

## Position Advertisement

**Position:** Intern (10 Positions)

- Data science track
- Health economics track
- Software engineering track
- Epidemiology track

**Duration:** 6 months (non-renewable)

**Reporting To:** CEMA Research Fellows

**Expected Start Date:** June 3, 2025

**Duty Station:** Center for Epidemiological Modelling and Analysis, University of Nairobi

Are you passionate about making a positive impact on health? Look no further! The Center for Epidemiological Modelling and Analysis (CEMA) at the University of Nairobi is offering an exceptional opportunity to join our team as an intern in one of four tracks.

### About CEMA

CEMA is a multidisciplinary Center of Excellence that uses data-driven approaches to guide the control of diseases and improve public health in Kenya and the African continent. Established in 2020, CEMA boasts a collaborative and intellectually stimulating environment, attracting experts from various fields of study. Through insights from applied epidemiological modelling and analytics, CEMA has played a critical role including in guiding responses to COVID-19 in Kenya and the continent; catalyzing the control and elimination of neglected tropical diseases, and guiding the delivery and maintenance of essential health services during health emergencies. CEMA provides training in quantitative skills required to manage and analyze health data to address priority public health questions in the region.

### The Position Description

As an intern at CEMA, you will play a pivotal role in supporting our ongoing research and data-driven initiatives. You will work closely with our team of researchers in generating data, analysing data and utilising data insights to better understand disease dynamics, identify and evaluate intervention strategies.

### Responsibilities of Data Science Intern:

- Use of data analytics and programming skills such as R to analyse data
- Support acquiring, validating, cleaning, and wrangling health and health-related datasets
- Apply statistical methods and machine learning algorithms to extract insights and patterns from data
- Develop and maintain data visualizations, dashboards, and reports to communicate findings effectively
- Collaborate with multidisciplinary teams to support research projects and provide data-driven recommendations
- Stay up to date with the latest advancements in data science, epidemiology, and public health.
- Take on other tasks as assigned.
- NB: Applicants with a degree in Geographic Information Systems will also be required to analyze and visualize spatial data related to health including integrating GIS with epidemiological and economic data to inform health decision-making

**Responsibilities of Health Economics Intern:**

- Support data collection and organization for clinical, safety, and cost information on health technologies.
- Conduct literature reviews and assist in evidence synthesis for health technology assessment (HTA) projects.
- Perform economic evaluations, including cost-effectiveness and budget impact analyses, with guidance from senior researchers.
- Help develop and maintain databases of clinical and economic evidence.
- Contribute to the preparation of HTA reports, policy briefs, and stakeholder materials.
- Assist in adapting international HTA frameworks to the Kenyan context.
- Provide support during HTA-related workshops, meetings, and trainings.
- Maintain organized documentation of references, datasets, and analysis outputs
- Take on other tasks as assigned.

**Responsibilities of Epidemiology Intern:**

- Collect and analyze epidemiological data to support health technology assessments.
- Assist in systematic reviews and evidence synthesis on disease burden and treatment outcomes.
- Support the development of epidemiological models and burden of disease estimates for economic evaluations.
- Prepare visualizations (tables, graphs, maps) to present epidemiological findings.
- Contribute to the drafting of technical reports, manuscripts, and policy briefs.
- Maintain organized documentation of data sources, analyses, and references for HTA projects.
- Participate in team meetings, workshops, and trainings related to HTA.
- Take on other tasks as assigned.

**Responsibilities of Software Engineering Intern:**

- Develop web applications to support dashboards, data visualization, and analytics tools for health data projects.
- Maintain and update CEMA's website, ensuring it remains secure, functional, and user-friendly.
- Assist in the setup, configuration, and maintenance of CEMA's internal server infrastructure.
- Support the migration of CEMA's online content to the in-house server, ensuring minimal downtime and data integrity.
- Help develop, test, and implement security protocols, backup solutions, and disaster recovery plans to safeguard CEMA's digital content.
- Contribute to optimizing data processing algorithms to enhance system performance and reduce processing times.
- Assist in coding, modifying, testing, and maintaining software applications and systems according to project needs.
- Provide technical support for troubleshooting, updating, and maintaining existing applications and systems.
- Document technical procedures, workflows, and solutions for future reference and team knowledge sharing.
- Take on other tasks as assigned.

**Requirements:**

- Bachelor's degree in Statistics, Biostatistics, Epidemiology, Mathematics, Data Science, Actuarial Science, Population Health, Computer Science, Information Technology, Economics, Geographic Information System, Veterinary medicine, Medicine, Pharmacy, Nursing, Public Health, Health System Management or other relevant disciplines (acquired after 2021)
- Demonstrated knowledge of data analytics using a programming language
- Evidence of motivation for the field of data science, epidemiology, health technology assessments and/or public health

**Terms of Appointment:**

This is a position whose tenure is a six (6) months contract, non-renewable. The interns will be offered a stipend of KES 50,000 per month.

**How to apply:**

Interested candidates who meet the above criteria are encouraged to fill out the application form on this [link](#). Only online applications will be accepted.

**Application Deadline:** April 21, 2025

**IMPORTANT NOTICE:** We receive a high volume of applications, however, only a few candidates can be selected for the position. Successful applicants will undergo a two-stage process to assess their competency in meeting the responsibilities of the role. Only those who pass a screening/assessment stage will move on to the next step in the recruitment process.