

# JOB ADVERT –GRADUATE TRAINEE AGRICULTURAL ENGINEERING

#### 1. OVERALL JOB PURPOSE

The position is within an agricultural research institution and is responsible for carrying out technology and climate change-related agricultural research. The candidate is expected to integrate innovations that improve the efficiency of tobacco operations and ensure sustainable and responsible production. Additionally, the Graduate intern will provide research-based information and advice to growers.

## Position reports to: Head of Agric Technologies, Engineering and Biosystems

### 2. <u>DUTIES AND RESPONSIBILITIES</u>

- i. **Conduct Agricultural Engineering Research Trials** aimed at improving agricultural processes, machinery, equipment, and systems. Specific areas of focus include:
  - a. Barn Furnace Improvements Research
  - b. Sustainable Curing Fuels Evaluation
  - c. Irrigation Trials (as necessary)
  - d. Conduct trials and experiments to evaluate new agricultural equipment in contract research trials (in collaboration with designers/developers of the said equipment).
  - ii. Proactively Design and Develop Structures and Machinery: Innovate mechanically-sound machinery, equipment, and gadgets to meet the needs of growers and other divisions within the institution.
  - iii. **Climate-Proofing Innovations:** Develop original innovations to climate-proof crops.
- iv. **Engage with Farmers and Tobacco Growers:** Discuss their agricultural engineering-related needs and implement necessary interventions based on research findings.
- v. **Provide Technical Support and Expertise:** Assist farmers, agricultural producers, and other stakeholders and offer guidance on agricultural engineering practices.

- vi. **Collaborate with Researchers and Scientists:** Work with team members to implement projects aimed at increasing agricultural efficiency and sustainability.
- vii. **Data Analysis and Reporting:** Analyze research data and interpret results. Prepare reports (weekly, monthly, board, and annual) documenting findings.
- viii. **Generate Scientific Publications:** Author scientific papers based on own research for publication in peer-reviewed journals. Present findings at various scientific conferences and workshops.
- ix. **Stay current with industry trends**, advancements in technology, and best practices in agricultural engineering.
- x. Assist in the estimation of costs and submission of bids for engineering-related projects and the preparation of the relevant contract documents.
- xi. Perform any other related duties and responsibilities as required

### 3. QUALIFICATIONS, SKILLS AND EXPERIENCE

- Minimum of a B. Sc. Agricultural Engineering or equivalent
- Minimum 1 year relevant working experience preferably with industry experience in agriculture or engineering.
- Understanding and leveraging Gen AI
- Software tools for sustainable agriculture practices
- Knowledge of Project Management and
- Ability to use Computer Aided Design
- Knowledge of precision agriculture techniques,
- Self-motivated with proven interpersonal and relationship skills
- Ability to work independently and within teams on abstract projects with minimal supervision
- Must be able to work under pressure.
- Class 4 driver's license

### 4. APPLICATION PROCESS

Interested candidates should submit their CV, cover letter, and references to <a href="https://doi.org/10.2012/nc.nlm">https://doi.org/10.2012/nc.nlm</a> by 09 May 2024 with "Graduate Trainee – Agricultural Engineering" in the subject line. Only shortlisted candidates will be responded to.

Kutsaga Research is committed to diversity and equal opportunity. We encourage applications from individuals of all backgrounds and experiences.