

## 3D Printing/Additive Manufacturing Lab

**Objectives:** 3D Printing/Additive Manufacturing is an Emerging technology, Where the Manufacturing a product is much faster than all conventional manufacturing technologies. Many manufacturing Industries use various 3D Printing technologies in various applications such as in Automobile, Aerospace, Defense and in Bio- medical applications etc.

Earlier, 3D-printed components were used as Prototypes for scientific experiments across different disciplines. Additive Manufacturing / 3D Printing Lab is equipped with various configurations of 3d Printers, Professional 3D Scanner, also has flagship CAD/CAM software packages and high-end CAD/CAM workstations to meet the present industrial requirements.

The lab is aimed at giving exposure and enhancing the knowledge and skills of engineers involved in the operation use of 3D Scanners, 3D Printers, CAD packages and for those who want to provide training to others in this area. It gives exposure and on hand experience in the field of Additive Manufacturing / 3D Printing, 3D scanning and, reverse engineering, some of the facilities available as follows:

### **Government polytechnic Siwan 3D Printing Laboratory has Latest Equipment as mentioned below:**

- Ender-3 V2 Fused Deposition Modeling 3D Printer

**Ender-3 V2 Fused Deposition Modeling 3D Printer:** Ender-3 V2 Fused Deposition Modeling 3D Printer From CREALITY, Which is Capable of manufacturing Products with Industrial Grade PLA,TPU, PETG materials etc., and less than or equal to 100°C chamber supports to deliver exceptional dimensional accuracy and precision for complex, durable parts.



<b>Product Parameters</b>	
Machine Size	475*470*620mm
Print Size	220*220*250mm
Package weight	9.6Kg
Filament	PLA/TPU/PETG
Layer Thickness	0.1-0.4mm