

Technical Support Staff - Mechanical Prototyping Module

Centre for Excellence in Design (D-CoE), Indian Institute of Science (IISc), Bengaluru

The Centre for Excellence in Design (D-CoE) at the Indian Institute of Science (IISc), supported by the Government of Karnataka, is seeking a proactive and skilled **Technical Support Staff member for the Mechanical Prototyping Module**. The selected candidate will play a key role in ensuring the smooth functioning of training programs, supporting hands-on sessions, maintaining equipment, and assisting participants and trainers in Mechanical prototyping activities.

Position Overview

The role involves *supporting advanced manufacturing facilities* and *providing technical assistance in mechanical prototyping* (D-CoE).

Key Responsibilities

1. Equipment Operation and Maintenance

- a. Ensure the smooth functioning of additive manufacturing equipment, including **FDM, MSLA, and MJP 3D printers**.
- b. Perform routine maintenance such as **lead screw lubrication in FDM printers, resin spill cleaning and FEP film replacement in MSLA printers, and maintenance of MJP printers**.
- c. Troubleshoot technical issues in **FDM and MSLA printers**, including minor repairs such as **nozzle replacement and clearing filament blockages**.
- d. Operate and program CNC milling machines (3/5-axis), **Strong programming skills M-code and G-code, mechanical aptitude**
- e. Perform multitasking across multiple machines, setups, and quality checks using precision Measuring Instruments,
- f. Maintain tools, and ensure production targets are met

2. Work Order Management

- a. Receive work orders from start-ups & clients.
- b. Prioritize and schedule jobs based on **project requirements, deadlines, and resource availability**.

3. Inventory and Consumables Management

- a. Monitor and track consumables such as **filaments, resins, and printing materials** and **place orders when inventory levels are low**.

4. Design Support

- a. Provide **design support** using CAD tool and assist users in preparing models for **additive manufacturing**.

5. Laboratory Support

- a. Provide **hands-on technical guidance** to students on equipment such as **CNC machines, 3D printers, CMM (Coordinate Measuring Machine), UTM (Universal Testing**

Machine), Vacuum casting, Welding and Laser cutting

6. Training and Academic Support

- a. **Develop new hands-on learning projects** for the module that incorporate different manufacturing techniques.
- b. Conduct and deliver **presentations for the Mechanical Prototyping Module**, explaining manufacturing concepts and practical demonstrations to students or trainees.

Educational Qualification

Diploma along with B. Tech/M. Tech in mechanical engineering with 2 years hands-on experience in relevant domain.

Salary

The consolidated salary offered will be commensurate with qualifications and experience, ranging from **INR 30,000 to INR 1,10,000 per month**. The final salary will be determined based on the candidate's performance during the interview and relevant experience.

General Conditions

1. **Duration:** The position is contractual for **one year**, renewable annually up to a maximum of **five years**, subject to satisfactory performance and institute requirements.
2. **Selection Process:** Shortlisted candidates will be invited for an **interview (online or at IISc Bengaluru)**.
3. Applicants must possess the **minimum educational qualification on the date of advertisement**.
4. Candidates may be required to work on weekends and holidays, as workshops and events are occasionally conducted on these days.
5. **Accommodation will not be provided** on the IISc campus.
6. **Age relaxation** for SC/ST/OBC/PWD candidates will be provided as per Government norms.

Application Process:

Interested candidates should submit their resume, a cover letter detailing relevant experience, and a portfolio (if applicable) to dcoe@fsid-iisc.in