



Module PMRF-ISSS054/2022

Additive manufacturing and in-depth insights on Vat Polymerization and Fused Deposition Modelling

Name of the PMRF student

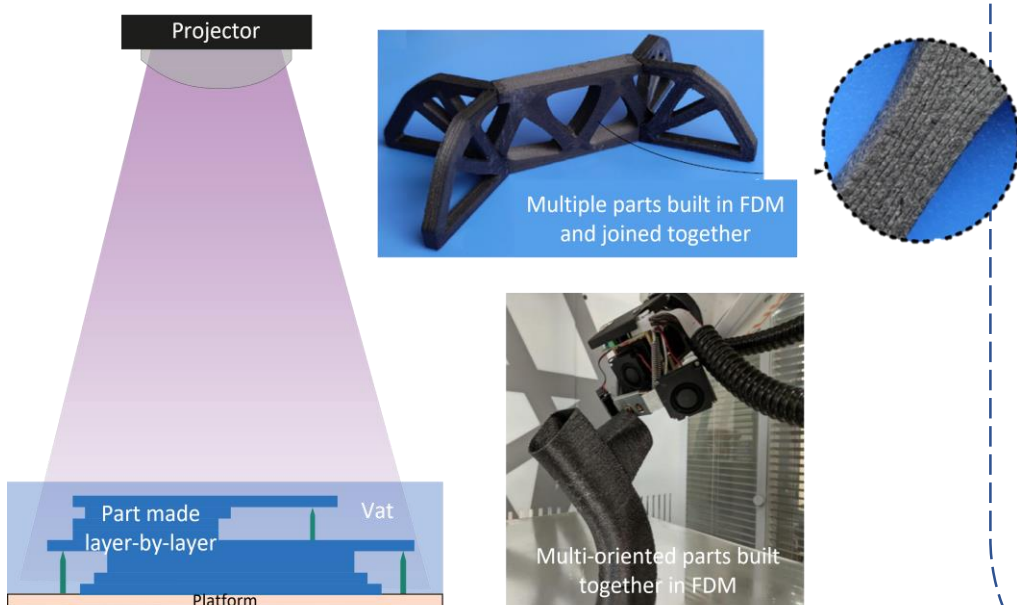
Vivek Khatua

Required background of the students taught

- Basic exposure to manufacturing
- Engineering mathematics (Basics, ODE, Linear algebra)
- Basic knowledges on electronic systems
- High-school level Organic Chemistry

Online session coordinator

Will be chosen from the list of registrants



Details of the content of the module

1. Overview of Additive Manufacturing (2 Lectures)

Classification and distinctions of AM processes and 3D printing.

2. Part Concept to Machine files (1 Lecture)

CAD parts to machine readable slices

3. Vat Polymerization (VP) (4 Lectures)

Stereolithography and their types for printing parts

4. Fused Deposition Modelling (3 Lectures)

Extrusion of plastic to build a part additively

5. Sensors and Actuators used in 3D printers: (1-2 Lectures)

6. Design for Additive Manufacturing (2 Lectures)

7. Design project: (1- 2 Lectures) presentation

Schedule of the module

Course starts on 24th February, 2023 4PM. Every Fridays from 4PM to 5PM for 16 weeks, session may extend for 10-20 mins depending on the situation.

Design project and presentation in the last 2 weeks



Meeting link : Will be shared later

[Link](#)

Contact email ID: issforum@gmail.com

Registration link:

<https://forms.gle/gSgYXXCEPbFnok7W9>