

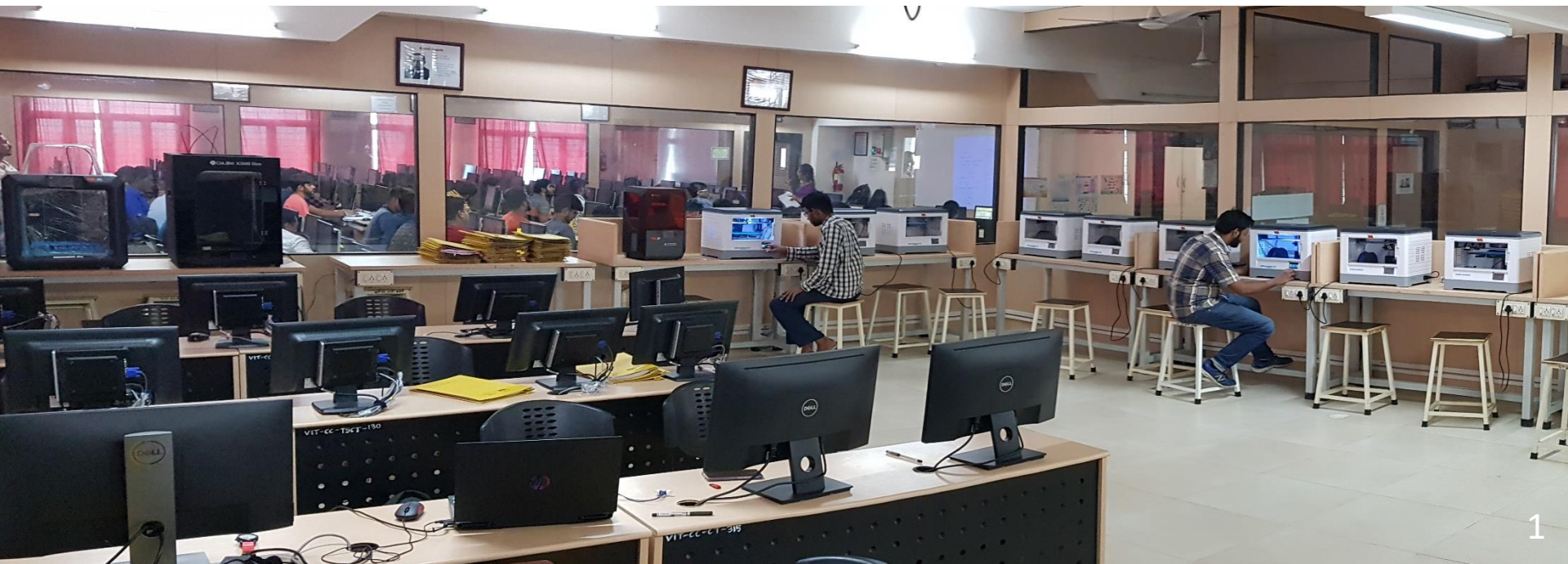
3D-Printing Laboratory: VIT Chennai



VIT[®]

Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

- VIT has 3D-Printing as part of curriculum for many years now
- Faculty, students, and several industries around Chennai use VIT's 3D-Printing facilities for their projects/research
- The lab is equipped with number of different 3D-printers



Fused Deposition Modelling (FDM) Machines

Capable of printing components of size up to: **30 cm x 30 cm x 45 cm**

Materials: **PLA, ABS, PETG, NYLON, TPU, PC etc.**

Machines with relatively small build size

- Build size: 23 cm x 15 cm x 14 cm
- More number of machines (10)
- Mainly caters to the needs of students' projects



Fused Deposition Modelling (FDM) Machines

Capable of printing components of size up to: **30 cm x 30 cm x 45 cm**

Materials: **PLA, ABS, PETG, NYLON, TPU, PC etc.**



Machines with relatively big build size

- Build size: 28 cm x 25 cm x 30 cm
- Caters to academic/industrial needs
- Inbuilt camera for monitoring

Printing of different colored objects is possible

Machines with relatively bigger build size & Color- gradient capable



- Build size: 30 cm x 30 cm x 45 cm
- Caters to academic/industrial needs
- Capable of printing parts with color-gradient

Digital Light Processing (DLP) Machines

Capable of printing components of size up to **12 cm x 6.7 cm x 15 cm**

Materials: **Castable Resins, Bio-compatible Resins etc.**



- 3D models in highly-detail
- printing time is relatively less
- For making tough and highly detailed engineering prototype, castable ring model, or even making medical model etc.

Continuous Fiber-Reinforced 3D Printer

Capable of printing components of size up to **29.7 cm x 21 cm x 14 cm**

Materials: **PLA, PETG, ABS, Nylon, and PC** that are reinforced with **composite carbon fibers (CCF) or composite basalt fiber (CBF)**



- 3D print parts with high strength and resistance, and yet light weight
- This Composer A4 is able to 3D print lightweight, complex shape composite material parts with superior mechanical properties for end-use production.