

# Digital Skills for an Innovative East African Industry (dSkills@EA)

East African innovation hub for digital skills in collaboration with academia and industry

## The challenge

The economy in the East African Community (EAC) is characterised by low productivity and low competitiveness, leading to high unemployment, especially among young people. Innovation and the application of Information and Communication Technologies (ICT) by businesses are drivers of socio-economic development and international competitiveness. To unlock the potential of ICT for the economy, the availability of digital skills and skilled workers with appropriate qualifications and innovation capacity is crucial. However, the digital skills of young people in the EAC Partner States are still insufficient and the offers of higher education do not yet meet the needs of the private sector and young innovators.

## Our approach

The objective of the project is that employment and innovation related digital skills of young people in the EAC Partner States Burundi, Kenya, Rwanda, South Sudan, Tanzania and Uganda are strengthened.

dSkills@EA builds on its predecessor and continues to support the “Centre of Excellence for ICT in East Africa” (CENIT@EA) by further improving the quality and sustainability of the Master Programme “Embedded and Mobile Systems” (MSc EMOs), such as through close collaboration and involvement of the private sector. Furthermore, short course trainings on advanced digital skills for different target groups (unemployed graduates, ICT experts in private and public sector, university staff) are offered throughout the EAC. The trainings complement

## SUSTAINABLE DEVELOPMENT GOALS



Project name	Digital Skills for an Innovative East African Industry (dSkills@EA)
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Lead executing agency	East African Community Secretariat; implemented by the Inter-University Council for East Africa (IUCEA)
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the two-years MSc EMOs offered at CENIT@EA at the Nelson Mandela African Institution for Science and Technology (NM-AIST) in Arusha, Tanzania. Finally, dSkills@EA improves the digital innovation and entrepreneurship capacity of young East African students at their ideation phase at universities in the EAC through trainings, a regional network of innovation hubs, multi-stakeholder dialogues, and matchmaking mechanisms with companies.

With the industry as an ultimate beneficiary of these digital skills, the collaboration with the private sector is a key element of dSkills@EA. In this regard, the project can build on the “ICT4Business” dialogue platform and established collaborations with companies like SAP, IBM or Kiira Motors.

dSkills@EA is part of the technical development cooperation between the EAC and Germany. It is anchored as a module in the regional programme “Support to the East



Photo (L): CENIT@EA students designing a prototype for flood detection system, during their internship at EAC Secretariat.

Photo (R): CENIT@EA students of the 2<sup>nd</sup> cohort during a group project session.

African Community (EAC)", which supports regional economic integration and development. The political partner is the EAC Secretariat and the main implementation partner is the Inter-University Council for East Africa (IUCEA), together with an East African-German academic consortium of universities and the German Academic Exchange Service (DAAD). The academic consortium is led by NM-AIST and the University of Oldenburg in Germany. Other consortium partners include the University of Dar Es Salaam (Tanzania), University of Technology and Arts in Byumba (Rwanda), Mannheim University of Applied Sciences and the German Aerospace Centre (DLR). Further partners include innovation hubs, national and regional industry associations as well as regional and international companies.

## Results in figures from CENIT@EA

- The new Master's Programme EMOs has contributed to addressing the needs of the private and public sector for digital skills; through its "Young Professionals Programme" 27 students of the 1st MSc EMOs cohort have already developed and implemented new digital products and services during their internships.
- 88 full scholarships have been awarded, aiming for an equal distribution of students in the EAC region. In total, 96 students from all EAC Partner States are enrolled in three cohorts (34% women).
- 20 CENIT@EA students have presented their innovations and participated in international conferences such as GMIS, YOULead Summit, APPPF, East African Business Summit.
- The "Digital Skills Accelerator" trainings for unemployed graduates in Android Mobile Applications Development trained 150 across the six EAC Partner States.
- Further advanced trainings in entrepreneurship, innovation promotion, cybersecurity, soft skills, project management and media enhanced didactics have been conducted in the EAC and about 150 more have been trained.

- Private and public sector engagement and collaboration increased and strengthened: Two MoUs signed with private sector (IBM East Africa and Kiira Motors Corporation) and ICT4Business as dialogue platform established.

## ...and in stories

### Digital systems – a potential game changer for EAC's automobile industry

Uganda's Kiira Motors Corporation (KMC) showcases the concept of Uganda's biggest automobile company to develop innovations with the expertise of regional digital pioneers. KMC's Kayoola EVS bus – Africa's first electric vehicle – a prime example of innovative transportation technology is now equipped with tech-enabled features that are beneficial to East Africans using public transport.

In the partnership between KMC and CENIT@EA, efforts to create a platform for innovation transfer of the practice-oriented master thesis, led to the involvement of CENIT@EA Young Professionals, who developed a digital mobile application system offering customer-centric solutions to issues of urban mass transportation such as passenger security, traffic jams, payment issues and risk of infectious diseases.

### Tech-enabled innovations transforming healthcare in EA

The Infectious Diseases Institute (IDI), based in Uganda, strengthens health systems in East Africa, through technology research of innovation in healthcare. CENIT@EA students supported IDI in solving industry's challenge, by designing a mobile application system that enhances access and delivery of Home-Based Care Services to patients in outbreak of Covid-19, with a potential of being integrated in the Ministry of Health healthcare systems and delivery structure in Uganda and adopted in the region.

Read more on the cooperation between CENIT@EA and Industry on [www.cenit-ea.org/stories](http://www.cenit-ea.org/stories).

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