

INTRODUCTION TO THE 3 D PRINTING

3D printing is a process where a digital model created using computer-aided design software (CAD) is turned into a physical three-dimensional object by adding material a layer at a time. There are many methods of melting or softening the material to produce the layers. 3D printing or additive manufacturing is the construction of a three-dimensional object from a CAD model or a digital 3D model. It can be done in a variety of processes in which material is deposited, joined or solidified under computer control with material being added together (such as plastics, liquids or powder grains being fused), typically layer by layer.

Duration

2/6 Months

Certificate Course in Biomedical Instrumentation

Course Description:

The aim of this training programme is to create a pool of personnel who may be deployed by focusing on the acquisition of skills required to utilise equipment geared to diagnose and repair malfunctioning medical devices. Biomedical instrumentation training is frequently seen as part of programmes in electronics engineering technology or biomedical electronics technology. Aspiring biomedical instrumentation professionals learn how the use of electronic equipment in the medical area, such as monitoring devices, affects healthcare personnel and patient care. Learning to repair medical equipment may necessitate expertise in:

- Alternating and direct current circuits
- Digital signal processing
- Fundamentals of robotics
- Structure of the human body
- Test equipment

According to the training modules, the candidate would be qualified to do the following actions at the completion of the programme:

- a) Maintain, repair, or offer technical assistance for biomedical equipment.

- b) Provide fundamental medical equipment training to physicians and other healthcare professionals, such as blood pressure monitors, ECG machines, and patient monitors.
- c) Assess the safety, efficiency, and efficacy of biomedical equipment.
- d) Liaison with medical, engineering, and scientific personnel.
- e) Report and documentation writing.

Career Prospects:

- Applications engineers
- Design engineers
- Manufacturing engineers
- Plant engineers
- Sales engineers

Duration

2/6 Months