



### ***The second Call for Registrants: Quantitative Monitoring and Evaluation course***

The University of Rwanda – College of Business and Economics (UR-CBE), African Centre of Excellence in Data Science (ACE-DS) in collaboration with the African Research, Implementation Science, and Education (ARISE) Network and the Harvard University T. H. Chan School of Public Health (HCSPH) wishes to inform PhD students and all interested professionals with strong quantitative backgrounds to register for an advanced course of Quantitative Monitoring and Evaluation to be held at University of Rwanda, ACE-DS from 24<sup>th</sup> -28<sup>th</sup> June 2019 in Kigali, Rwanda.

### **Overview of Quantitative M&E**

This is the second time that the Quantitative M&E course is organized in Rwanda through ARISE network and partnership with the Harvard University T. H. Chan School of Public Health (HCSPH). Content and structure of the proposed *Quantitative Monitoring and Evaluation* course has been developed by instructors at the Harvard T. H. Chan School of Public Health using materials from their own offering of the course and contextualised to Rwanda-specific cases. The aim of this course's implementation in Rwanda is to enhance the capacity of the Rwandese to provide scientific evidence to support (or refute) the efficacy and scalability of public health interventions. The training activities are designed to prepare a new cadre of decision makers and public health professionals that can translate research findings into policies and programs, and to bring successful interventions to scale. The course focuses on key concepts for monitoring and evaluating programs toward scale up and policy translation.

Rwanda is going to conduct this initial implementation through support of the McGoldrick Professional Development Program in Public Health operating under the aegis of HCSPH and the ARISE Network, in collaboration with the ACE-DS and the Rwandan McGoldrick fellow from UR & and Rwanda Ministry of Health.

### **Objectives**

This course is an introduction to the common and innovative statistical methods used for monitoring and evaluation (M&E). The course uses real data as motivating examples for each topic to allow students to easily digest the concepts in a friendly manner. The specific lecture topics are as follows:

1. Introduction to quantitative methods in M&E
2. M&E design: Frameworks for and levels of evaluation and indicators
3. Using statistics to make inference about program – Variability, Inference, Probability
4. Complex survey samples: Design and Analysis
5. Lot Quality Assurance (LQAS) Methods: Introduction, Design and Implementation, Integrating with Survey Sampling
6. Levels of Evaluation
7. Statistical analysis of Clustered and aggregate data
8. Common sources of error (Missing at Random (MAR), Missing Not at Random (MNAR), Pool (Group) Testing)
9. Bias Mitigation (Multiple Imputation, Estimation & Rep Steps, pooling Step and Standard Error, Randomized Response, Annealing, Lying)

### **Expected results**

By the end of the course, students will be able to:

- Identify appropriate sources of data, including the limitations and necessary interpretations.
- Employ basic to intermediate, but common, statistical tools used in program M&E.
- Integrate multiple methods for the operation of a comprehensive M&E system.
- Describe how to extend basic components to more complex M&E methods.

### Course Duration

This course will take place over one week, meeting 8 hours per day over five days.

Face to face lecturing is 24 hours, in addition to group discussion and interaction between instructors and students.

The practice exercise known as practicum will take 11 hours for individual student practice on specific projects.

### Qualification of participants

The course is designed for individuals with a prior Master's degree, as well as professionals with strong knowledge in statistics or other quantitative methods. The applicant should have experience of working with data-related projects or M&E.

### Award

Candidates that successfully complete this course will be awarded a Certificate of Completion.

### Application process

To apply, please e-mail the following materials to [muteelia@gmail.com](mailto:muteelia@gmail.com) and copy [aceds@ur.ac.rw](mailto:aceds@ur.ac.rw) and Dr. Ignace Kabano ([kabanoignace@gmail.com](mailto:kabanoignace@gmail.com)) by **24<sup>th</sup> May 2019**

- Motivation letter
- CV

The selected candidates will be notified by 30<sup>th</sup> May 2019.

### Registration Fees

200 USD (180,000 RWF) for Rwandan and East African citizens  
300 USD for others

### Bank Accounts:

00094-07744797-74 (USD)

00094-07744796-73 (RWF)

Account name: UR/ACE-DS

Bank Name: Bank of Kigali

SWIFT CODE: BKIGRWRW



**Dr. Charles Ruranga**  
Director

**African Centre of Excellence in Data Science (ACE-DS)**

