Image source:IMF EAC 2016 report

CENIT@EA
Centre of Excellence for ICT in East Africa

NEWSLETTER

August - December 2019 Activities

- Partnership Development Events
- Project Timeline
- CENIT@EA Meetings, Students and Activities
- CENIT@EA Official Launch
- CENIT@EA Planning
- Appendix : CoCSE Brochure

CENIT@EA is embedded in the bilateral development cooperation between Germany and the East African Community (EAC) and is funded by the German Federal Ministry for Economic Cooperation and Development (BMZ). CENIT@EA activities are implemented by a consortium of institutions and universities in EAC and Germany.

OUR STUDENTS

Our students are our absolute priority. We train them to develop as individuals and develop solutions that positively impact the society. Activities of the centre range from knowledge advancement to regional development i.e. developing partnerships and collaboration fostering public private academia collaboration.

CONSORTIUM

CENIT@EA consortium members include: fromEAC: the Nelson Mandela African Institution of Science and Technology as the host, the University of Dar es Salaam, University of Technology and Arts Byumba. from Germany: University of Oldenburg, German Aerospace Centre, Mannheim and Berlin Universities of Applied Sciences.

NM-AIST

The Nelson Mandela African Institution of Science and Technology (NM-AIST) is a post-graduate only research based higher education institution located in Arusha, Tanzania. NM-AIST focusses in Life Sciences, Material sciences, water, environment, energy, computational and communication sciences and engineering.

CENIT@EA
Centre of Excellence for ICT in East Africa

PARTNERSHIP DEVELOPMENT EVENTS

ICT4Business Events
EAC countries

Image source:IMF EAC 2016 report

10th Sept.2019, Kampala, Uganda

Previous Events

18th July 2019, Kigali-Rwanda
27th July 2019, Nairobi-Kenya
27th July 2018, Dar es Salaam-Tanzania

ICT4Business events are designed to foster public, private partnership and collaboration. Initial events focussed on the needs and requirements for digitalisation changes and how CENIT@EA can provide relevant skills, capacities and know-how to the private and public sector to enable them to reap benefits from the digital transformation. CENIT@EA provides relevant skills, capacities and knowledge to shape the digital transformation. It currently offers a Master's programme in Embedded and Mobile Systems as well as specific customized trainings. In order to design its activities to solve industry specific issues and provide appropriate solutions, CENIT@EA is committed to closely involve all relevant stakeholders from the private and public sector.

DAAD Regional ACE meeting
18th - 21st September 2019, Dakar, Senegal

African Excellence

CENIT@EA attended this year's Network Meeting of the Centres of African Excellence under the title Networks for Sustainable Impacts on African Development. The meeting took place at the Centre Africain d'Études Supérieures en Gestion (CESAG) in Dakar, Senegal from 18 to 21 September 2019. The overall goal was to strengthen internal and external networks between the Centres of African Excellence to enhance capacities, not only in higher education and research, but also with regards to applied sciences and innovative technologies. The participants discussed the short-, mid- and long-term perspectives of the Centres and identified potential to maximize synergies among the various regiona l and international stakeholders

CENIT@EA
Centre of Excellence for ICT in East Africa

PARTNERSHIP DEVELOPMENT EVENTS

Academia Public-Private Partnership Forum - APPPF
23rd -25th October 2019, Kampala, Uganda

Inter-University Council of East Africa (IUCEA) in collaboration with the East African Business Council (EABC), East African Development Bank (EADB) and the East African Science and Technology Commission (EASTECO) organized the first Science, Technology and Innovation conference and the Academia-Public-Private-Partnership dialogue session under the theme Science, Technology and Innovation (STI) as a Catalyst Towards Achievement of East Africa Community Vision 2050. CENIT@EA staff and students participated in this forum and exhibited ongoing project activities and student activities. The forum involved: keynote address, plenary sessions and a report writing session with presentation and discussion of attained resolutions.

The Global Manufacturing & Industrialization Summit -GMIS
14th-15th November 2019, Arusha, Tanzania

Established in 2015, GMIS is an industry association that aims at building bridges between manufacturers, governments & NGOs, technologists, and investors in harnessing the Fourth Industrial Revolution's transformation of manufacturing to the regeneration of the global economy. CENIT@EA participated in the summit, exhibiting project & students' activities.

PARTNERSHIP DEVELOPMENT EVENTS

EAC Business and Investment Summit
25th November 2019

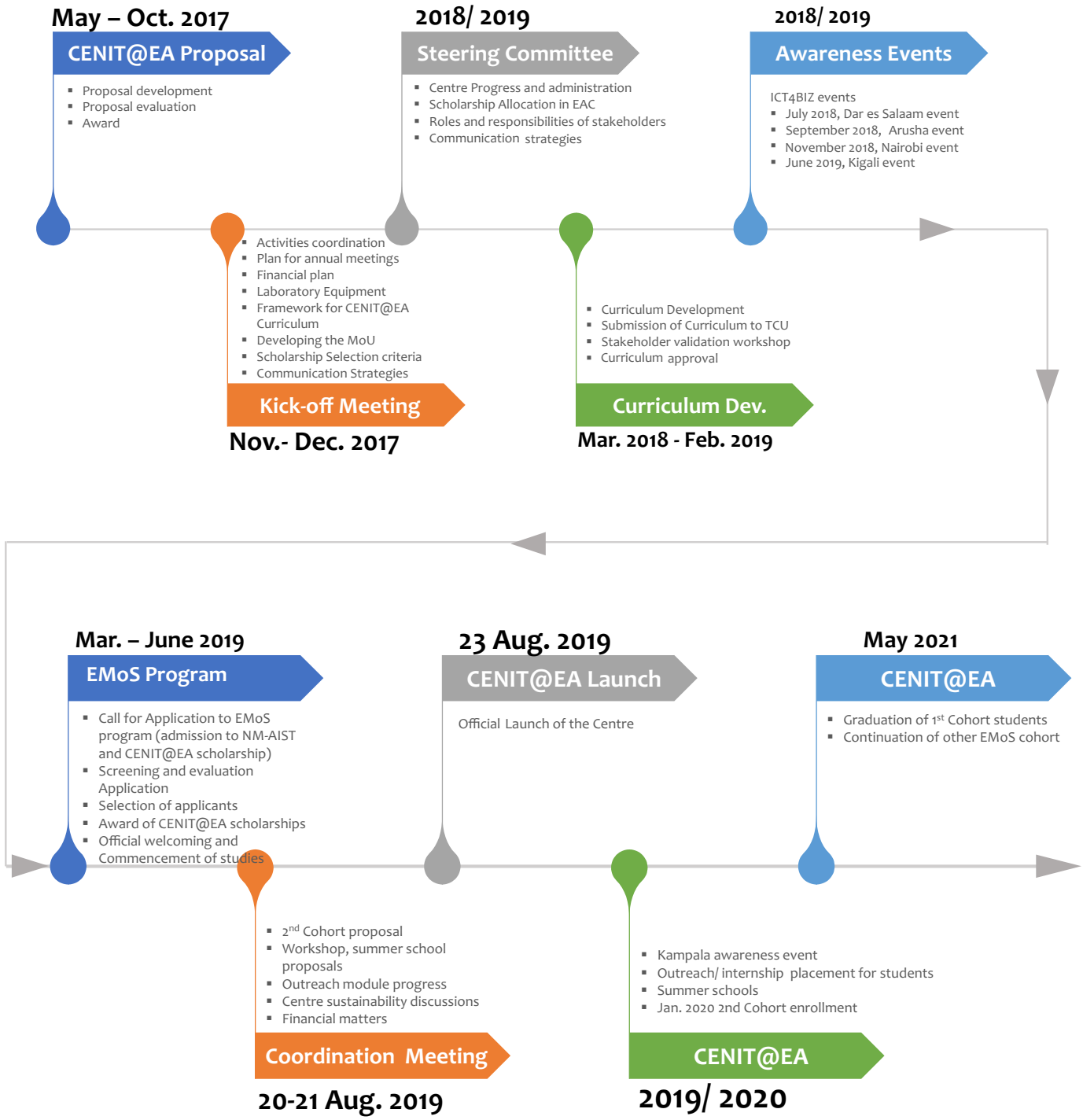
On 25th Nov. 2019 at EABC Business and Investment Summit, IBM and CENIT@EA hosted by NM-AIST signed a memorandum of Understanding on Digital Skills Development. The MoU was signed by Prof. Emmanuel Luoga the Vice Chancellor of NM-AIST and Chairman of the East African Business Council (EABC) Nicholas Nesbitt. This event was preceded with a CEOs Round Table session with the EAC Council of Ministers and parallel exhibition showcasing products and services, technologies and innovations from businesses and organizations in EAC.

CENIT@EA students had the opportunity to exhibit their project work at the summit and they were involved in panel discussions on education and technology trends in EAC. From left to right: CENIT@EA students explaining their ongoing project and research work to summit guests.

CENIT@EA student Josephine Mbanyi pictured with Hon. Deng Gai, EALA representative from South Sudan during a booth visit. Visitors had ample opportunity to hear on our students' research interests. CENIT@EA consortium is encouraging students from South Sudan to apply and get enrolled in EMoS Masters programme.

CENIT@EA
Centre of Excellence for ICT in East Africa

PROJECT TIMELINE



CENIT@EA MEETINGS

CENIT@EA JOINT Steering Committee

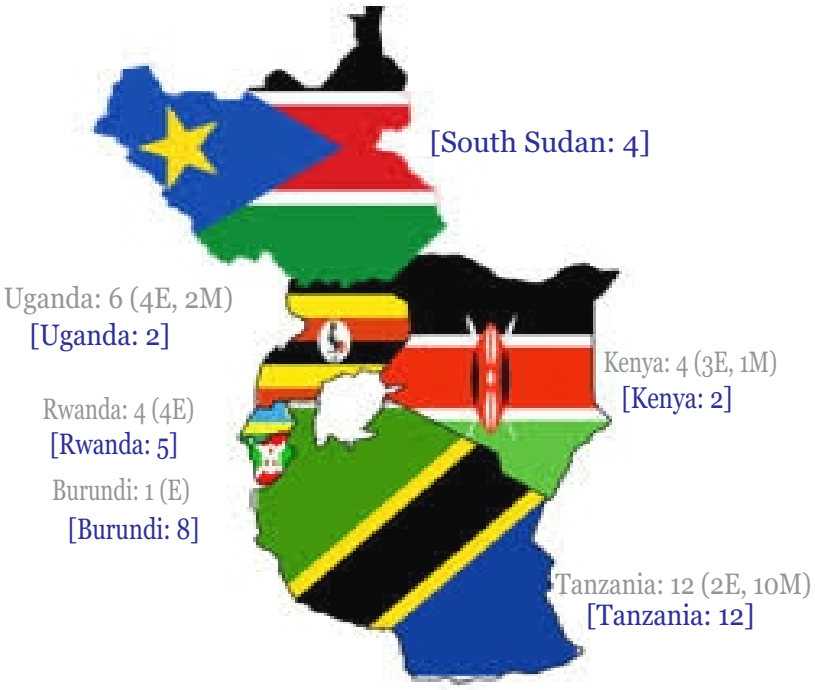
The project is supported by a joint steering committee (JSC). JSC supports CENIT@EA leadership with the the implementation of CENIT@EA academic program. Monitoring by the JSC is implemented throughout the duration of the project and aims at enforcing project goals, mitigating challenges in effort to enhance the expected outcomes. JSC follows-up project activities throughout the project´s time frame and examines events to answer specific questions related to project design, implementation, results and intervention.

CENIT@EA Coordination Meeting
20th - 21st August 2019

CENIT@EA coordination meeting discussed among many issues: the progress of the centre, ongoing activities, opportunities and challenges, financial plan, rules and regulations and future outlook of the project. Members of the coordination meeting include all partner universities and institutions. Following the 20th - 21st August 2019 coordination meeting, CENIT @EA coordination team met with students to discuss their progress and various issues with regard to their academic and social well-being.

.

CENIT@EA STUDENTS: FIRST AND SECOND COHORT



KEY
First cohort
E: Embedded systems specialty
M: Mobile systems specialty
Second cohort

Image source:IMF EAC 2016 report

Competitively selected, CENIT@EA students include individuals who are involved in private companies, public entities and academia Our students have diverse research interests in technology-based solutions for healthcare, agriculture, telecommunications, environment, education and embedded systems, logistics, electronic, security and others. The map shows CENIT@EA first and second cohort scholarships and students' distribution for first cohort students i.e. E-Embedded, M-Mobile Systems specialties).

Second cohort selection took place in Oldenburg Germany in November 2019. this cohort commence their studies in January 2020. A total of 33 scholarships are offered for the second cohort with candidates coming from the following countries South Sudan -4, Rwanda -4, Burundi - 5, Kenya -4, Tanzania -12 , Uganda- 4. Apart from students selection, the scholarship selection meetings discuss the learning process of the selected students, evaluate and re-evaluate decisions, build capacity among members and overall discuss on how to improve assessment and scholarship selection to improve efficiency and facilitate best performance of the project.

CENIT@EA
Centre of Excellence for ICT in East Africa

CENIT@EA STUDENTS AND ACTIVITIES

CLIMATE LAUNCHPAD GREENTECH IDEA COMPETITION
September 2019, Dar es Salaam- Tanzania

CENIT@EA first cohort students Ms. Shakila Mshana and Mr. Maalim Yahya were declared first runner up for the climate launchPad competitions held in Dar es salaam in Sept. 2019

The duo presented their promising Artificial Intelligence based mechanical System capable of collecting and sorting waste materials based on their properties. The solution comes in at the right time where waste management in the East African Region is a big challenge. CENIT@EA commends such efforts and this serves as an inspiration to all students and staff to strive to solve emerging societal and industry challenges

CENIT@EA FIRST SUMMER SCHOOL
4th - 8th Nov. 2019

With Design Thinking as the main theme the first CENIT@EA summer school had 17 participants i.e. 8 EMoS students, 3 participants from UTAB, 4 participants from UDSM, 1 participant form State University of Zanzibar and a facilitator Wahome Gathondu Program Manager of IBM African Skills Initiative Program, East Africa.

The main objective of the Summer School is to gather students together with industry captains and academicians to share, discuss and look for solutions of various industry and society problems by using design thinking approaches. In this week long event, participants worked in interdisciplinary teams to brainstorm, discuss, analyze and apply innovative and entrepreneurial skills to generate solutions to societal challenges.

CENIT@EA
Centre of Excellence for ICT in East Africa

CENIT@EA OFFICIAL LAUNCH
23rd August 2019

CENIT@EA was officially launched on the 23rd August 2019. The ceremony was officiated by Tanzania's Minister of Education and Vocation TRaining (MoEVT) Hon. Prof. Joyce Ndalichako. The launching ceremony included representatives from the EAC, DAAD, GIZ, IUCEA, EABC and CENIT@EA partner institutions. CENIT@EA aims at empowering and educating EAC students to become qualified personnel in the field of Embedded and Mobile Systems (EMoS).

Hon. Prof. Joyce Ndalichako, officially opening the Centre of Excellence for ICT in East Africa (CENIT@EA). Also in the picture from right to left: CENIT@EA Centre leader Dr. Kisangiri Michael, IUCEA Executive Secretary Prof. Alexandre Lyambabaje, Principal Education Officer at the EAC Secretariat James Otieno Jowi, NM-AIST Chairman of the board Prof. Lugano Kusiluka, DAAD Head of Section - Development cooperation Institution building in Higher Education Mr. Lars Gerold, Tanzania's Minister of Education , Science and Technology Hon. Prof Joyce Ndalichako, NM-AIST Vice Chancellor Prof. Emmanuel Luoga, GIZ Project Manager - Private Sector Engagement Mr. Simon Hochstein, Ministry of Education - Director for Science and Technology Prof. Maulilio Kipanyula, NM-AIST students dressed in traditional Maasai outfits, Master of Ceremony Dr. Eliamani Laltaika and CENIT@EA partner Institution representative from the University of Dar es Salaam, Dr. Juma Masele . Witnessed by the NM-AIST community and regional representatives, The event took place in Arusha at the Nelson Mandela African Institution of Science and Technology (NM-AIST).

CENIT@EA OFFICIAL LAUNCH
23rd August 2019

Hon. Prof. Joyce Ndalichako officially opening CENIT@EA cornerstone with Mr. Lars Gerold, DAAD at NM-AIST, Arusha.

Hon. Prof. Joyce Ndalichako appreciating CENIT@EA Project coordinator Prof. Jorge Gomez for the ongoing work and the project activities. Also in the picture, from right to left Lars Gerold - DAAD, Simon Hochstein - GIZ, Prof. Jorge Marx Gómez - University of Oldenburg, Dr. Shubi Kaijage - Dean School of CoCSE NM-AIST, Prof. Joyce Ndalichako - Minister MoEVT, Dr. Kisangiri Michael and Dr. Mussa Dida CENIT@EA Centre Leader and Deputy Centre Leader respectively and to the far left Prof. Emmanuel Luoga, Vice Chancellor - NM-AIST

Hon. Prof. Joyce Ndalichako appreciating CENIT@EA centre leader Dr. Kisangiri Michael. Also in the picture from left: MoEVT Director of Science and Technology Prof. Maulilio Kipanyula, Prof. E Luoga NM-AIST Vice Chancellor, Dr. Mussa Dida CENIT@EA Deputy Centre Leader. From right: Dr. Masele University of Dar es Salaam, Lars Gerold -DAAD, Simon Hochstein - GIZ, Prof. Jorge Marx Gómez - University of Oldenburg and Dr. Shubi Kaijage Dean school of CoCSE, NM-AIST

CENIT@EA
Centre of Excellence for ICT in East Africa

CENIT@EA OFFICIAL LAUNCH
23rd August 2019

Spectacular event witnessed by: from right to left Prof. Alexandre Lyambabaje - IUCEA, James Otieno Jowi - EAC, Prof. Lugano Kusiluka - NM-AIST, Prof. Maulilo Kipanyula - MoE, Simon Hochstein - GIZ, and to the far left Prof. David Mwakyusa - former Minister and NM-AIST Chairman of the board.

Hon. Prof. Joyce Ndalichako conversing with Prof. Lyambabaje, also in the picture is the new NM-AIST chairman of the board Prof. Kusiluka .

Left to right, Dr. Kisangiri Michael CENIT@EA centre leader NM-AIST, Mr. Christian Osorio CENIT@EA Centre Manager University of Oldenburg, Mr. Ben Ruhinda Senior Systems Officer Inter University Council of East Africa, Mr. Simon Cremer DAAD Desk Officer CENIT@EA and Mr. Simon Hochstein Project Manager GIZ CENIT@EA Private Sector Engagement, posing for the camera in front of CENIT@EA cornerstone, marking successful launch of CENIT@EA.

CENIT@EA OFFICIAL LAUNCH
23rd August 2019

Colleagues exchanging a few words, Prof. Lambabje - IUCEA, Dr. Laltaika and Dr. Hakizimana of CENIT@EA Partner University Universit of Technology and Arts Byumba (UTAB)- Rwanda, also in the picture Dr. Anael Sam CENIT@EA project Scientific Coordinator - NM-AIST

CENIT@EA AT LARGE

CENIT@EA first cohort students together with various CENIT @EA partners including IUCEA, GIZ and EAC. CENIT@EA first cohort enrolled a total of 27 students from five EAC countries i.e. Burundi, Kenya, Rwanda, Tanzania and Uganda. Among the 27 students, 13 are pursuing mobile systems specialty and 14 are pursuing embedded systems specialty.

CENIT@EA PLANNING

CENIT@EA OFFICIAL COMMUNICATION AND FINANCIAL MEETING
16th - 18th December 2019, Oldenburg-Germany

CENIT@EA met in December 2019 in Oldenburg for a communications workshop and discussion on finance issues and plans for year 2020 up to March 2021. The discussions were fruitful with a number of resolutions made on the projects' communication strategies and planned events.

PLANNED UPCOMING EVENTS
Jan 2020 - March 2021

- Orientation for second cohort students
- Commencement of studies for second cohort students and continuation for first cohort students
- Industrial placement for first cohort students
- Second CENIT@EA Summer school in Oldenburg
- CENIT@EA short courses and training

THE NELSON MANDELA AFRICAN INSTITUTION OF SCIENCE AND TECHNOLOGY

academia for Society and Industry
-NM-AIST motto

Visionary to become a world class institution dedicated to the pursuit and promotion of excellence in Science, Engineering, Technology and Innovation (SETI) and their application for economic growth and sustainable development. The NM-AIST training curricula incorporate innovation and entrepreneurship academia-industry relations aimed at building an academia for society and industry, the institution's development agenda. The curricula also seek to accommodate, enable, stimulate, catalyze and harness the innovativeness and entrepreneurial qualities inherent in the young generation

CONTACT US

Dean CoCSE
P.O.Box 447, Arusha
Tanzania
Email: dean.cocse@nm-aist.a.tz

Visit our websites
NM-AIST: www.nm-aist.ac.tz
CENIT@EA website: www.cenit-ea.org

THE SCHOOL OF COMPUTATIONAL, COMMUNICATION SCIENCES AND ENGINEERING

CoCSE

No problem can be solved in the same level of consciousnes that created it
- Albert Einstein

NM-AIST, 2020

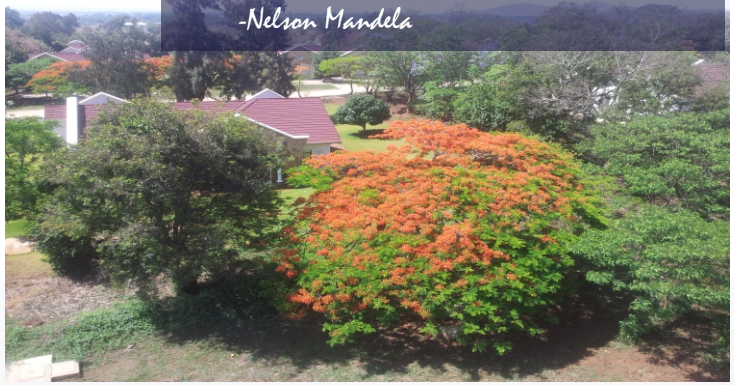
THE SCHOOL OF CoCSE

academia for Society and Industry -NM-AIST motto

Information and Communication Technology (ICT) permeates all aspects of modern society: more tasks are automated, activities simplified, systems embedded in systems, machines are learning, scenario are modelled to define complex relationships, data analyzed to extract useful information, these among many, supported by modern electronics minituarization are among the different aspects of focus in the school of CoCSE. CoCSE trains students in Information Communication Science and Engineering (ICSE), Mathematical and Computer Science and Engineering (MCSE), Embedded and Mobile Systems (EMoS), Wireless and Mobile Computing (WiMC) and Information Systems and Network Security (ISNS).

The school of CoCSE hosts the Centre of Excellence for ICT in East Africa (CENIT@EA) and the Centre for High Performance Computing (CHPC).

It always seems Impossible until it's done -Nelson Mandela



DEGREE PROGRAMMES & SPECIALIZATION

MCSE Programmes (MSc. & PhD)

Applied Mathematics and Computational Science - AMCS
Computer Science and Engineering-CoSE

ICSE Programmes (MSc. & PhD)

Information Technology System Devt and Management -ITSDM
Electronics and Telecommunications Engineering - ETE

CDAC Programmes (MSc.)

Wireless and Mobile Computing - WiMC
Information Systems and Network Security - ISNS

CENIT@EA Programme (MSc.)

MSc. Embedded and Mobile Systems - EMoS

The programmes are designed to foster problem solving approach and techniques & inter and multi disciplinarity. They build skills and competencies in both the specific areas of specialization as well as Business studies and humanities. These skills and competencies include: entrepreneurship, communication, scientific writing, research skills, intellectual property, research ethics and philosophy. These programmes equip students with the necessary knowhow and pushstart/ enhance their careers as entrepreneurs, employees and inspire them to think beyond the classroom.

KNOWLEDGE, SKILLS AND COMPETENCIES

MCSE programmes build competencies in mathematical and computational modelling to analyse physical systems, operating systems, computing architectures, algorithm design and development and various areas of artificial intelligence. . ICSE programmes build competencies in the analysis, design, implementation, integration and management of information systems, analogue and digital electronics, IoT, circuit design, and telecommunication systems. CDAC and CENIT@EA programmes are technical programs with substantial practice oriented modules. ISNS focusses on techniques and methodologies that allow creation and management of complex information systems whereas WiMC builds on techniques employed in telecommunication and mobile systems. All programmes include core and elective modules covering many areas including emerging themes in artificial intelligence and data science.

THE CENTRE FOR HIGH PERFORMANCE COMPUTING

CHPC is established to support research and and learning activities. The centre is established by the collaboration between the Indian and Tanzanian government. This collaboration has also led into the establishment of WiMC and ISNS Masters programs

CHPC

THE CENTRE OF EXCELLENCE FOR ICT IN EAST AFRICA

CENIT@EA is among the African Centres of Excellence funded by the German government. Established as a regional centre CENIT@EA: trains students in EMoS, builds capacity and regional partnership and linkage towards practice oriented teaching, learning & development.

CENIT@EA
Centre of Excellence for ICT in East Africa

PARTNERSHIPS AND COLLABORATION

IBM
CDAC
DAAD
DLR Deutsches Zentrum für Luft- und Raumfahrt German Aerospace Center
hochschule mannheim
vlirous
CARL VON OSSIETZKY universität OLDENBURG
htw Hochschule für Technik und Wirtschaft Berlin
University of Applied Sciences