slice the CAD model designed and produce g-codes compatible with the FDM type of 3D printer.

### Course Content:

- Designing a 3D Model: Convert ideas into three-dimensional CAD models with Tinkercad, an excellent online application for beginners.
- FDM 3D printing technologies: Working principle of a 3D printer using Fusion Deposition Method (FDM)
- How to use Slicing Software: Using slicing software, prepare the CAD model to be printed as 3D objects
- 3D Printing demo.

**Date:** October 26<sup>th</sup>, 2021

**Time:** 2 pm to 4:30 pm

**Venue:** Amrita Centre for Automation and Robotics

**Workshop Fee:** Free for the students who enrol as members of the A-CAR

Please use the link to register <https://forms.office.com/r/hPUka0si1t>

E-certificates Will be provided to all the participants

### Immediate Goals

1) Student members of the A-CAR will be provided support to practice using Tinkercad and slicing software for the development of working 3D printed prototype TOY and participate in the Grand Challenge “Most profitable business case for Digital Toy using 3D printing in India” by AICTE. [Click here to read the format](#). Last Date of Submission: 6 November 2021. Registration Link: <https://forms.gle/5aZsLMioTceccQDo7>

2) In order to prepare the business proposal successfully, student members of A-CAR will be supported to register and undergo training on “Digital Fabrication Techniques and 3D Design Software” from October 26 to 30, 2021, 4:00 PM to 6:00 PM by [Amrita TBI](#), Amrita Vishwa Vidyapeetham, Kollam. The course will help students to know about how to convert their Ideas into a Prototype and will get In-Depth Training for Rapid Fabrication Techniques for making a TOY. Topics such as Learn Basics of 3D Design, Product Management Strategy, how to use a FDM 3D Printer? Slicing Software Training and Demo of Laser Engraving are covered during the online course. Registration Link: <https://bit.ly/3ATp7dq>

For information and registration Email to [v\\_saisudha@amrita.edu.in](mailto:v_saisudha@amrita.edu.in) or contact 9895851532