

# JOB DESCRIPTION for DIGITAL FABRICATION ENGINEER

Build-a-Tech Incubator & Workspace is a hardware technology accelerator with a mission to equip start-ups with cutting-edge resources and custom-tailored mentorship. Build-a-Tech helps entrepreneurs design, build and manufacture products that address everyday quality-of-life issues. You will have the opportunity to work in a world-class workspace, interface with tech innovators as well as collaborate on a global scale. The details of the position are as follows.

#### **BASIC JOB FUNCTION:**

Lead advanced manufacturing processes, develop custom solutions, and optimize the use of cutting-edge digital fabrication technologies. The ideal candidate will have substantial technical expertise, a strong background in engineering and materials science, and proven experience in managing complex projects within a fabrication or prototyping environment.

CLASSIFICATION: Technical Personnel

JOB TYPE:	On-Site / Full time
WORK HOURS:	Monday to Friday   09:00 AM to 05:00 PM Saturday   09:00 AM to 05:00 PM (1 per month)
SALARY:	$\aleph$ 80,000 to $\aleph$ 100,000 Monthly determined by relevant years of experience, qualifications and education
LOCATION:	Uyo, Akwa Ibom

#### **DUTIES & RESPONSIBILITIES:**

- 1. Design, develop, and execute advanced digital fabrication projects from concept to completion.
- 2. Utilise 3D modelling, CAD, and CAM tools to create detailed designs and machine-ready files.
- 3. Evaluate and implement new fabrication technologies and methodologies to improve efficiency and quality.
- 4. Oversee the operation, programming, and optimisation of digital fabrication tools, including 3D printers, CNC machines, and laser cutters.

- 5. Lead projects requiring interdisciplinary collaboration, integrating electronics, software, and mechanical systems.
- 6. Conduct material testing and analysis to ensure optimal performance for each application.
- 7. Develop and maintain documentation, including technical specifications, testing results, and procedural guides.
- 8. Mentor and provide technical support to the Digital Fabrication Technician and other team members.
- 9. Collaborate with clients or internal stakeholders to translate requirements into feasible technical solutions.
- 10. Ensure compliance with safety standards and industry regulations within the fabrication lab.

## **REQUIRED SKILLS:**

- Ability to instruct students and other lab users
- Excellent written and oral communication
- Excellent presentation skills
- Proficient in the use of PC/Mac, Google Workspace and business communication channels
- Excellent organisational skills with strong attention to detail
- Ability to multitask, prioritise, and manage time effectively
- Familiarity with robotics, automation, and control systems.
- Knowledge of additive manufacturing trends and innovations.

#### Optional:

- Knowledge of or ability to learn how to operate and maintain related equipment in the lab, such as 3D printers, CNC Machines, oscilloscopes, multimeters, power supplies, frequency generators, and spectrum/network analyzers, among others
- Knowledge of how to perform tests on systems and equipment to ensure that every component is working properly

## **EDUCATION:**

Experience and proficiency in the above Duties & Responsibilities and Required Skills sections will be weighed above any educational qualifications. Applicants not possessing the above-listed degrees should not be discouraged from applying.

It is preferred that applicants possess a **Bachelor's Degree in Engineering, Design, Architecture, Information Systems, Environmental Science, Physics** or a related field.

## TO APPLY:

Interested candidates fill out the Employment Application Form @ <u>bat.ng/careers/apply</u> and select the **DIGITAL FABRICATION ENGINEER** position.

Applications close on **11th JAN 2025** at 11:59 PM. Additional enquiries should be directed to <u>careers@buildatech.ng</u>