



IIT PALAKKAD TECHNOLOGY IHUB FOUNDATION

(Incorporated under Section 8 of the Companies Act 2013)

Ref: IPTIF/HR/Adv/2025/007

26th August 2025

Palakkad

Advertisement for the position of Maker Space Engineer/Associate/Executive

About NM-ICPS and TIH-ICS

The Union Cabinet approved the National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS) to be implemented by DST with a total outlay of Rs.3660 crore for a period of five years. The Mission aims to create a strong foundation and a seamless ecosystem for CPS technologies by coordinating and integrating nationwide efforts encompassing knowledge generation, translation research, technology and product development, human resource development, innovation & commercialization standards and international collaborations. To this end, a TIH on Intelligent Collaborative System (TIH-ICS) has been established at Indian Institute of Technology Palakkad.

About IIT Palakkad

Indian Institutes of Technology (IITs) are autonomous public institutions of national importance for higher education in engineering, science and technology. IIT Palakkad was announced by the Government of India in 2014, and began with a headstart in the very next academic year, 2015-16, with the support of IIT Madras. The academic program was launched by admitting students to the B. Tech. course in the disciplines of Civil Engineering, Computer Science & Engineering, Electrical Engineering and Mechanical Engineering. IIT Palakkad can already boast of a vibrant student and faculty community drawn from different parts of the country; it has truly emerged as a microcosm of India.

About the company

IIT Palakkad has established IIT Palakkad Technology IHUB Foundation (IPTIF) to facilitate the Technology Innovation Hub on Intelligent Collaborative Systems (TIH-ICS) setup at IIT Palakkad by NM-ICPS coordinated by the DST, Govt. of India. TIH-ICS, through IPTIF, plans to attract potential and harness expertise available nationwide, thus fostering research innovation, world-class technology and product development. IPTIF also plans to build linkages with research institutes and labs within and outside India. One of the primary goals of this company is to work in close collaboration with the industry to deliver commercial technology and products, and build a vibrant innovation ecosystem by providing a reliable platform for technology-based start-ups and entrepreneurs.



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Job Description

Position: Maker Space Engineer /Associate/Executive

Nature: Full-time, On-site

Location: Palakkad, Kerala

Start Date: Immediate

Context & Role: IPTIF over the past five years have supported multiple technology development projects, supported startups and entrepreneurship, conducted skill development programs and events and forged collaborations with National and International Organizations.

IPTIF, being a young organization with a small team, has an entrepreneurial work culture and we require the successful candidate to be adaptive, flexible, ready to operate under tight deadlines and be a good team player with multi ability to strategize and work independently. The roles and responsibilities are described below.

The Maker Space Engineers will be responsible for executing the full spectrum of FabLab operations at IPTIF. The role encompasses advanced R&D projects in **mechanical systems, electrical, electronics, embedded systems, product design, prototyping, and fabrication**. The position requires both technical expertise and leadership skills to manage specialized facilities and guide multi-disciplinary teams toward innovation and excellence.

Key Responsibilities:

- Serve as an engineer handling equipment operation, preventive maintenance, and workflow optimization.
- Execute projects as required on the case to case basis, covering mechanical systems, electrical/electronics, embedded systems, product design, fabrication, integration, and testing.
- Operate Qualisys Motion Capture Lab utilising the setup, calibration, and data acquisition for high-precision motion analysis
- Operationalise Battery Testing Lab, including cell/pack performance evaluation, safety monitoring, and lifecycle testing.
- Operate electronics lab, including PCB design, SMD assembly (pick-and-place), circuit testing, and troubleshooting.



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- Undertake the 3D printing job orders and facilitate operations (FDM and SLA), including CAD modeling, STL preparation/repair (Fusion 360, AutoCAD, Materialise Magics), and prototype post-processing.
- Handle advanced manufacturing processes such as CNC routing, VMC machining, and laser cutting, while also operating and maintaining basic mechanical tools for assembly, fitting, and repair.
- Ensure quality, safety, and compliance by maintaining EHS standards, documentation, and adherence to regulatory guidelines.
- Collaborate with cross-disciplinary teams (mechanical, electronics, software, and controls) to deliver integrated, production-ready solutions.
- Conduct training and mentorship sessions for students, interns, and support skills development activities providing training on safety protocols, fabrication methods, electronics prototyping, and 3D printing etc.
- Support procurement, project documentation, reporting, and process optimization to enhance lab efficiency and utilization.
- Support for NABL and ISO accreditation processes.
- Work under the supervision of Facility Manager / Fab Lab Lead by taking guidance and support for fab lab operations.

Educational Qualifications and Experience

- Bachelor's degree / Diploma/ITI in Mechanical Engineering, Electrical/Electronics Engineering, Mechatronics, Robotics, Embedded Systems, or a related field.
- 1 to 3 years working experience in hardware startup/maker space etc. are desirable.

Required Skills:

- Strong expertise in mechanical design, CAD/CAE tools (Fusion 360, AutoCAD), and additive manufacturing (3D printing FDM/SLA).
- Hands-on knowledge of electronics hardware design, PCB design & assembly line operations, embedded systems prototyping, and testing.



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- Experience with CNC machining, VMC, laser cutting, and other fabrication processes.
- Proficiency in battery testing, characterization, and safety protocols.
- Familiarity with motion capture systems (e.g., Qualisys) and data acquisition setups.
- Strong understanding of safety, compliance, and quality assurance standards in engineering labs.

Emoluments & other terms

- Remuneration will be as per qualification and experience
- Duration of employment will be initially for **One year** with a scope of extensions subject to performance and fund availability.
- The selected candidate will have to work on-site at Palakkad and join at the earliest.

Application process

Interested candidates can apply: <https://forms.gle/mybTN3ABQOBRxrA6>

Date of Application:- At the earliest.

For any further clarifications please send email to: manager-hr@iptif.tech

IPTIF holds the right to stop receiving applications when we identify the right candidate.

IPTIF holds the right to modify the required qualifications / experience based on the requirements and receipt of a number of applications from time to time.
