



### Issue Nº 05 | August-2021

## **African Centres of Excellence**





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On 27<sup>th</sup> August, 2021, the University of Rwanda held its long awaited graduation for the 2019 and 2020 classes. The graduation took place virtually due to the current measures to avoid the spread of COVID 19 Pandemic. The ceremony was presided over by Education Minister Dr Valentine Uwamariya.





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All the Degrees and Diploma were awarded and conferred upon by the University Chancellor Ms Patricia Campbell who used virtual facilities to follow the graduation. She asked graduants to draw their attention to the good things they might never have had the chance to learn this early in their academic and professional lives were it not to be for corona virus.

Ms Patricia further commended graduates for resilience showcased during the uncertain times of COVID 19 which contributed to the University to reach graduation. "You have proven that you can persevere and succeed when faced the unpredicted challenges," Patrcia said while expressing her belief in graduates' capacity to adjust and work with new challenges.

" The Government will continue to empower the University of Rwanda in all meaningful and relevant ways "

Prof Alexandre Lyambabaje, the UR Vice Chancellor urged graduates to be determined to take something valuable back to their communities and governments. He also asked them to bring back something to the University of Rwanda for continuity and excellence after their graduation. During this year graduation, a total of 8,908 graduates in various programs were feted from the university of Rwanda six colleges. Among them, 385 graduates were awarded Masters' degrees while 57 were awarded Postgraduate Diplomas and Certificates. A total of 7,796 graduated with Bachelor's degrees while 467 graduate were awarded with Advanced Diploma and 198 with Diploma.

Speaking on behalf of graduates Dan Tumusiime pledged commitment and be the backbone for the development of the country. He also expressed his pride to graduate from the University which has constantly ranked number one in Rwanda.

Tumusiime who was the Guild President noted that fresh graduates can have huge contribution to the future of the nation.

"A dinosaur industry risks extinction if not open to fresh ideas that come from creativity of the young generation" He said.

In her keynote speech Dr Valentine Uwamariya, the Education Minister who presided over the event assured that the Government of Rwanda is more than willing to render the necessary support to the University of Rwanda.

"The Government will continue to empower the University of Rwanda in all meaningful and relevant ways" said Uwamariya.

At total of 92 Master's and 3 PhD students graduated from African Centres of Excellence.

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## **STUDENTS' REJOICE AFTER GRADUATION**

### **Mr. Frederic NGENDAHIMANA, specialized in Mining, ACE-DS**



Mr. Frederic NGENDAHIMANA, specialized in Mining, ACE-DS

n 2018, I got a full study scholarship from ACEDS in partnership with the World Bank. Since then, I was exposed to a different environment, which is full of facilities and mentors from around the world.

For instance, I appreciated the program exchange where experts from high ranked universities mostly came to either teach or share with us their experience or even students went and explored their mode of learning.

I also enjoyed the way ACE-DS students were mostly invited to join some high level conferences including PASET, Transform Africa, Internal conference on big data among many others.

I don't doubt that the skills I acquired from ACEDS not only extended my statistical capacity but also opened doors for new and innovative ways of solving societies' problems mostly using the new gold "Big Data".

" I don't doubt that the skills I acquired from ACEDS not only extended my statistical capacity but also opened doors for new and innovative ways of solving societies' problems mostly using the new gold [Big Data]." I have learnt ways this special type of data could be useful to improve the traditional ways of addressing problems.

Today, some of the acquired skills are being exploited by researchers where we are developing a set of data collection and data analytics cost reduction techniques.

However, I feel like such knowledge is less utilized because the field is yet to be fully recognized by both private and public investors.

I then strive to be among those who brings such impact

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## Dr. Kizito NDIHUKUBWAYO, specialized in Physics Education, ACE-ITLMS



Dr. Kizito NDIHUKUBWAYO, specialized in Physics Education, ACE-ITLMS

am glad to finally graduate from the University of Rwanda ACEITLMS! I am excited to be awarded a PhD in Physics Education research (PER). PER is growing globally, and I am confident that I will advance this field in Rwanda, Africa, and the entire world by conducting basic and applied research with colleagues in the field. I am thankful to the Government of Rwanda through the World Bank project for the financial support offered during my studies.

My appreciations go to my research advisors, collaborators, trainers, journal editors and reviewers, internal and external examiners for academic support, my fellow students for motivational support, and my family for emotional support.

ACEITLMS has offered support: various training [such as proposal writing, research publication, etc.], research data collection fund, and research dissemination [such as attending international conferences], and exchange program (learning from experts abroad) funds.

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I am thankful to the Government of Rwanda through the World Bank project for the financial support offered during my studies. "

These opportunities were for everyone, and this is appreciable!

I am encouraging my fellow postgraduate students to innovate how to connect what they learned with available resources, such as applying the knowledge into skills.

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## Dr. Joseph Njiku, specialized in Mathematics Education, ACE-ITLMS

y PhD graduation was anticipated but still came with excitement. Thanks to the African Centre of Excellence for Innovative Teaching and Learning Mathematics and Science (ACEITLMS) of the University of Rwanda – College of Education.

I graduated my PhD studies from the University of Rwanda in Mathematics Education. My research was on the development of secondary mathematics teachers' TPACK and attitudes through collaborative technologybased lesson design activities.

My research informs professional development practices in technology integration in the teaching of mathematics.

I am grateful to the government of Rwanda that supported me financially through the ACEITLMS during my studies. I also commend the ACEITLMS, UR-CE academic staff, advisors, and colleagues for their invaluable academic and social support.

They provided for me the learning environment that many prospective students are looking for. As such, I encourage students and prospective students to properly exploit this environment for their professional development and the development of Rwanda and the region.

The ACEITLMS shall stride sustainably



Dr. Joseph Njiku, specialized in Mathematics Education, ACE-ITLMS

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by harnessing, as it has always done, the best resources to its repertoire. This includes attracting the best minds country, the region, and beyond to its programs.

It also includes increasing and facilitating collaborative learning between the academic staff and the research students.

This may not only be attained through supervisor-supervisee relationships but also deliberate efforts to involve academic staff in students' learning activities such as active participation in staffstudent seminars and collaborative research activities. Together we can!

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## Eng. Jean Pierre BIZABAKORAHO, specialized in Electrical Power Systems, ACE-ESD



Eng. Jean Pierre BIZABAKORAHO, specialized in Electrical Power Systems, ACE-ESD

uring my stay at African Centre of Excellence in Energy for sustainable Development (ACE-ESD), I had a clear understanding that the progress in energy industry does not stand still i.e. growing demand for increasing energy efficiency, keeping environment clean and safe which lead to sustainability however, energy sector in many the aspects in need of modernization.

As I am working as Regional Operation Coordinator in Energy Utility Corporation Ltd (EUCL), a subsidiary of Rwanda Energy Group, this Master's degree helped me more understand energy sector to analyze the whole power system diagram, energy analysis, loss reduction analysis and participation in our country development in energy sector.

I am appreciating the **African Center of Excellence** in Energy for sustainable Development how thev help us to get incomparable skills in electrical power system and good practices. I am encouraging young engineers to join this ACE-ESD /UR for being more competitive in electrical engineering theory and practices."

One of the most milestone I have achieved in my targets is to design power system, fault analysis in the system and the later needs more experienced engineers. Thus, the study of Electrical Power Systems in ACE-ESD is incomparable key for skills development and practical engineering experience.

I am appreciating the African Center of Excellence in Energy for sustainable Development how they help us to get incomparable skills in electrical power system and good practices. I am encouraging young engineers to join this ACE-ESD / UR for being more competitive in electrical engineering theory and practices.

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## Dr. Angel Mukuka, specialized in Mathematics Education, ACE-ITLMS



experience comes with numerous moments of hard work towards attaining my Doctoral Degree in Mathematics Education. Thanks World Bank, through to the the government of Rwanda for providing a scholarship to enable me to undertake such an important academic activity, at the African Centre of Excellence for Innovative Teaching and Learning Mathematics and Science (ACEITLMS), University of Rwanda-College of Education.

Ultimately in my 3/4 years at ACEITLMS, the platform given to interact with colleagues from different parts of Africa prepared me mentally on expressing issues as a knowledge authority in my field.

Regardless of where Mathematics and Science teachers would come in

contact with news about ACEITLMS,

" I would encourage them to apply and start a journey of attaining excellence in skills of mathematics, science, and technology education."

The Center's involvement in research and training, community outreach programs, and its strong partnership and collaboration with other institutions offer students the opportunity to do research that can contribute to improved teaching and learning mathematics, science, and technology at all levels of education.

Looking at the enormous achievements ACE-ITLMS has made so far, I strongly recommend a continuation of its partnership with other research and higher learning institutions. Continuous provision of scholarships by the World Bank through the government of Rwanda will enable ACE-ITLMS to continue admitting students from different parts of Africa, who will later contribute to the development of Maths and science education not only in Rwanda but also across the African continent.

ACE-ITLMS should also consider admitting post-Doctoral students as that will not only increase the research output of the University of Rwanda but will strengthen research skills among early-career researchers who will in turn help post-graduate students to do quality research with a great impact on society.

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## Mrs Grace Busingye, specialized in Energy Economics, ACE-ESD



Mrs Grace Busingye, specialized in Energy Economics, ACE-ESD

appreciated the networking we had at the Center. We had a chance to learn with people from other countries and I learnt a lot from them. I also appreciated the way the Center motivated us to grow great researchers. into the Center could always give us chances to attend public talks, research presentations which opened my mind and realized the gap of female researchers specifically in the energy sector.

extent that breastfeeding mothers who wished to come along with their babies were not restricted to attend classes. They could bring their baby sitters along with babies and breastfeed duringbreak. This was interesting and encouraged mothers to pursue their degrees.

The African Center of Excellence in Energy for sustainable Development recommended me for a professional internship and I am currently working in the Rwanda Utilities Regulatory Authority delivering as expected and I believe in days to come, I will be able to deliver beyond the expectations of line manager as I get used to work done in energy regulatory authority. I believe I will have a great career in the future.

" I will use the skills I got from the Center plus the ones I am learning here to develop the Energy Sector more specifically the Economic side by doing more research in order to give a hand in showing facts of the problems and recommend the possible solutions to the policy makers. "

I will use the skills I got from the Center plus the ones I am learning here to develop the Energy Sector more specifically the Economic side by doing more research in order to give a hand in showing facts of the problems and recommend the possible solutions to the policy makers.

To my understanding, the energy sector in my country has a big gap of researchers to help boost the sector. I believe the recent graduates in Energy Economics are a big asset to the energy sector since the economy needs a steady stream of energy.

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The Center also was inclusive to an



"My studies enabled me to explore how vital is data and how it can be manipulated with the use of adequate technologies such as artificial intelligence and Big data technologies for more business solutions. These skills will expose me to advanced data driven decision-making opportunities and allow me to find more solutions for the community.

The skills I got have given me an opportunity to work as a data scientist and I am able to contribute to data driven insights on my current position because of what I learned. In the future, these skills will expose me to advanced data driven decision-making opportunities and allow me to find more solutions to existing."

Olivia RUTAYISIRE, specialized in Data Mining at ACEDS

"ACEIoT made me an expert in Internet of Things which is hightech and top technology nowadays and I hope it will drive me to my expectations. I love being able to support and assist vulnerable people. Based on my research work which focused on Diabetes remote monitoring, I am sure, I will help people. I am always looking forward to the opportunities to assist and support everyone in this field.".



Gaspard Nelly UWUMUREMYI, specialized in Wireless Sensor Networking, ACEloT



"I appreciated the way the Center provided us with a conducive environment for learning. In addition, it was a good experience sharing interests, cultures, knowledge and experience with students from other East African countries. I am so grateful to have worked with supportive peers, brilliant lecturers and inspiring advisors throughout this program.

This program provided me with professional opportunities that drive me continually towards personal capacity building and contributing to the ecosystem. I believe that the values, skills and experience acquired from academic engagements through the two years of study will help to provide solutions to real-world problems. "

Mrs Marie Grace MUJAWAMARIYA, specialized in Wireless Intelligent Sensor Networking, ACEIoT

# **Our respective programs**

## African Centre of Excellence in Data Science (ACEDS) based at UR-College of Business and Economics, Gikondo



### We have Day and evening Programs:

- Master/PhD of Science in Data Science in Data Mining
- Master/PhD of Science in Data Science in Econometrics
- Master/PhD of Science in Data Science in Biostatistics
- Master/PhD of Science in Data Science in Demography
- Master/PhD of Science in Data Science in Actuarial Sciences

### N.B: All PhD programs are by research.



In partnership with Data Science Council of America (DASCA), we also offer certified professional Short courses:

- a. Associate Big Data Engineer (ABDE)
- b. Senior Big Data Engineer (SBDE)
- c. Associate Big Data Analyst (ABDA)
- d. Senior Big Data Analyst (SBDA)
- e. Senior Big Data Analyst (SBDA)

More details: www.aceds.ur.ac.rw

African Centre of Excellence for Innovative Teaching and Learning Mathematics and Sciences (ACEITLMS) based at UR-College of Education, Rukara



### We have Day and Weekend Programs:

- Master of Education in Biology Education
- Master of Education in Chemistry Education
- Master of Education in Physics Education
- Master of Education in Mathematics Education
- PhD in Biology Education
- PhD in Chemistry Education
- PhD in Physics Education
- PhD in Mathematics Education

### N.B: All PhD programs are by research.

More details: www.aceitlms.ur.ac.rw

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# African Centre of Excellence in Internet of Things (ACEIoT) based at UR-College of Science and Technology, Nyarugenge



## We have the following Programs:

- Master/PhD of Science in Embedded Computing Systems (ECS)
- Master/PhD of Science in Wireless Sensor Computing (WSC)

### N.B: All PhD programs are by research.

### Short courses:

- a. Rapid Prototyping
- b. Blockchain Fundamentals and Applications
- c. Drone fundamentals and applications
- d. LoRA technologies
- e. IEEE GRSS Drone Sensor Deployment

More Details: www.aceiot.ur.ac.rw

# African Centre of Excellence in Energy for Sustainable Development (ACEESD) based at UR-College of Science and Technology, Nyarugenge



## We have the following Programs:

- Master/PhD of Science in Energy Economics
- Master/PhD of Science in Renewable Energy
- Master/PhD of Science in Electrical Power Systems

### N.B: All PhD programs are by research.

#### Short courses:

Power Engineering, Smartgrid, Microgrid

More Details: www.aceesd.ur.ac.rw

## **Adresses and Contacts**



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