



---

OFFICE OF PRINCIPAL

**TERMS OF REFERENCE FOR RECRUITMENT OF THE DIRECTOR FOR THE  
AFRICAN CENTER OF EXCELLENCE IN INTERNET OF THINGS (ACE-IoT)**

---

**1. Background:**

One of the five broad priorities underpinning Rwanda's Vision 2050 is to develop modern infrastructure and livelihoods. The National Strategy for Transformation (NST1) also focuses on transforming Rwandans into a capable and skilled people ready to compete in a global environment and sustain the envisioned development goals. Among the priority areas under NST1's economic transformation pillar is to establish Rwanda as a globally competitive knowledge-based economy. To achieve this, one of the key strategic interventions is to support the establishment and operationalization of new and strengthen existing centers of excellence with a focus on science, technology and innovation. In line with this strategy, Rwanda is part of the *Eastern and Southern Africa Higher Education Centers of Excellence Project (ACEII)*, with a set of four (4) Centers of Excellence currently under implementation, including the *African Center of Excellence in Internet of Things (ACE-IoT)*.

The University of Rwanda (UR)'s vision is to be a leading University that develops highly enterprising graduates prepared and dedicated to building a more just and sustainable society locally, nationally and globally, with appropriate innovations that advance quality of life. As the main provider of knowledge and skills in science, technology and engineering, the UR-College of Science and Technology (UR-CST) hosts ACE-IoT. The center aims at delivering Master's and PhD trainings and research in the growing field of IoT with the main objective of bringing together students, researchers and the industry to provide IoT-based solutions and promote researches and innovations that address a broad range of societal and development challenges at both national, regional and global levels.

It is against the above background that UR-CST would like to recruit a highly motivated and experienced scientist specialized in IoT and allied fields to occupy the vacant position of *The Director of the African Center of Excellence in Internet of Things (ACE-IoT)*.

**2. Job profile and main responsibilities**

As Director of the Center of Excellence in Internet of Things (ACE-IoT), you will be responsible for the planning, management, coordination and supervision of all activities implemented under the center. Specifically, you are expected to:

- i. Exercise academic leadership by being responsible and accountable for setting and advancing the academic strategy of the ACE-IoT in line with the UR-CST and UR's strategic plan and direction;
- ii. Coordinate the implementation of ACE-IoT action plan in line of ACEII Project's objectives and deliverables;
- iii. Ensure best possible student learning experience through fulfillment of the University's responsibilities concerning students in respect of their admission, instruction, progress and examination;

W

Page 1/3





### OFFICE OF PRINCIPAL

- iv. Facilitate excellence in teaching and PhD research supervision that supports creative learning through challenge-driven education;
- v. Promote collaborative research with strong focus on multidisciplinary research and innovation that lead ACE-IoT towards being an advanced regional learning and research platform that attracts qualified international visiting faculty and researchers;
- vi. Create a dynamic and forward-looking research and innovation environment for both staff and students; including facilitating the establishment of research groups to promote a research culture;
- vii. Attract and establish strong collaborations and strategic partnerships with regional and international reputable academic and research institutes in the field of IoT, including embedded systems, wireless sensors and related disciplines;
- viii. Establish fruitful linkages with both public, regional and international organizations as well as industrial partners through consultancies as well as joint innovative research and innovation projects;
- ix. Promote research dissemination through contribution to impactful community outreach programs, seminars, workshops and conferences;
- x. Develop strategies for financial sustainability through income generating activities such as attracting research grants proposals and scholarships, innovative professional short courses as well as consultancy services;
- xi. Create and exploit new opportunities for R&D and knowledge transfer activities in order to secure additional income streams;
- xii. Coordinate efficient planning, acquisition and usage of teaching and research laboratory equipment, advanced simulations tools and software, including following up on their continuous maintenance and upgrade.
- xiii. Be an active member of the UR-CST College Academic Council and contribute to advancing the overall leadership and management of the College;
- xiv. Develop and sustain appropriate structures for management, consultation, decision-making and communication with staff and students;
- xv. Refresh and develop strategies and programs in order to attract new students and markets;
- xvi. Ensure that the University policies and procedures are duly implemented;
- xvii. Ensure robust reporting, performance evaluation and audit systems are established and implemented within the Center, in line with ACEII project requirements;
- xviii. Develop and implement sound human capital development strategy and plan for the center.

### 3. Desirable Qualifications

- i. Hold a PhD Degree with specialization in wireless communications or embedded systems;
- ii. Possess a track record of professional experience in planning, design, development and implementation of projects in the areas of wireless communications or internet-based technologies with proven skills in software engineering;

*[Handwritten signature]*

Page 2/3





### OFFICE OF PRINCIPAL

- iii. Have strong understanding of the IoT, embedded systems and wireless sensors industry, including its array of human capital needs and professional skills profiles;
- iv. Demonstrate a track record of capacity and leadership in carrying out consultancy services in the areas of planning, functional design, or operation and management of wireless communications and internet-based systems;
- v. Demonstrate effective communication skills with capacity to write and present professional reports, scientific briefs as well as research projects;
- vi. Having a good record of research publications. Holding patents maybe an advantage;
- vii. Have experience in postgraduate students' supervision;
- viii. Experience with managing donor funded projects which involves multi- stake holders may be an added advantage;
- ix. Applicants with track record of skills in applied R&D through work experience with the industry will be highly appreciated.

#### 4. Application Procedure

Interested and qualified candidates are requested to electronically send their application documents specified below by email via [principal.cst@ur.ac.rw](mailto:principal.cst@ur.ac.rw)

The deadline for submitting applications Friday **3<sup>rd</sup> January 2020 at 5.00 PM Kigali Time.**

Before starting the application, please make sure the following documents are ready to be used in PDF format:

- i. *A detailed CV*
- ii. *A copy of academic degree*
- iii. *A copy of ID or passport*

The position is open to all nationalities but preference shall be given to Rwandan nationals in case they fulfill the required qualifications. Attractive conditions and terms of employment shall be negotiated with the successful candidate. Women are encouraged to apply.

Done in Kigali on Tuesday 24<sup>th</sup> December 2019

**Dr. Ignace GATARE**  
Principal  
College of Science and Technology  
University of Rwanda



Page 3/3





---

OFFICE OF PRINCIPAL

**TERMS OF REFERENCE FOR RECRUITMENT OF A  
TRANSPORT PLANNING AND ENGINEERING SPECIALIST**

---

**1. Background:**

One of the five broad priorities underpinning Rwanda's Vision 2050 is to develop modern infrastructure and livelihoods. The National Strategy for Transformation (NST1) has set priority areas with key strategic interventions to strengthen Rwanda's economic transformation. These include the improvement of both rural and urban transportation services countrywide. There is also focus to develop and implement smart and efficient transportation systems to reduce the cost of doing business and facilitate trade, including the development of railway transportation, logistics platform and construction of ports on navigable lakes. NST1 also focuses on transforming Rwandans into a capable and skilled people ready to compete in a global environment and sustain the envisioned development goals.

The University of Rwanda (UR)'s vision is to be a leading University that develops highly enterprising graduates prepared and dedicated to building a more just and sustainable society locally, nationally and globally, with appropriate innovations that advance quality of life. As the main provider of knowledge and skills in science, technology and engineering, the UR-College of Science and Technology (UR-CST) intends to strengthen its education, training and research in the areas of Transport Planning and Engineering and allied sciences with the strategic objective of contributing to the achievement of both national and global development goals. In line with this vision and in the framework of the World Bank funded Priority Skills for Growth (PSG) Program-for-Result for Results (PforR) project, UR has developed new BSc in Transportation Engineering, BSc in Transport Management and BSc in Logistics and Supply Chain Management Programs. UR also ambitions to establish a Regional Center of Excellence in Transport and Logistics and has started to engage various partners to that effect.

It is against the above background that UR-CST would like to recruit a highly-motivated and experienced *Transport Planning and Engineering Specialist*.

**2. Job Profile & Main responsibilities**

As a *Transport Planning and Engineering Specialist*, you will be responsible for planning, coordinating and monitoring the implementation of all UR-CST's education, professional training and research programs in the thematic area of Transport Planning and Engineering. Specifically, you are expected to:

- i. Coordinate the development of innovative needs-based and up-to-date curriculum in the areas of transportation engineering and allied disciplines;
- ii. Facilitate teaching excellence that supports creative learning through challenge-driven education;

JK

Page 1/3





---

### OFFICE OF PRINCIPAL

- iii. Promote collaborative research with strong focus on multidisciplinary research. To this end, you will lead the design and establishment of the envisioned *Regional Center of Excellence in Transport and Logistics* as an advanced learning and research platform;
- iv. Attract and establish strong collaborations and strategic partnerships with regional and international reputable academic and research institutes in the field of transportation planning and engineering and related disciplines;
- v. Establish fruitful linkages with both public, regional and international organizations as well as industrial partners through joint innovative research projects;
- vi. Promote knowledge transfer and research dissemination through contribution to impactful community outreach programs, seminars, workshops and conferences;
- vii. Develop strategies for financial sustainability through income generating activities such as research grants proposals, attractive professional short courses, and consultancies services
- viii. Coordinate efficient planning, acquisition and usage of transportation planning and engineering teaching and research laboratory equipment, advanced simulation tools and software; including following up on their continuous maintenance and upgrade.
- ix. Coordinate efficient planning and acquisition of ISI journal publications and books in transportation planning and Engineering field in collaboration with the University of Rwanda Library to enhance student centered learning and research.

### 3. Desirable Qualifications:

- i. Hold PhD Degree in transport planning and engineering or related fields with a track record of professional experience of minimum 5 years in planning, design and development of transport infrastructure with practical experience in implementation of large-scale transportation projects;
- ii. Must have a solid record of teaching experience, research publications in peer reviewed journals as well as supervision of postgraduate students;
- iii. Demonstrate a track record of capacity and leadership in carrying out consultancy services in the areas of planning, design, development and management of transportation systems;
- iv. Have strong understanding of the transportation planning and engineering industry, including its array of human capital needs and professional skills profiles;
- v. Be conversant with transportation planning and engineering regulations and standards;
- vi. Demonstrate effective communication skills with capacity to write and present professional reports, scientific briefs as well as research projects;

88

Page 2/3



### OFFICE OF PRINCIPAL

- vii. Having a combination of demonstrable practice, teaching and research experience in transport infrastructure planning and engineering is an advantage;
- viii. Experience with managing donor funded projects which involves multi- stake holders may be an added advantage;
- ix. Having a record of reviewing scientific research outputs as well as sitting on editorial boards of scientific journals is an advantage.

#### 4. Application Procedure

Interested and qualified candidates are requested to electronically send their application documents specified below by email via [principal.cst@ur.ac.rw](mailto:principal.cst@ur.ac.rw)

The deadline for submitting applications Friday 3<sup>rd</sup> January 2020 at 5.00 PM Kigali Time.

Before starting the application, please make sure the following documents are ready to be used in PDF format:

- i. *A detailed CV*
- ii. *A copy of academic degree*
- iii. *A copy of ID or passport*

The position is open to all nationalities but preference shall be given to Rwandan nationals in case they fulfill the required qualifications. Attractive conditions and terms of employment shall be negotiated with the successful candidate. Women are encouraged to apply.

Done in Kigali on Tuesday 24<sup>th</sup> December 2019

**Dr. Ignace GATARE**  
Principal  
College of Science and Technology  
University of Rwanda

