



We Are Hiring!

FABRICATOR

- INNOVATION CONSULTING
- RESEARCH & DEVELOPMENT
- PROTOTYPE DEVELOPMENT
- START-UP INCUBATION
- MENTORSHIP
- VENTURE CREATION
- ENTREPRENEURSHIP
- HUMAN CAPITAL DEVELOPMENT

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Open Position: Fabricator

Location: Innov8 Hub, Abuja, Nigeria

Employment Type: Full time, permanent

Reports to: Head, Technical & Vocational Department

COMPANY PROFILE

Innov8 Hub is a not-for-profit, non-governmental organization with a mandate to groom innovators, researchers, creatives, and venture creators. We strategically aid and collaborate with organizations and individuals seeking to transform their ideas into solutions.

KEY RESPONSIBILITIES

1. Prototype Design and Development:

- Collaborate with cross-functional teams, including material scientists, designers, and technicians, to develop innovative prototype designs.
- Utilize mechanical engineering principles to ensure designs are structurally sound, functional, and meet project requirements.
- Create detailed technical drawings and specifications for fabrication, considering material properties, manufacturing processes, and design optimization.
- Apply engineering analysis techniques to evaluate and validate design performance.

2. Fabrication Process Planning and Optimization:

- Select appropriate fabrication techniques based on design requirements, materials, and project constraints.
- Develop fabrication process plans, including material selection, manufacturing sequences, and quality control procedures.
- Optimize fabrication processes for efficiency, cost-effectiveness, and scalability.
- Collaborate with fabrication technicians to troubleshoot process issues and propose improvements.

3. Equipment and Tooling:

- Identify and specify fabrication equipment and tooling requirements based on project needs.
- Collaborate with vendors and equipment manufacturers to ensure proper selection,

installation, and maintenance of fabrication equipment.

- Develop and implement preventive maintenance schedules to ensure optimal performance and longevity of fabrication equipment.
- Stay updated on the latest advancements in fabrication technology and recommend equipment upgrades or additions as needed.

4. Quality Control and Testing:

- Develop quality control plans and inspection procedures for fabricated prototypes.
- Conduct quality checks and tests at various stages of fabrication to ensure compliance with design specifications and industry standards.
- Analyse test data and collaborate with cross-functional teams to address any quality issues and implement corrective actions.
- Document and maintain quality control records and reports.

5. Collaboration and Communication:

- Collaborate effectively with material scientists, designers, and technicians to ensure seamless coordination throughout the fabrication process.
- Communicate technical information clearly and concisely to both technical and non-technical stakeholders.
- Participate in project meetings, provide progress updates, and contribute to decision-making processes.
- Foster a collaborative and innovative environment within the fabrication department.

6. Prototyping and Testing:

- Develop prototypes of equipment/machinery to evaluate and validate design concepts.
- Conduct field testing of prototypes to assess performance, durability, and usability under real-world conditions.
- Analyse test data and collaborate with cross-functional teams to refine designs and address any issues or limitations.
- Document and maintain records of prototyping and testing activities.

7. Technology Integration:

- Explore and evaluate the integration of advanced technologies, such as sensors, automation, and data analytics, into equipment to enhance precision engineering practices.
- Stay updated on emerging trends and innovations in agricultural engineering and technology for potential implementation in equipment design and fabrication

SKILLS AND QUALIFICATIONS

1. Strong Mechanical Engineering Fundamentals:

- In-depth knowledge of mechanical engineering principles, including structural analysis, thermodynamics, fluid mechanics, manufacturing processes, and machinery design.

- Ability to apply engineering principles to solve complex design and fabrication challenges.
- 2. Design and CAD Proficiency:**
- Proficiency in Computer-Aided Design (CAD) software, such as SolidWorks, AutoCAD, or similar tools, for creating detailed 3D models and technical drawings.
 - Familiarity with design optimization techniques, Design for Manufacturing (DFM) principles, and tolerance analysis.
- 3. Fabrication Techniques and Processes:**
- Knowledge of various fabrication techniques, including additive manufacturing, subtractive manufacturing, and forming processes.
 - Experience with fabrication equipment and tools, such as CNC machines, 3D printers, laser cutters, and welding equipment.
 - Familiarity with different materials and their fabrication requirements.
- 4. Quality Control and Testing:**
- Understanding of quality control principles and methodologies applicable to fabrication processes.
 - Experience in developing and implementing quality control plans, inspection procedures, and testing protocols.
 - Proficiency in measurement and testing equipment, statistical analysis, and interpretation of test results.
- 5. Analytical and Problem-Solving Skills:**
- Strong analytical abilities to identify and solve fabrication challenges and optimize processes.
 - Ability to perform engineering analysis, evaluate design performance, and propose improvements.
- 6. Collaboration and Communication:**
- Excellent teamwork and collaboration skills to work effectively with multidisciplinary teams.
 - Strong written and verbal communication skills to convey technical information clearly and concisely.
- 7. Emerging Technologies and Innovation:**
- Familiarity with emerging technologies in agriculture, such as precision farming, automation, remote sensing, and data analytics.
 - Ability to assess and integrate advanced technologies into equipment design to optimize farming practices.

EDUCATION AND EXPERIENCE

- A bachelor's or master's degree in Mechanical Engineering/Agricultural Engineering or a related field.
- Professional engineering certification or licensure is advantageous.

- Relevant hands-on experience in a fabrication, equipment design, manufacturing or prototyping environment.
- Experience with CAD software and familiarity with simulation tools.
- Knowledge of relevant industry standards and regulations.

REMUNERATION

Salary Range – Open – Initially dependent on experience, thereafter on performance

HOW TO APPLY

Interested candidates are encouraged to submit their CVs and Cover letter to **hr@innov8hub.ng**

