



TU-K STUDENT IS WORLD CHESS CHAMPION

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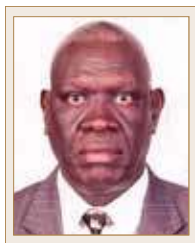


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FROM THE VICE-CHANCELLOR'S DESK

Welcome to another exciting edition of *TU-KNEWS* – a publication of the Office of the Vice-Chancellor. We have the pleasure of sharing with you, our customers, partners and stakeholders in education and training, some of the milestones that have resulted from the endeavours of the Technical University of Kenya community.

This year has witnessed the manufacturing and export potential of the nation of Kenya, and particularly, The Technical University of Kenya. In collaboration with Avic International, TU-K hosted the technology contest dubbed “Africa Tech Challenge,” that brought together participants and contestants from Gabon, Ivory Coast, Ghana, Zambia and Kenya. The event attracted the attention of the Ministry of Education of the Republic of Kenya, which pledged to multiply its support for technical education.

In August, the University received new students, to study various academic programmes. TU-K strives to ensure that the students get nurtured for the future, hence, the University has also welcomed new members of academic staff to augment its business of teaching, learning and research. The Vice-Chancellor, on behalf of the Senate and Management, encourages the new students to steer clear of vices and stay focused on their studies, and as the Chancellor, Dr. Manu Chandaria affirms from his own experience, “passionate pursuit of your dreams is the difference between obscurity and success.”

At TU-K, we pride ourselves as champions in preparing our students for life after school. Apart from the highly-acclaimed Industry-Based Learning programme, we lay special emphasis on entrepreneurship education. Towards this end, TU-K recently launched on-campus youth empowerment programme, in collaboration with the Ministry of Information and Communication Technology, dubbed *Ajira Digital Programme*. This programme aims to incorporate young students into self-employment in the usage of ICTs to support sectors such as health and medical services, food safety and security, education and infrastructure. At this moment, there is an ongoing graduate trainee programme in Dubai, in which TU-K students are participants.

On the co-curricular activities front, TU-K means business. Our Music and Performing Arts troupe is the epitome of artistic talent. Our team did not only scoop trophies and other awards at



the last National Music Festivals, but also had the pleasure to perform for the President of the Republic of Kenya at the Sagana State Lodge!

TU-K continues to be represented in high places. Our alumni profile is growing tremendously and steadily. This edition of *TU-KNEWS* takes a look at some of the notable figures who have graduated from this institution into places of high repute. The institutional presence of TU-K attracts the attention of stakeholders in the international stage. Dr. George Okwadha, a Senior Lecturer of Civil and Construction Engineering at The Technical University of Kenya – who also happens to be our alumnus – has been appointed by the Association of the Commonwealth Universities (ACU) as a Fellowship Reviewer.

Also in this edition, there is a new column *Know TU-K Professors*. This section aims to bring to the fore some of the achievements and notable academic and research-related accolades of our professors. Professor Joseph Lalah is the first to grace this brand-new column.

Finally, TU-K is holding the sixth Graduation ceremony. At the congregation, hard work and commendable attitudes have resulted in the award of diplomas and the conferment of degrees in various fields of study. We wish all the graduands the best in their future endeavours, Merry Christmas and a Happy New Year!

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Editorial Team: Dr. Ken Ramani, Cosmas Kanyadudi, Daniel Macharia, Billy Mutai, Lucy Anaya, Bernard Awino, David Mwangi, Elizabeth Kariuki, Alex Wamonje, Richard Kembero.



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TU-K STUDENT IS A WORLD CHESS CHAMPION

Sasha Mongeli makes Kenya proud by winning the Woman Fide Master during Georgia Olympiad

By Yvonne Akinyi

Sasha Mongeli, a student at TU-K, was declared a champion in the just concluded Olympiad games in Batumi, Georgia.

Ms. Mongeli won the Woman Fide Master (WFM) title beating several opponents in her category.

"It was exciting being awarded WFM in Georgia, this marked an achievement in my sporting career and I now look forward to achieving a Woman Grand Master (WGM) title," Mongeli said.

Mongeli represented Kenya alongside another TU-K student, Joyce Nyaruai and three others from other institutions.

Olympiad games are held after every two years. In 2018, Ms. Nyaruai was among the five female players who represented the country in Baku, Azerbaijan.

Mongeli currently is ranked second position in Kenya National Chess Championship – female category, while Nyaruai is the top female player in the country.

Both Sasha and Nyaruai have dominated in several university competitions in Kenya and across the African continent.

"I won in the first, second and third phases in the qualifier board games last year, thrusting me to second best female chess player in the country," said Mongeli during an interview.



Sasha Mongeli (left) with Joyce Nyaruai at Black Sea Beach in Georgia.

She appreciates the University and Chess Kenya Federation for supporting their sporting career.

The 22-year disclosed that she discovered her talent in chess while at TU-K. "This started as a fun game, I later realised this could be more than a pass-time activity as I took it seriously, and today, I take pride in what I have achieved," said Mongeli.

"I give credit to my friend and competitor Joyce Nyaruai for teaching me key skills that made me believe in myself, and not forgetting the late Jose Raul Capablanca, who inspired my hand

in chess," Mongeli added.

"Chess is about war between two kingdoms, black and white, played on a 64 square board. The main aim is to checkmate, both sides 16 pieces, this is a game relating to life experiences," She noted.

The 16 pieces consist of 8 pawns, 2 knights, a king, a queen and 2 bishops for both colours.

Mongeli is a Fourth Year student pursuing a Bachelor of Science degree in Mathematics.

- The writer is a journalism student at TU-K



Sasha Mongeli (right) during the competition in Georgia.



Kenya's team and other competitors from around the globe.

SASHA FETED BY STARTIMES AS SPORTS PERSONALITY OF THE MONTH

Sasha Mongeli is the StarTimes/Sports Journalist Association of Kenya (SJAK) sports personality for the month of October 2018.

Mongeli beat Equity Hawks player Belinda Okoth, tennis sensation Angela Okuyoti and Abraham Kiptum for the accolade.

The 21-year-old student attained the highest Women Fide Master (WFM) title during the World Chess Olympiad held in Batumi, Georgia from September 28 to October 6, 2018. It was her debut at the biennial event and she achieved the feat with two rounds to spare.

Her score of eight wins out of nine games was one of the best in the Olympiads and the highest percentage score by a Kenyan in the Olympiad's history. She had previously gained a Women Candidate Master (WCM) title during the 15-day event before upgrading to the WFM.

Her exploits saw her win a 42-inch digital television courtesy of StarTimes as well as Sh100,000 and a trophy. And the accolades left the third-year Actuarial Science major quite surprised.

"I honestly never thought that something like this would happen to me. Chess is not a very popular sport like football, rugby or event athletics, but StarTimes shown that indeed we matter,"



From Left, Students Sports, Entertainment and Culture Secretary Brian Oduor, University Student Support Services Assistant Director, Mr. Maurice Ochieng, DVC in-charge of Academics Research and Students, Prof Paul Shiundu, Chess champion Sasha Mongeli, VC Prof. Francis Aduol, Sports Assistant Chris Ojwang and Mongeli's coach Moses Andiwo.

she said.

"This award will inspire more chess players to continue working hard because now it is evident that our efforts are not going unnoticed," she added. Mongeli will now turn her attention to next weekend's season-ending Kenya National Chess Championship.

"Not many people consider chess as a sport and so to award someone from

this field is quite remarkable and unique. This award is all about going beyond the norm and unearthing those that have been forgotten," StarTimes Director of Marketing and PR, Mr. Japheth Akhulia, said.

"As a brand, StarTimes will endeavour to encourage our sports men and women through these awards as a way of recognising their dedicated efforts in the industry," Akhulia added.

SJAK Chairman, Chris Mbaisi, said the association ventured into the unique monthly awards to give non-football players a chance to be recognised.

TUK's Vice-Chancellor Prof. Francis Aduol congratulated Mongeli for making the university and the country proud.

"As a University we are overly excited and proud of Sasha's achievements. Chess is one of the many sporting disciplines that TU-K has excelled in over the years. At TU-K we provide an enabling environment for our students to excel at national and international level. A good example is Harambee Stars strike Michael Olunga who was a student here but took leave to pursue his professional football career overseas," said the VC.

He thanked SJAK and StarTimes Kenya Limited for acknowledging and feting a TU-K student saying it was a great honour to the institution.



Chess player Sasha Mongeli (4th left), pose for a photo with TU-K chess team.

TU-K CHOIR SHINE AT MUSIC FESTIVAL

The VC awards the Choir for improved performance at National Music Festival

The TU-K students won five trophies during this year's National Music Festival held at the Dedan Kimathi University of Technology in Nyeri County. Vice-Chancellor Prof. Francis Aduol awarded the choir Sh200,000, double the amount the team won for posting impressive results.

Choir directors Mr. Wycliffe Obiero, Mr. Wafula Mukasa and Mr. Andrew Obaga led the team to first position in seven classes, second position in eight classes, third position in six classes and fourth position in one class.

Mr. Austin Odongo, an alumnus, Mary Nduta and Iscalin Awino (both music students) helped during practice while Dr. Philip Wakaba and Dr. Gabriel Musungu helped with logistical and administrative support.

Despite participating in 19 classes compared to last year's 31, the choir competitively contested against other institutions with entries in most classes. Mary Nduta Githu came first with a 91 per cent score winning a trophy in a soprano solo performance. Albert Wekesa emerged top and won a trophy with an 86 per cent score. Joy Kirii and Shadrack Muthui were winners in wood wind solo and brass solo respectively.

"The exemplary performance in Class 694 in which the choir scored 93 per cent to emerge first saw the team



Ceal Gichohi (right), receives a trophy on behalf of The Technical University of Kenya Choir from the Vice-Chancellor Prof. Francis Aduol. On the left is Mr. Wycliffe Obiero and Prof. Paul Shiundu, DVC in-charge of Academics, Research and Students.

earn an invitation to perform at the Winner's Gala and thereafter perform at the State Concert at the Sagana State Lodge," said Mr Obaga. The choir was the second overall best and was awarded a trophy.

"At the State Lodge, President Uhuru Kenyatta was thrilled by TU-K's choir rendition of 'Unishike Mkono Bwana' by Anastasia Mukabwa as arranged by Hum Kisia. The choir was privileged to

pose for a photo with the President.

Prof Aduol commended the choir for the achievement in the national competition which he said had raised the university's profile.

"In addition to the Sh200,000 you won in the competition, I will give you another Sh200,000. You can travel to Tanzania or Uganda to see how other people do their things, and share what you have," said the VC.

Prof Aduol received the trophies and certificates from the Department of Music and Performing Arts accompanied by the Deputy Vice-Chancellor in charge of Academics, Research and Students, Prof. Paul Shiundu and other senior members of staff.

He noted that music among other performing arts is important in the society.

"One of the most paying professions is music. The curriculum we are developing can accommodate students who may want to partially pursue music, for instance one can take mathematics and music, physics and music among other combinations," he disclosed.



TU-K Choir pose for a photo with the VC after returning from the National Music Festival held at Dedan Kimathi University of Technology.

PROF. LALAH SETS PACE IN RESEARCH

Joseph Owuor Lalah is currently the Director, School of Graduate and Advanced Studies and Professor of Chemistry in the Department of Chemical Science and Technology. He is the most cited TU-K researcher in Google Scholar. As at 7th December 2018, his citations stood at 1060.

He has so far contributed over 100 articles in peer-reviewed journals and book chapters. He has also published 31 reports and presented major contributions in academic conferences.

Prof. Lalah attended Ugunja Primary School and Alliance High School. He joined the University of Nairobi in 1979 and obtained a BSc in Chemistry and Biochemistry in 1983. In 1984 he was admitted at Leeds University in the United Kingdom where he graduated with a postgraduate Diploma in fuel and energy and an MSc in combustion and energy in 1986. His first employment was with the Ministry of Energy in 1983 before moving to Kenya Industrial Research and Development Institute where he headed the Energy and Environment Division. In 1989, he enrolled for his PhD degree in Chemistry at the University of Nairobi and graduated in 1994.

He joined Maseno University in 1995 as a lecturer before proceeding for postdoctoral research options at the International Atomic Energy Agency -Marine Environment Laboratory in Monaco, France and then later at the German National Research Centre for Environment and Health in Munich, Germany. He also worked at the Centre of Ecology and Hydrology, Natural Environment Research Council, in the United Kingdom.

In 2010 he was appointed Associate Professor in the then Kenya Polytechnic University College and Director in charge of Research and Postgraduate Studies. And in 2013 when TU-K was granted a charter, he was appointed Director, School of Graduate and Advanced Studies. In 2014, he was appointed a Professor of Chemistry. His main areas of teaching is inorganic chemistry, environmental/analytical chemistry and his research area is in environmental chemistry and ecotoxicology.



Prof. Joseph Lalah - Department of Chemical Science and Technology.

RESEARCH SUPERVISION:

- Completed Supervision – 6 PhD's, 20 MSc's and 30 undergraduate projects.
- Currently supervising 8 PhDs and 1 MSc.

He has been a member of the Kenya Chemical Society, the Society of Environmental Toxicology and Chemistry (SETAC), Stop Poisoning Wildlife Taskforce (Wildlife Direct, Kenya), an alternate coordinator for the National Commission for Science Technology and Innovation (IAEA projects) and an affiliate member of International Union of Pure and Applied Chemistry (IUPAC) Crop Protection Committee. Prof. Lalah has won several research grants and awards, including the prestigious Alexander von Humboldt Research Award in recognition of his research work and contribution to Environmental Toxicology. He is an alumnus of the British Council, DAAD and Alexander von Humboldt Foundation.

CURRENT RESEARCH ACTIVITIES

Prof. Lalah is currently involved in two major research activities. First is the Monitoring of contaminant flow in Lake Victoria using Passive Sampling Techniques, which he is doing in collaboration with colleagues from Helmholtz Zentrum Muenchen,

the German Research Centre for Environmental Health, Research Centre Juelich of Germany, Research Center for Eco-Environmental Science (RCEES) of the Chinese Academy of Sciences, and Makerere University. He is also conducting research on Impacts of large scale agricultural and industrial activities on Ecosystems, human health and sustainable rural development. This is a multi-disciplinary multi-institutional project funded by the National Research Fund (NRF), in which he is working in collaboration with researchers from Maseno University, Masinde Muliro University of Science and Technology, University of Eldoret, Jaramogi Oginga Odinga University of Science and Technology and the Pest Control Products Board of Kenya (PCPB).

“As the country continues to develop rapidly both in terms of industrial growth and expansion in agriculture, we see deteriorating water quality in our water resources, rise in airborne pollution, and rising cases of human diseases such as cancer which are often linked with environmental pollution, occupation chemical exposure and endocrine disrupting chemicals. Thousands of tonnes of pesticides and fertilizers are imported and added to soil every year to improve agricultural food production. The environmental burden of these chemicals continues to rise as toxic residues accumulate in the ecosystems and in our bodies,” says the scholar.

Prof. Lalah and his colleagues are concerned with unlocking the major impacts of these toxic chemicals on the ecosystem and human health in order to generate useful information for future sustainable management of our resources. Prof. Lalah is also supervising students are looking at other issues such as nutrients, heavy metals, industrial chemical residues, as well as combustion generated contaminants using active and passive sampling.

Through some of the awards and grants, he has played a critical role in capacity building for research and training through workshops, student exchange programs and equipment donation in TU-K and Maseno Universities.

STAFF & STUDENTS TRAINED IN NANOSATELLITE TECHNOLOGY



Vice-Chancellor Prof. Francis Aduol (third left) being shown how the satellite technology works. He is joined by Nanosatellite Technology trainers Dr. Chris Brunskill (Left) and Mr. George Addison (Second Right) from Catapult Satellite Applications (UK) and TU-K professors.

The Department of Physics and Space Science has been commended for spearheading the training of staff and PhD students on the Nanosatellite Project.

Speaking while opening a workshop on Nanosatellite training led by the Director, School of Physical Sciences and Technology Prof. Paul Baki, the V-C exuded confidence that TU-K would one day send a satellite to space.

"I am looking forward to the day TU-K will launch its branded satellite into space," said the VC.

He said he was impressed by the progress made by the department and assured it of support.

"I am here to encourage and assure you of our full support," he assured.

He said the initiative would help drive the agenda of teaching space technology at the university and should therefore be taken to the next level.

"I am glad that you have involved students from different departments who will know that big things start in a small way," he added.

The training was conducted

by Catapult Satellite Applications (UK) under the supervision of Dr. Chris Brunskill, Domain Head Small Satellites and Future Constellations and Mr George Addison, Nanosatellite Electronic Engineer.

Staff drawn from the School of Computing and Information Technologies, School of Electrical and Electronic Engineering and those from the Department of Aerospace and Aviation Engineering were also trained.

Also present were the Executive Dean, Faculty of Applied Sciences & Technology, Prof. Francis Gatheri, Prof. George O. Amolo, Chairman, Department of Physics and Space Science, Prof. Jackson Odote, School of Physical Sciences and Technology, and Prof. Faustine Ondore, Department of Aerospace and Aviation Engineering.

"I am looking forward to the day TU-K will launch its branded satellite into space,"
— VC Prof. Francis Aduol

About the Nanosatellite Technology Project

The technology is as a result of the collaboration between TU-K and Cape Peninsula University of Technology (CPUT), South Africa.

Nanosatellite Fire Detection Proposal project proposal was jointly developed by Clyde Space, CPUT, TU-K, Namibia University of Science and Technology and the University of Strathclyde (UK) after obtaining funding in 2017.

The Project has components of Master's and PhD scholarships to the University of Strathclyde. It also has fellow positions in which postgraduate students or senior academic staff members spend 3-6 months working on a research theme or some hands-on engagement at the University of Strathclyde.

The project will be implemented in three phases and the training equipment on cubesat development has already been delivered to TU-K.

DON DEVELOPS ANTI-AFLATOXIN YOGHURT



*Nicholas Nduti, PhD Candidate,
Department of Food Science and
Technology*

Aflatoxins remains a health problem in developing countries. Aflatoxins enters the blood stream from the gut and are transported to the liver where upon metabolism, several end compounds are produced capable of causing among other problems cancer of the liver.

Since 2004, about 477 aflatoxin poisoning cases associated with eating contaminated maize have been reported in eastern Kenya with a fatality rate of 40%. The problem is that it is difficult if not impossible to eradicate aflatoxins in cereals especially maize. To solve this problem, my PhD study analyzed

200 strains of Bacteria with capacity to sequester aflatoxins from the human intestines and get them out together with the waste.

The study has identified one strain code named NN20 which did not only sequester aflatoxins but also did ferment milk with good quality as yoghurt. This yoghurt once consumed reduces the efficacy of aflatoxin absorption in the human intestines. The yoghurt has been used in the eastern part of Kenya and in Uganda with great success. This probiotic yoghurt has won a world recognition bagging Grand Challenge Canada award among others.

BILL TO GUIDE GEOPHYSICISTS MOOTED

The Kenya Society of Geophysicists (KSG) has sensitised TU-K Physical Science students on the proposed Geophysical Policy Draft and Professional Bill 2018 aimed at guiding the practice of geophysics in Kenya.

The policy will address challenges and constraints in the sub-sector. The discussions on the draft policy were led by Mr Charles Osiro from KSG and School of Physical Sciences and Technology Director Prof. Paul Baki.

Speaking during the function, Mr Osiro highlighted the importance of a policy to guide the country's geophysics sub-sector: "The Policy will facilitate and guide the practice of geophysics by addressing challenges and constraints in the sub-sector," he said.

He identified some of the challenges the policy would address such as

the formulation of appropriate legal framework, establishing mechanisms for resource mobilization, investments and financing of the sub-sector.

The interactive workshop aimed at obtaining ideas and establishing of a legal framework to ensure the geophysics practice is regulated.

It also aimed at ensuring the registration of qualified personnel,

setting the standards of professional services and ensuring that compliance is carried out in a suitable manner that guarantees optimum benefit for the East African Community.

The geophysicists sector's engagement with the public started in 2014 after the amendment of Kenya's system of governance which required enhanced citizen participation in decision-making.

The policy will ensure the harmonization of roles and functions in the development, operations and management of geophysics in Kenya. It will also assist in capacity building, research and innovation.

Students undertaking geophysics supported the proposed policy since it provides a legal framework for the regulation of the practice of geophysics once they graduate.

The geophysicists sector's engagement with the public started in 2014 after the amendment of Kenya's system of governance that requires enhanced citizen participation in decision-making.

CHANCELLOR'S ADVICE ON CAREER GOALS



The Chancellor Dr. Manu Chandaria, speaks to First Year students at the University's Main Hall.

The TU-K First-Year students have been asked to work diligently to achieve their dreams.

Speaking at the climax of the matriculation ceremony at the Main Hall, the Chancellor Dr. Manu tChandaria asked students to remain focused on their dreams and to pursue their goals with passion.

He narrated his childhood background, rising from obscurity to a leading industrialist in the region. "We are not different human beings from the rest of the world. I am assuring you that everything is achievable, so long as you stay focused and work hard towards realising your dreams." He cautioned students against taking part in strikes and other vices.

"I would like you to understand that universities were established as centres for transmission of knowledge. Stick to this mandate and avoid unnecessary confrontations," said the Chancellor. He said he expected students to learn faithfully, maintain high standards of discipline and uphold a sense of patriotism to the

university and the entire country. Before the Chancellor's address, Vice-Chancellor Prof. Francis Aduol welcomed the students and congratulated them for having attained good grades that enabled them gain admission to TU-K

He said TU-K offers unique programmes, has exciting facilities and was prepared to give them the best education. Prof Aduol reminded the students that the university is a community of scholars and therefore they should be committed to scholarly work.

"University is the greatest institution

"I would like you to understand that universities were established as centres for transmission of knowledge. Stick to this mandate and avoid unnecessary confrontations,"

—Dr. Manu Chandaria

invented by human being. It has academic freedom of teaching and learning. You will therefore be required to pursue knowledge and truth freely," said the VC.

He asked students to listen to lecturers and take seriously what they learn, adding that they will be required to go out of their way and research on various topics. The VC advised academic staff to maintain a high sense of dignity and appearance since students consider them as their role models. He urged the students to be well behaved and make the university competitive.

"We would like you to project a good image of our university. Go back to your previous schools, talk about TU-K and encourage other students to join this university," he added.

Prof Aduol advised students to choose their friends carefully and be cautious of con men who may disorganise them by promising impossible things. The University has so far admitted 2,674 students in both Module I (Regular) and Module II.

DVC WARNS STUDENTS AGAINST VICES

The Deputy Vice-Chancellor in-charge of Academics Research and Students, Prof. Paul Shiundu, has asked students to desist from bad behaviour and instead nurture good character.

These virtues, the DVC said, will help them hone desired personalities while at the university and later in their careers.

He said it was sad to note unfortunate cases resulting from drug abuse, immoral sexually behaviour, gambling and criminal activities among university students.

Such unbecoming behaviour could land them to problems including contracting sexual transmitted diseases, unplanned pregnancies, mental conditions and sometimes resulting into deaths.

The DVC was speaking at the end of a three-day training of peer-to-peer volunteers that saw 23 students benefit from a programme spearheaded by the Inter-Religious Council of Kenya (IRCK). The students were drawn from various religious associations. They were advised on interpersonal and group information sharing skills. The training was organised by the university's Directorate of Students Support Services (SSS) in collaboration with IRCK and saw the volunteers awarded with certificates.

Referring to the recent brutal killing of Bondo University student linked to extramarital affairs, he asked both the



Some of the peer-to-peer trainee students taking a selfie.

young and the elderly to take up the challenge in rooting out rising rogue behaviour in universities.

"It is unfortunate that young and old people find themselves in these challenges. Questions are raised on where we as a society are headed to. It is unfortunate that the student had to die that way," said Prof. Shiundu.

"We are happy that you decided to participate in this mission; you have taken up a noble responsibility and we look forward to witness you practice what you have learnt.

"This kind of effort is commendable and affords the university opportunity

to reach out to the students' population of over 15,000 and also extends to members of staff."

Student Support Services Director Prof. Omondi Oketch said peer-to-peer counseling was an effective way of reaching out to the bigger student population whenever sensitive matters are involved.

Some of the skills the peer educators were trained included abstinence, HIV and AIDS, HIV situation analysis in Kenya, HIV transmission and protection, awareness and moral aspects, roles and qualities of peer-to-peer educators and practical strategies during engagements.

Facilitators of the training included Sabina Ng'ang'a, Margaret Mburu, Dr. Francis Kuria, Mercy Hongos, Mark Too, Ezekiel Mburu and Gloria Jumba.

IRCK Chairman, Father Joseph Mutie, said the council was pleased to collaborate with TU-K in training peer educators. He said the initiative would help instil moral and religious values in efforts to change attitudes in society.

"It is worrying that over 50 per cent of new HIV infections are among the youth. We therefore urge you to work hard in developing attitude change towards this pandemic among fellow students and in the society," Fr Mutie said, adding that ICRK will identify other possible collaborations with the university towards this effort and other engagements.



Deputy Vice-Chancellor, Academics, Research and Students, Prof. Paul Shiundu (3rd Right) award certificate of participation to Ms. Joan Sally Waithera. Looking on from left are Sabina Ng'ang'a and Margaret Mburu, Inter-Religious Council of Kenya Father Joseph Mutie and Student Support Services Director, Prof. Omondi Oketch.

AJIRA TO CURB YOUTH UNEMPLOYMENT



Mr Conny Kioko, a trainer from the Ajira Secretariat leading one of the training sessions at the University Main Hall

The Ministry of Information, Communication and Technology has launched the *Ajira Digital Programme* at the Technical University of Kenya.

A government initiative, the programme targets to train over 7,000 students and equip them with the necessary skills for online jobs.

The one-week training was held at TU-K from 20th to 24th August.

A trainer from the Ajira Secretariat, Mr Conny Kioko, mentioned four key areas students will be trained on - articles and content writing, transcriptions, virtual assistance and digital marketing.

"This programme will provide tools, training and mentorship needed for young people to work and earn an income with dignity thus achieving the country's objective of a globally knowledge-based middle income economy in an increasingly digital world. So far, we have trained youths in 13 counties and 1 constituency," he said.

Two days into the training, students had already started using the Ajira Digital Portal in learning how to earn from leading international companies through the internet infrastructure

established by the ICT Ministry.

The coordinator and Director, School of Computing and Information Technology, Dr. Salesio Kiura, School of Health Sciences and Technology Director Prof. Alfred Orina and Senior Assistant Registrar, Faculty of Applied Sciences and Technology, Mr Stephen Karanja, briefed the students on the Ajira background information for registration and shared the links (<https://goo.gl/8bR2jg>) for students to confirm their attendance in the training.

The training targeted students from all schools including Computing Information and Technology, Electrical,

Physics, Mathematics and Business.

After the 5 day rigorous training, the students were awarded certificates to show their successful completion of the short course and were given the mandate to become members of the Ajira Club that will soon be launched at TU-K.

AJIRA Club will have trainees, club members and experienced online workers from within TU-K. Various activities such as training of trainers, the appointment of a patron and sustainability of the programme, will be handled by the club.

Members are expected to register new members, create awareness about online work in their respective institutions, conduct training of new members and other students within the university and provide mentorship to those trained on the Ajira Digital Programme.

The registration form shared online will only be accessible to students through the online portal. Students interested in the Ajira programme are required to register through the link (<https://tinyurl.com/y9kmyvj5>). To be eligible to join, one has to be a bona-fide TU-K student or member of staff.

AJIRA Club will have trainees, club members and experienced online workers from within TU-K. Various activities such as training of trainers, the appointment of a patron and sustainability of the programme, will be handled by the club.

ICT IS DEFINING HOW WE DO BUSINESS



Delegates pose for a group picture during the 2nd International Conference on Information and Knowledge Management.

Information and knowledge management specialists have been challenged to help society understand the existing vast volumes of information and to pay special attention to the youth.

Speakers during the 2nd International Conference on Information and Knowledge Management held recently at Panafric Hotel, Nairobi, TU-K Vice-Chancellor Prof. Francis Aduol challenged information professionals to cascade the wealth of knowledge for social and economic growth.

"In the 21st Century, you cannot do anything without relevant and timely information. Access to information is critical to societal development," Prof. Aduol noted.

The theme for this year's conference was *Transforming Information and Communication through Digital Media and Technologies*. It was jointly organised by TU-K, Moi University and the University of Nairobi. The biennial conference attracted delegates from South Africa, Zambia, Zimbabwe, Tanzania, Uganda, Nigeria, USA, and Kenya. It was first held in 2016.

Prof Aduol said today's world relies heavily on an information base and urged information managers to help match this demand. The V-C

further challenged higher learning institutions across the continent to present information-related courses in a way that attracts young learners who graduate from secondary schools.

"While choosing courses they prefer to pursue at the university, the first thing that hits their minds is the prestige attached to a career and profession," Prof. Aduol observed. "I sit in the board of the Kenya Universities and Colleges Central Placement Service and I have observed that information science for a while now has not been attracting top students who are joining universities. Think of how best you can present this profession to the young people for them to understand and gain interest in it," he appealed.

"In the 21st Century, you cannot do anything without relevant and timely information. Access to information is critical to societal development."

— Prof. Francis Aduol

Outgoing Deputy Vice-Chancellor for Administration, Planning and Infrastructure, Prof. Joseph Kiplang'at, emphasised the conference's importance, noting that it provided a platform for dialogue and sharing of experiences, insights and ideas about how best to use technology to improve personal and professional lives.

"It is estimated that every second, 973,000 users log in on Facebook, and over 174,000 users scroll on Instagram. Additionally, 38 million messages are passed between various individuals on the WhatsApp messaging platform. Importantly, 3.7 million searches get initiated in Google while 4.3 million videos get viewed on YouTube. All these are just a glimpse of the entire picture," noted Prof. Kiplang'at.

Prof Dennis Ochola from the University of Zululand in South Africa, who was the conference's keynote speaker, said the significant purpose of knowledge management is to foster innovation through encouragement of free flow of ideas through knowledge sharing. He asked information managers to enable knowledge creation by facilitating the filtration of knowledge through socialisation, learning and diffusion.

INSPIRING SECURITY GUARD'S DREAM TO ONE DAY BECOME A JOURNALIST

By Stephen Omondi

Stephen Wambua Peter is a security officer at the Technical University of Kenya and hopes to one day become a journalist.

His dreams of becoming a career journalist, he said, was shelved when his mother died while he was still in primary school. He hopes to raise enough fee to carry on.

A few years after their mother died, their father took off, leaving him and two siblings in desperate situation. He was forced to seek refuge at their grandmother's home.

"Things took a badly wrong turn when our father left us, we had to fend for ourselves," said Mr. Wambua.

He later went ahead to do his KCPE exams and scored 380 out of the possible 500 marks. He was lucky and got a sponsorship to continue with his secondary education where he was enrolled at St. Mary's High school in Makueni County.

With dire situation back home, Mr. Wambua wasted no chance in high



Stephen Wambua Peter

school. He scored a B minus in his Kenya Certificate of Secondary Education (KCSE) in 2009. He was however, not lucky to get a sponsorship for his college education.

He headed to Mombasa in search of a job to raise his college fee. He met Mr. Maina, his former classmate who helped him secure a place at Pack Pin, a carton manufacturing industry. He rose to a quality controller position earning him

Sh6000 per month.

Despite working for about five years, he realised the salary could not sustain him noting that he would save little amount. He resigned and moved to Nairobi where he stayed with one of his former friend who worked as supermarket attendant.

After a short stay in Nairobi, he learnt TU-K was recruiting security officers. He luckily secured a place as a security officer.

While discharging his duties as a security officer, he dedicates time to his passion in music where he records gospel songs.

"Despite all these challenges, I am happy that I have saved some amount both from my little salary and proceeds from sale of music and performance, which I intend to pay for my training in journalism" said Wambua.

He challenged students to not only rush for white collar jobs but take interest in skill-based opportunities.

"I know most students view my job as low earning, but this is what puts food on table, help save for my college fee and I do not have to rely on handouts from friends and relatives," he noted adding that young people need to learn to be patient and focused.

— The writer is a journalism student at TU-K

Despite working for about five years, he realised the salary could not sustain him noting that he would save little amount. He resigned and moved to Nairobi where he stayed with one of his former friend who worked as supermarket attendant.

COMMONWEALTH ASSOCIATION PICKS TU-K DON

The Association of the Commonwealth Universities (ACU) has appointed TU-K Civil and Construction Engineering Senior Lecturer Dr. George Okwadha as a Fellowship Reviewer.

Dr Okwadha's appointment heralds a collaborative link between TU-K and ACU that will see staff benefit from research, training and networking in Kenya and abroad. The association is the world's first and oldest international university network founded in 1913. It has over 500 member institutions in developed and developing countries across the Commonwealth.

ACU provides scholarships, academic research, and leadership on issues of mutual interest and promotes inter-university cooperation and the sharing of good practice thus helping universities better serve their communities. It also provides a platform for online sharing of information by member universities.

The fellowships, funded by ACU's Development Fellowships Fund, aims at enabling universities within the Commonwealth to develop the human resources capacity of their institutions and countries through the interchange of people, knowledge, skills and technologies.

EXPERTS TIP STUDENTS ON JOB SEARCH SKILLS



Students and members of staff from the School of Business Management Studies during a workshop. Inset: Mr Morris Gwaye a staff at KASNEB.

Several companies attended the 1st Annual Business Day hosted by TU-K's School of Business Management Studies. The event was used as a platform to link students with the industry and instil professionalism in their work.

Dr Jared Abong'o, a member of the TU-K Senate, represented the School of Business Management Studies Director Dr. Elyjoy Micheni. Dr. Abong'o asked the students to keep their minds open and embrace the industry players' advice.

He reminded the students of a few years back when technology was seen for the first time in the country and how people feared it would change the economy for the worse, yet it has now revolutionized the market by creating new jobs.

Mr Morris Gwaye and Ms Caroline Makutwa from the Kenya Accountants and Secretaries National Examinations Board (KASNEB) explained the opportunities available to the students at the board.

"KASNEB is all rounded, it does not discriminate. Whether you are doing a managerial course or accountancy, this is the place to get the ultimate

skills and competencies to enable you to compete effectively in the global market. We do benchmarking locally and internationally, therefore chances of our students being offered scholarships are high." Mr Gwaye explained.

Ms Makutwa advised the students pursuing business courses to acquire the best academic qualifications and also spice up their CVs with some interpersonal and life skills. She encouraged students to aspire to be employers rather than employees. She then took students through the process of registration for KASNEB courses.

Ms Cecilia Kplang from the Association of Chartered Certified Accountants (ACCA) - the global body for professional accountants pointed out that there was more to a student

"Making yourself unique among others is important. Most employers are not interested in what you have academically, but will judge you by your character."

—Ms Cecilia Kiplang

than just papers.

She told them that part of the ACCA's work is to instill ethical behaviour among students and impacting them with the requisite technical skills.

"Making yourself unique among others is important. Most employers are not interested in what you have academically, but will judge you by your character," she said.

"We have heard of instances where interviews start from the minute you walk into the premises and take less than 30 minutes. This is where we at the ACCA come in to instil ethics and build up your professional character," Ms Kplang said.

A senior manager at the giant telco Safaricom, Mr Joshua Kimani, challenged the students to strive to become leaders that other people can follow. "At Safaricom we offer a whole range of careers from internships to job openings in accountancy and management. Academic qualification is mostly required in these careers, but there are other things we look at such as discipline and commitment," he said.

Telkom Kenya, Postbank and National Bank were also represented at the event.

DON LAUNCHES PODCASTS ON NUTRITION AND HEALTH

"Welcome to Health Talk Radio Africa, the show that inspires you to improve your health, educate you on nutrition issues, and offer practical tips of daily living so that you can live healthy. I am your host Dr. Mary Mugambi, a doctor in nutritional sciences talking to you from the city in the sun, Nairobi Kenya!"

That is how Dr. Mary Mugambi, a lecturer of Nutrition and Dietetics at the Technical University of Kenya, introduces herself in a podcast. Nutrition is the branch of science that studies how humans use food for maintenance of life, growth, reproduction, functioning of the organs, tissues and for healing.

Dr Mugambi produces *Health Talk Radio Africa*, an educative nutrition radio programme and distributes it via online platform in form of podcast episodes that are accessed on-demand.

She lectures during the week days and speaks to a global audience over the weekend on matters nutrition and health.

Her discovery of podcast radio programming, altogether, opened a new world of sharing knowledge on nutrition among Kenyans in the rural and urban areas, and beyond the country's borders.

Her audience base, unlike the traditional radio, is not limited to geographical boundaries or radio frequency coverage. The seven-month old online broadcast attracts followers from over 10 countries who interact with her, ask questions and give feedback through social media, calls or direct mails.

"Each episode I upload attracts up to 500 plus people globally. Listeners can download the episode on their phones or computers and follow them at their comfort."

The breakthrough came a couple of years ago after local mainstream media houses she had approached declined her the opportunity to host a health talk show.

"I wanted to enter into broadcast media to run a programme on nutrition education once I completed my studies



Dr. Mary Mugambi

in the US, but doors were shut on me. Most media houses asked me whether I was a medical doctor or hold a doctorate degree." But answered "No" and tried to explain that a person with a Master's in Public Health can offer advice for public consumption but still could not even get past the receptionist or secretary.

"In the US, there were several dedicated broadcast media, both radio and TV programmes that included discussion on nutrition and with vast topical issues educating people."

In Kenya, however, there are a few dedicated programmes deliberating on particular issues that affect people and environment such as human health, she points out.

Some of the topical issues she has covered in her programmes include living positively with HIV, delaying full-blown AIDS, cancer, winning the battle against treatment side effects plate by plate. She has also spoken about teenage

pregnancy and alcohol abuse.

According to Dr. Mugambi, the human body requires nutritious food to function effectively and fight off infection. "I get inspiration for topics to discuss simply from people and society around me, trending issues in the media, research and experience," she explains.

Interaction with people form part of her content for discussion. These include health problems resulting from teenage pregnancies, alcohol and drug abuse, HIV prevalence, bad eating habits and malnutrition.

Dr. Mugambi graduated with a Bachelor of Arts Degree in Food Nutrition and Dietetics from the College St Catherine, Minnesota and a Master of Public Health from California State University Fresno, USA.

"I wanted to pursue a coursework in nutrition and dietetics but it was not on offer in any of the universities in Kenya in late 1980s. I settled on a course in home economics at Kenyatta University.

"I did not love it much. After a short stay at KU, I sought out an opportunity abroad to pursue my dream career, and that is how I got myself in the US, with big dreams. In the US, I juggled between work and class to support myself and pay my fees, often missing sleep to manage this reality."

She says the Master's programme was tough, as she took five years to graduate due to financial difficulties and remembers marking her 30th birthday in the library.

Her advice to young people aspiring to live in the USA is to follow the law.

"If you want it, you'll get it, but don't break the law. Someone tried to lure me into a marriage to get a green card - they call it 'Marriage for Green Card' but I chose not to break the law," she says.

While in the US she worked for the Women Infants and Children Supplemental Nutrition Programme as a public health nutritionist and as a public health researcher at the Kings County Health Department.

After 11 years in the US, she returned

Launching podcasts is not expensive and demanding like mainstream radio that demands massive infrastructure with huge financial implications.

to Kenya, with a dream to practice what she had achieved both in class and short work experience. Her dream was to first set up an educative nutrition broadcast programme, just like the health radio and TV programming activities she experienced in the US.

This mission proved futile so she shelved her ambition and went for other employment opportunities.

Between the year 2001 and 2004, she was employed as a food security project evaluator at Brelan Consultant Team and as a Medical Nutrition Therapist at Gertrude's Garden Children Hospital. Dr. Mugambi was also a director at the Medical Nutrition Therapy Centre.

"While at Gertrude's, a colleague, just out of the blue shouted, anybody here interested in carrying out a sponsored doctorate research degree? I shot up," she recollects.

A year after she applied for the doctorate programme, she received a call notifying her that she had qualified for the sponsorship to carry out research, but the study was to be conducted in South Africa.

"Nestlé Nutrition Institute Africa sponsored me for research and my PhD studies at the University of Stellenbosch in South Africa in 2004," she recalls. Her progress encountered hurdles when her supervisor plagiarised her research and published it in his own name. And the options were to leave South Africa or to start afresh after five years of hard work



Dr. Mugambi during her online talk show

without a degree. However, she opted to start afresh.

"University of Stellenbosch funded my second attempt and allocated me another supervisor. This time, my research sailed through, and I graduated in 2014," she said.

Immediately she came back to Kenya, she applied for teaching opportunities at Kenyatta University, the University of

Nairobi and TU-K.

TU-K invited her for an interview, which she passed and was appointed a lecturer and later rose to Acting Chair of the Department of Nutrition and Dietetics.

Early this year, she embarked on her passion in radio broadcasting, this time settling on online-based broadcasting (podcasts) where programmes are uploaded and listeners follow the programmes on demand.

Launching podcasts is not expensive and demanding like mainstream radio that demands massive infrastructure with huge financial implications.

"With positive development and reception among listeners, I believe TU-K will eventually run a fully established online radio station dedicated to health discussions, without compromising teaching duties," says Dr. Mugambi.

She has now embarked on marketing her programme in print and on social media. For now Dr. Mugambi records different episodes for *Health Talk Radio Africa* in the evenings and weekends. She advises young people to take advantage of new technology and the fast changing digital world.



HEALTH TALK RADIO AFRICA

Your host: Dr MARY MUGAMBI PhD

FUN, HEALTH & NUTRITION PODCASTS

Listen on your phone, tablet or computer,
30 minute podcasts on African health & nutrition issues



Teenage pregnancy, a constant problem, but 1st let us feed the pregnant teenager to avoid problems.

- Teen pregnancy is a topic we all avoid.
- Pregnant teenagers do not have resources, enough education, employment skills or access to prenatal health care.
- We all pay for the problems created by teenage pregnancy.
- To help the pregnant teenager, 1st feed her well to gain enough weight.
- Find out how to help and break the intergeneration malnutrition.

www.blogtalkradio.com/healthtalkradioafrica

KENYAN 'FATHER OF CLIMATE CHANGE' TAKES FINAL BOW



*In an exclusive interview a few months before his demise in September 2018, distinguished scholar Prof. Ouma Muga opened up to **Philip Ronny** on a wide range of issues relating to his illustrious career that started in 1961 at the prestigious Makerere University and climaxed with the acclaimed scientific presentation by his team at the 1985 UN Vienna Conference. TU-K News dedicates this interview posthumously as a tribute to Prof. Muga.*

Welcome Sir. Tell us about yourself, where did you go to school?

I am an environmental scientist. I went to Saint Mary's School, Yala, where in 1957, I emerged the best student in East and Central Africa Cambridge Examination. I joined Makerere and graduated in 1961 with distinctions in all units. I was appointed a tutorial fellow in the same university. I proceeded to Sydney University 1962 to pursue a two-year Masters and thereafter a PhD programme. By 1966, I was through. I rejoined Makerere in 1967 and by 1969, at 34, I was a full professor.

You completed your PhD in less than two years?

Yes. 18 calendar months, to be precise.

Your PhD thesis was on "Fluvial Geomorphology". Briefly tell us about it. This is the interaction and formation of soil strata. It encompasses the understanding of their response to natural and man-made activities. The thesis finding which was third best in Commonwealth performance ranking, helped reclaim what is present day Australia.

Who were some of your students?

Prof Anyang' Nyong'o (Makerere), President Yoweri Museveni (as visiting lecturer, Dar es Salaam), Prof. Donald Ogwenyo and Dr. Muusya Mwinzi (Moi University).

What is climate change and why is it happening?

This is the emissions attributed to people causing atmospheric variation with consequences of global warming.

Are there findings related to global warming that worry you?



The late Prof. Ouma Muga

Yes. Gases emitted into the atmosphere have far-reaching consequences to the world's flora and fauna. From the scientific formula I invented for sealing the ozone layer, our team presented evidence of global warming at the 1985 UN Vienna Conference. This is what we are presently witnessing globally as climate change.

Is this why you are referred to as the 'Father of Climate Change'?

(Chuckling) Maybe it is because I have carried out prolific research in global climate.

What are the vital signs of climate change?

Unpredictable rainfall, soil fertility depletion, high incidences of pests including high temperatures that make crops flower sooner. With all these, difficult times are coming.

How difficult?

Emissions that create climate change are gradual. Presently, 11% of the global population faces hunger due to climate change. This is projected to rise to 40% by 2050. The present generation is not as doomed as future generations.

The main contributors to climate change are the developed nations. Are they making profit to kill Africa?

Absolutely. Rich nations contribute more to global warming.

According to principles of international law, sovereign rights rest with individual countries. How are we going to direct other countries to act on climate change?

Principles of international law are an inspiration rather than direct law to be practiced by civilized nations where decisions are based on scholarly writing. Here, the majority account for full society inspired benefits. Principles of international law must positively promote what the majority desire.

How much should we worry about the effects of climate change?

The refugee flow into Kenya is traceable to climate change? Societal problems, water, sanitation, diseases, insecurity and lack of food all affect us.

At the household level, are there solutions to the problem of climate change?

Yes. Turn off lights and computers when not in use. Take group transport. Practice pollution-free policies. Go green by planting a lot of trees.

Why don't we plant Lake Victoria green with water hyacinth?

(Laughter) Trapped heat causes water to expand. Kisumu, Entebbe and Mwanza would be submerged in water sooner.

You preferred this interview to take place in Narok, why?

(Emphatically) We would have observed excerpts of climate. Tourism in Kenya is never accomplished without a visit to the Maasai Mara. The wildebeest

migration represents an irreplaceable heritage threatened by climate change. The domestic animals crisscrossing the road in search of pasture and water are already affected by climate change. The intertwined relationship between climate change and the built environment can be opined in Narok. The rich architecture in Maasailand has better thermal comfort despite the hot weather. However, the frequent flooding affects their livelihoods. Soil erosion makes Narok roads to be below ground level with a consequence in tourism. In addition, the library of knowledge in traditional Maasai medicine is now threatened by climate change. When Narok is affected, Africa is affected. It is worrisome.



With this worry shall Africa achieve Sustainable Development Goals?
(Assertive) No. We are trying to do too much to achieve too little. With 17

goals and 169 targets, we lose focus. Let Africa prioritize its challenges and adopt appropriate technologies for their wellbeing. This way Africa may achieve and own loco specific targets.

Is there any other important thing to know about climate change?

Many things. As a scientist, I have the duty of care to say that globally we only have 30 years to come up with mitigation measures before climate irreversibly affects us.

Prof, thank you very much for your time.

It was my pleasure, Ronny.

—Ronny is a lecturer, Department of Construction, Economics and Management.

BLENDING ACADEMIC PROGRAMMES



Mr Peter Ngugi (Right), Nairobi County Deputy Chief Fire Officer' briefs TU-K team on "Disaster Tool Kits"

TU-K programs are blended in class and practical delivery format. Through this blending, students of disaster and emergency management discover new strategies through teaching and practice. This experience makes them fully equipped in dealing with various incidents.

Towards this end we acknowledge with gratitude the courtesy of Disaster Management and Co-ordination Sector, Nairobi County Government, for giving insights including sharing their competencies with TU-K students.

The blending resonates well with "Education and Training for the real world"



TU-K students Purity Kisiangani and Wycliff Sungu under keen eye of Mr Peter Ngugi during a fire fighting drill.

MORE TU-K STAFF OBTAIN PHD'S



Dr. Cleophas Odieki

Is the Director of Distance and Open Learning. He obtained a PhD in Education - curriculum studies from Masai Mara University.



Dr. Fredrick Mutie Musila

Is a lecturer in the Department of Technical & Applied Biology. He obtained a PhD in Botany from the University of Nairobi.



Dr. Wycliffe Kipkoech Cheruiyot.

Is a lecturer in the Department of Statistics and Actuarial Science. He obtained a PhD in Biostatistics from Moi University.



Dr. Mary Clare Kidenda

Is the Chairperson, Department of Design and Creative Media. She obtained her PhD from Coventry University, UK.



Dr. Beth Nyambura Kiratu

Is a Lecturer in the Department of Pure and Applied Mathematics. She obtained a PhD in Pure Mathematics from the University of Nairobi.



Dr. Paul Maina Wanjau

Is a Lecturer, Department of Industrial Mathematics. He obtained a PhD in Applied Mathematics from Moi University.



Dr. Gaudencia Achieng' Ndeda

She is a lecturer in the Department of Human and Social Development. She obtained PhD in Educational Research from CUEA.



Dr. Jared Abongo Onyango

He is a Lecturer and acting Chair of the Department of Accounting & Finance. He obtained a PhD in Business Administration from JKUAT.

DEEPENING THE FRENCH CONNECTION

The government of France is keen on establishing collaborative initiatives with the Technical University of Kenya. A delegation from the French Embassy disclosed the intention for partnership when they called on the Vice-Chancellor.

The delegation, headed by Mr Cyril Gerardon, Head of Cooperation and Cultural Affairs Department, was received by the Vice-Chancellor Prof. Francis Aduol, Deputy Vice-Chancellor in charge of Academic, Research and Students. Prof. Paul Shiundu, Executive Dean, Faculty of Engineering Sciences and Technology, Prof. Alex Muumbo, Executive Dean, Faculty of Applied Sciences and Technology, Prof. Francis Gatheri and the Executive Dean, Faculty of Social Sciences and Technology, Prof. Maina Matu.

Mr Gerardon was accompanied by Ms Ade'lie de Soumagnat, Manager Campus France Kenya and Rosine Nzietchueng, Attache' High Education and Research Cooperation. The meeting was also meant to present newcomers of the French Cooperation as well as make a follow-up of the France/TU-K partnerships.

Mr Gerardon said France was keen on collaborating with TU-K in education, research and training.

"We are here to understand how



TU-K Vice-Chancellor Prof. Francis Aduol (Left) shares an information folder with Mr. Cyril Gerardon, the Head of Cooperation and Cultural Affairs Department at the French Embassy in Nairobi.

Kenyan universities work, initiate collaborations, encourage students to apply for scholarships, as well as assist them get attachment or jobs in some of the French companies operating in Kenya," he added. The French team said France had collaborations with other institutions in the country and was interested in working with TU-K to improve Technical and Vocational

Education and Training (TVET).

The V-C termed the visit important adding that TU-K was open to collaborations in areas and programmes of mutual interest. "We are open for collaboration in areas that would help us move forward. We will be happy to work with French companies and other stakeholders," he added.

Prof Aduol said TU-K was spearheading technical training in the country by producing graduates who are practically oriented in line with the government's development agenda. "We have available land in Nairobi and are negotiating with people and institutions to help us build a college that will entirely deal with TVET," said the V-C.

TU-K has been working closely with the Embassy of France in Nairobi and had on several occasions hosted the then Ambassador of France to Kenya, Mr Remi Marechaux.

The university's working relationship with France dates back to 2016 when TU-K was represented at an International event held in Paris, France. The event brought together directors of international relations and linkages from various French universities, research centres and TVET institutions.



The delegation from the French Embassy in Nairobi pose for a group photo with the Vice-Chancellor, Prof. Francis Aduol.



Pwani University Student Council who were on a benchmarking mission at TU-K. With them is TU-K student leaders and Director, Student Support Services, Prof. Omondi Oketch.



Hosts and producers of 'Top Story', a show aired by KTN, speak to the TU-K communication and journalism students during mentorship workshop.



Mr. Bernard Mwashighadi and Mr. Lawrence Githinji both 5th year Mechanical Engineering students showcase a mango solar drier which they made. The innovation is a milestone for increasing the shelf life of mangoes.

TU-K Student Support Services Director Prof. Omondi Oketch speaking to peer-to-peer trainees and student leaders during a workshop at the University's female hostels in Upperhill.



TU-K Health Wellness and Services staff and City Council's Rhodes Chest Clinic personnel attend to a volunteer during a TB testing and treatment campaign that was carried out within the university targeting staff and students.



Dr. Kevit Desai (right) receives a trophy from CAPA on behalf of Kenya's Ministry of Education for its leading role in promoting TVET. This was during CAPA's 40th Anniversary Celebrations held in August 2018 in Abuja, Nigeria.



Part of the Trainees' team learning how the Tirak is installed on top of an elevator car at the training centre. The use of the Tirak is a KONE patented method used for scaffoldless elevator installation.



Prof Emily Akuno, the President of the International Society for Music Education, giving a keynote address at the 45th Association of European Conservatories annual Congress in Graz, Austria. Prof. Akuno spoke about the 5 Music Rights and their impact on higher music education.



Angelina Otieno, a staff member has been enhancing religious diversity, culture and commitment to work. She retires this year alongside other staff members.



TU-K Student leaders pose for a photo with the Chancellor Dr. Manu Chandaria (centre) and the University Management led by the VC Prof. Francis Aduol.

TU-K DONS TRAINED HOW TO TEACH FRENCH ONLINE

There are about 700 students at TU-K learning French language both for specific purposes and for general use.



The Department of Language and Communication Studies Co-ordinator, Dr. Teresa Atieno Otieno, with colleagues after a training session.

The Technical University of Kenya French language teaching staff have benefited from an online training set to prepare them adopt internet-based technology in research and instruction.

French Embassy in Kenya, in collaboration with The Francophonie University Association, supported a five-day seminar. The workshop was hosted by Kenyatta University's at its centre for training and documentation the workshop brought together lecturers teaching French in respective universities across the country.

The Francophonie project aims to establish a French-language international academic community that produces and transmits knowledge.

Dr. Teresa Atieno Otieno, one of the two participants from TU-K said the exercise was helpful especially when teaching young generation that is

techno-adoptive.

"This mode of instruction presents an opportunity to learners to interact with peers as well as the instructor outside the classroom," she said.

Mrs Ann Wafula from TU-K was also part of the nine trainees drawn from universities including Maseno, University of Nairobi, Kenyatta University and Baraton University.

"We were taken through technical facets of developing and uploading the lessons online and simulating it. The

The Francophonie project aims to establish a French-language international academic community that produces and transmits knowledge.

software enables the use of multimedia in the development of lesson illustration and interactive learning activities via internet. The software application can be customised in the teaching of other disciplines both in social sciences and technical sciences," said Dr. Otieno, who is also the Coordinator, Foreign Languages at TU-K's Department of Language and Communication Studies.

There are about 700 students at TU-K learning French language both for specific purposes and general French. Some of the French Embassy-supported opportunities and activities students can participate in include; the French World Speaking Week, Drama Festival in French, SciencesPo, Study in France: French Open Day at Alliance Française and English teaching assistants programme offered by the French Ministry of Education.

KONE TRAINS STUDENTS IN DUBAI



Kone trainees pose for a group photo led by KONE Kenya, Managing Director, Mr Antonio Jose (centre in blue shirt) before they left for Dubai in September. Also in the picture is TU-K outgoing Deputy Vice-Chancellor in-charge of Technology Innovation and Partnerships, Prof. Suki Mwendwa (centre) and Executive Dean Faculty of Engineering Sciences and Technology, Prof. Alex Muumbo (3rd left).

KONE Corporation (Kenya) conducted a first ever recruitment exercise targeting technical-based universities in Kenya, in which 17 students from TU-K in their final year of study were successful.

They underwent an initial theoretical training in Kenya before leaving for Dubai for a year of field training. The team joins KONE's International Trainee Programme.

Mr Caleb Muyodi a student, is leading a team of 17 TU-K Bachelor of Engineering Technology - Electrical and Electronic and Bachelor of Technology in Mechanical Engineering Technology finalists who are currently undertaking a trainee programme in Dubai.

"There are myriad of opportunities in the industry, only those who are prepared to go an extra mile get a chance. Discover your interest early and strive to be excellent in your specific discipline," Mr Muyodi challenged students pursuing various courses.

KONE Corporation is a global leader in elevators and escalators manufacture and installation.

KONE Kenya Managing Director Mr Antonio Jose who spoke to the trainees before they left for Dubai last August, asked the trainees to be diligent and

master good workmanship.

He said KONE Kenya is planning to expand its operations in the region and would be keen to absorb the trainees at supervisory capacities.

"This is the first time we are conducting such training in this region. We together have to make it a success. We are using Kenya as a reference point in setting up similar trainings," said Mr Jose.

"KONE has invested a lot in this training project, and therefore expects a lot from you in terms of professionalism and good workmanship. We want you to join KONE with passion and energy. You will thereafter be placed on supervisor positions in Nairobi or in other countries in the region."

Mr Jose challenged the trainees to remain steadfast during their stay in

KONE Corporation (Kenya) conducted a first ever recruitment exercise targeting technical-based universities in Kenya, in which 17 students from TU-K in their final year of study were successful.

Dubai and even later in their practice and interaction with clients. "Do not allow anyone to tell you are different, or have lower capacity, in reference to race, country of origin, religion or any other biases they harbour.

"Bear in mind that our key interest and pillar at KONE is the client. Do not make assumptions while you undertake duties and in anything you do," he added.

Present during the ceremony were Regional Training Manager, KONE Middle East & Africa, Mr Venkatesan Jagannathan, Human Resources Manager, KONE Kenya Ms Roseanne Masila, Field Trainer, KONE Kenya, Mr Sundar Kasi, outgoing TU-K Deputy Vice-Chancellor in-charge of Technology Innovation and Partnerships, Prof. Suki KK Mwendwa, and Executive Dean Faculty of Engineering Sciences and Technology, Prof. Alex Muumbo.

Prof Suki said the university will embark on training the candidates on soft skills needed to best fit in the corporate industry.

"We are happy KONE remained optimistic and indeed were surprised by the talent and training we offer at TU-K. It has now dawned on me that we have great brains at this university.

Q&A WITH CALEB MUYODI



Mr Caleb Muyodi, (2nd Right), the trainee's team leader pose for a photo with his trainers at Dubai Hills Mall Project, one of the installation sites in Dubai where KONE is set to install 66 elevators and 90 escalators.

Seventeen TU-K final year students are currently undergoing a graduate trainee programme with the global leader in elevators and escalators manufacture and installation, KONE Corporation in Dubai. They are set to be absorbed by the company in supervision capacities. Here is what the trainee team leader, Mr Caleb Muyodi, had to say:

How was your reception in Dubai?

We touched down at Dubai International Airport on 28th August.

The first thing was to adjust to an hour time difference between Dubai and Nairobi.

Secondly, we got a taste of the high temperatures. Experiencing 35°C at about midnight was very startling to us. The reception was well-organized. We were picked up from the airport by the transport manager.

Tell us about your training in Dubai.

We began with a two-week long induction on 29th August. To our surprise, we noted that the top management had a lot of interest in our training programme.

Various regional departmental heads found time from their busy schedules to share with us introductory remarks about their departments. Notably, we have been inspired by our local Managing Director - KONE UAE, Mr Nicholas El-Khal. He shared insights about his career journey in the company, having started as a graduate trainee like us.

Dubai has massive infrastructure, what does this mean to your training?

One fascinating thing about Dubai is the ever-rising buildings. The elevator and escalator industry is at the centre of this infrastructural growth and ensuring efficient vertical people flow. We are convinced that this is one of the best opportunities to enable us acquire the requisite skills and knowledge in the industry. Dubai's construction industry is growing at a very fast rate in preparation for the 2020 Dubai Expo.

Our training in Nairobi covered three divisions. In Dubai, we have been introduced to all of KONE's frontline operations. The training is scheduled

to cover even some newly-introduced divisions in the company's operations. We are confident that we will live up to the expectations that the company has placed on us.

Tell us about your interaction with communities in Dubai, as well as social life experience.

Dubai is an amazing tourist destination. We have been to the all-time fancied Dubai Aquarium at the prestigious Dubai Mall. Not to mention our visits to Jumeirah Beach just adjacent to the world's renowned Burj Al Arab Hotel. The high temperatures are still taking a toll on us, but we are hopeful that we'll adapt as winter approaches in December. You note that it only rains about thrice annually in Dubai. Notably, the cost of food and housing in Dubai is very high compared to Nairobi, mainly because Dubai relies on imports for most of her agricultural products.

What do you advice the students currently undertaking various coursework?



Caleb Muyodi with colleagues at Jumeirah Beach in Dubai during their leisure time.

There are a myriad of opportunities in the industry and only those who are prepared to go an extra mile get a chance. Discover your interest early and strive to be excellent in your specific discipline. As an engineering student, sharpen your soft skills to blend well with other professionals in the corporate world.

Do you have any comments for the supporting institutions?

We appreciate the partnership between

T-UK and KONE, Kenya. It is our hope that our younger brothers and sisters at TU-K will also get an opportunity to join the subsequent training programmes offered by KONE.

Besides your training, what is interesting about Dubai?

There are no matatus in Dubai. The bus and metro system is well organized by the Roads and Transport Authority. Road discipline is strictly enforced even for

pedestrians. Failure to adhere to traffic regulations attracts very heavy fines.

General comments to write home about...

Our stay in Dubai, a multi-cultural society, has enabled us to appreciate the importance of our national identity. As Kenyans, we should always be proud of our culture and the values we uphold. We are envied by many other nationalities!

VARSIY ACQUIRES STATE-OF-THE-ART BLOOD TESTING EQUIPMENT

By Rosebell Njoki Njega

The Technical University of Kenya Health Wellness and Services facility has acquired a state-of-the art laboratory blood testing machine that can carry out up to 70 tests per hour.

Fujifilm Dry Chemistry - NX500I borrows latest technology in biochemical. The University's health facility is among the few medical facilities in the country to acquire the equipment.

This technology has now cut down the long queues at the clinic and can be helpful whenever emergency blood testing and diagnostics may be required.

According to medical lab technologist at the clinic, Mr. Peter Many, the equipment is efficient and produces instant results compared to previous apparatus. "Fujifilm dry chemistry is a very simple clinical blood test system that can measure samples by placing a drop of blood on

a dry slide, set the sample, the machine processes specimen in just a few minutes," said Mr. Many adding that the procedure is fully automated.

The Japan-manufactured equipment replaces the previous blood testing method scientifically known as the Wet Chemistry. The old technology was considered unstable, and time consuming because blood samples were being analyzed in liquid form.

The Fujifilm Dry Chemistry machine is quick and easy to use, produces reliable and accurate results and it minimises the risks of sample contamination," said Mr. Many adding that the equipment is user- friendly.

The blood tests that can be carried out include: kidney function, blood uric levels, blood calcium levels and



Newly acquired Fujifilm machine

blood inorganic phosphate levels. Some of the diagnosis made by this machine include diseases such as liver cirrhosis, kidney renal cases and hepatitis.

— *The writer is a journalism student at TU-K*

CAREER TALK: INSIDE THE MEDIA INDUSTRY

By Connie Masama

The School of Information and Communication Studies (SICS) organized a career day where students met practitioners to discuss their career prospects.

The event took place at the University's Lecture Theatre on 4th October. Journalism Department Chair Dr. Joyce Omwoha welcomed guests and highlighted the expectations of the forum which gave an overview of the media career.

Two departments were involved in the organization of the event, the Department of Journalism and Media Studies and the Department of Information and Knowledge Management.

Rence Madubi, an entertainment journalist talked about how entertainment can be used to educate people on various issues in society. She said there was need to ensure that communication is not broken because it is a unique tool which if not used well may bring about negative outcome on issues of great importance.

Stephen Dwoya, Records and Archives Management Officer at Kenya Red Cross said: "no organization can exist without records personnel." He then took participants through what a records officer does.

This goes hand-in-hand with librarianship, a topic that was handled by Azenath Ateka, a librarian at the United States International University (USIU).

"Equipping a society is never a hard thing to do, set up an individual or communal library and the development in a society shall forever be equipped with information, thus enhancing communication.

John Mwazemba, publisher and CEO Oxford University Press in Kenya and a columnist with the Nation newspaper, talked about publishing and the rules of publishing, data

"The media is an information tool and therefore it has to ensure that it does not misuse that right by being biased, act as a propaganda tool or mislead the people in any way."

articulation and issues of referencing more so, when it comes to books.

In every university, students are expected to do research projects on topics of their choice which requires them to collect data in books, journals and the Internet making it essential for them to go through the basics of publishing.

Key media personalities enumerated crucial and sensitive matters pertaining to media practice and information publication. Media Council of Kenya Deputy CEO Mr Victor Bwire highlighted the information verification process



Media Council of Kenya Deputy CEO, Mr. Victor Bwire, speaking during the workshop at TU-K's Lecture Theatre.

before dissemination to the audience through observing media laws and ethics together with the KICA Act.

"Media people go through a lot of psychological torture from the audience but we have to persevere at all costs.

He gave the example of the ongoing investigations about businesswoman Monica Kimani's murder investigations in which media personality Jacque Maribe was linked to through her fiancé Joseph Irungu alias Jowie.

Mr Bwire said the Media Council has to allow investigations to be carried out before delving into the matter despite it being a matter of public interest. "Investigative journalism is the most crucial form of journalism practice, but the law has to be observed either way," he emphasized.

Johnson Mwakazi, a former Citizen TV news anchor now works with World Business Channel (WBC) which owns Royal Voice International organization.

He urged the audience to rise up to the challenges of knowing one's ability and capabilities and to decipher



From left, TU-K journalism student Mr. Rence Madubi, Kenya Red Cross Records and Archives Management Officer Stephen Dwoya and Oxford University Press CEO and publisher Mr. John Mwazemba.

ways to overcome challenges by using them as stepping stones to greater heights.

“As a media person you should have a vision, know your identity, utilize your ability and let every opportunity coming your way have a positive outcome. This is because journalism is like the military, without frequent training you can never be the best; thus integrity and passion will lead to greatness.”

“Journalism is a very interesting profession if you observe professionalism in all it entails and do it as your passion not for money. Ensure that while you are in this learning facility, you use your time well, your energy and resources as well, so that when you graduate, you hit the ground running.”

Mwakazi gave a sneak preview of how one can equip himself or herself by being an all-round person while practicing journalism. He said most of the existing media houses want a people who can gather news, edit, report and even publish in newspapers.

“Be a free bird, accept corrections, allow new ideas, a free flow passage either from corrections or from challenges from people around you and use them to benefit yourself and add value to your skills,” said Mwakazi.

The forum attracted students from other departments including engineering and business despite it being an information/communication talk. Such a motivating event it was that it left a permanent impression on students who were challenged to strive to be better while also giving them a different way of looking at the journalism career.

— The writer is a journalism student at TU-K



Media personality Mr. Johnson Mwakazi speaking during the workshop. He emphasised on personal growth in ensuring a successful career growth.

PLAGIARISM COULD SCUPPER UNIVERSITY GRANT-SEEKERS

A study in BMJ Open has reported high levels of plagiarism in Africa-based medical research journals.

The study, published on 8 November, looked at 495 papers in 100 Africa-based journals published in 2016. It found that 63 per cent of the papers contained elements of plagiarism—ranging from a couple of copied sentences to more than six copied sentences.

Since such text plagiarism is easy to find with software, the authors of the paper—who hail from South Africa, Croatia and the United Kingdom—say the problem could be relatively easy to solve. Only 16 of the 100 journals drawn from African Journals Online (AJOL), an aggregate site for African journals, say they use plagiarism software.

Anke Rohwer, the lead author of the study, said she does not believe the results suggest that more serious misconduct, such as data fabrication, is more common in Africa than elsewhere.

“It may be that people are patchwork plagiarising—copying from the web and editing. I don’t think this is an indication that there is fabrication or other things happening [in Africa]. But there is a problem with standards, that both editors and authors think this kind of copying is ok,” she said.

A DEEPER PROBLEM

So how damaging is patchwork plagiarism? After all, it is not surprising that researchers for whom English is not their first language would copy a sentence that they think perfectly describes what they want to say—perhaps better than they could themselves.

But the ill-effects of such innocuous copying extend beyond marring a scientist’s published record. It can also

severely hamper a scientist’s grant-seeking success.

Many big-league research funders say they do not tolerate plagiarism in applications and that the consequences for discovered plagiarists can be dire.

For example, the National Institutes of Health in the United States told Research Africa that while the NIH doesn’t screen applications for plagiarism, researchers found to have submitted applications containing misconduct could be barred from receiving future funding from the US federal government.

It may be that people are patchwork plagiarising—copying from the web and editing. I don’t think this is an indication that there is fabrication or other things happening [in Africa].

At the Alliance for Accelerating Excellence in Science in Africa, a Kenya-based organisation that manages donor funding, grants issued to plagiarised applications could lose their funding or even have to be repaid, says Tom Kariuki, programme director at the Nairobi-based African Academy of Sciences, which hosts AESA.

“Since plagiarism is theft, intellectual theft, we make it very painful, just like a good criminal justice system would treat criminals,” Kariuki says.

FOCUS ON NIGERIA

The sample of the study was skewed towards a few African countries. More than half the 100 listed journals named their editors-in-chief as based in

Nigeria. Nigeria also dominated the list of corresponding authors with 51 per cent, followed by South Africa with 17 per cent. Authors based outside Africa accounted for 13 per cent.

Although the study does not say whether plagiarism was higher among Nigeria-based papers or authors than others, earlier papers have identified plagiarism as a problem in Nigeria. In a 2010 survey of 133 Nigerian scientists, nearly 90 per cent believed misconduct, including plagiarism, was common at their institutions, and that it was seldom caught. Many Nigerian scientists admit it is a problem in their country.

STANDARDS NEEDED

It would be wrong to interpret the BMJ Open result as a general indictment of African medical research. The sampling of the journals targets those with relatively small reach, and a lot of African medical research is not published in these journals. It could be that the problem is particular to them.

Kate Snow, contents and communication manager for AJOL, says that while the aggregator “certainly encourages all the journals indexed on our website to have plagiarism checks in place,” it is unable to do much more than encourage.

Snow says that in the last few years AJOL has been assessing its journals according to the Journal Publishing Practices and Standards framework, which helps journals gauge their quality control. “We are hoping that this will encourage our partner journals to improve their journals, informing them of the licences, policies and other publishing practices they should have in place,” she says.

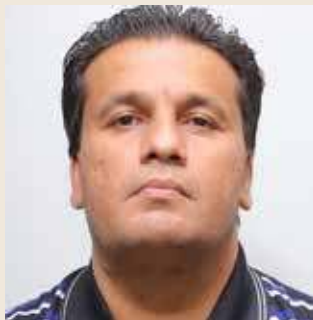
VAR SITY APPO INTS MORE PROFESSORS

Prof Sameer Jaffer Hameer

has been appointed Associate Professor in the Department of Aerospace and Aviation Engineering, School of Mechanical and Process Engineering.

Prof Hameer has been involved in curriculum development for the undergraduate and post graduate programmes. He has also been actively involved in collaborative frameworks with international institutions such as Stellenbosch University and University of Pretoria in South Africa.

He served as an assistant professor in the Bahir Dar Energy Centre, Bahir Dar Institute of Technology, Bahir Dar University, Ethiopia. He has also served as a lecturer in the School of Materials, Energy, Water, Environmental Science and Engineering at the Nelson Mandela African Institute of Science and Technology.



Prof Hameer has over eight years' experience of teaching and researching in renewable energy systems. He has designed and installed an artificial wind generator system for the solar thermal test facility at Stellenbosch University, in addition to having carried out solar water heating tests as per SANS6211-1:2012 standards.

He was part of the Academy of Science of South Africa team that wrote a technical report titled, *The*

State of Energy Research in South Africa published in August 2014. He has also served as a wind engineering consultant Wind and Star Energy in Nevada, USA.

Recently, the professor was the principal investigator in developing and securing a successful Erasmus+ grant with international and local partners on the Development of a Modular Curriculum for the Smart Grid for the Nelson Mandela African Institute of Science and Technology.

The project involved a consortium of partners from Germany, Sweden, South Africa, Italy, and Tanzania. Prof. Hameer holds a PhD in Aerospace Engineering from Georgia Institute of Technology, Atlanta Georgia, a Master of Science in Aerospace Engineering and a Bachelor of Science in Electrical Engineering from the same institution.



Prof. Cleopha Maende

has been appointed Associate Professor and Director, School of Infrastructure Resource Engineering (SIRE), Faculty of Engineering Sciences and Technology (FEST).

Prof. Maende has considerable professional, academic and management experience that will benefit TU-K. He has intensive knowledge in supervision of students, teaching and research in Operations Research; Information Systems, Quantitative Methods and

Quantitative Techniques. He is a member of the Association of Information Systems.

Before joining TU-K, he served as a senior lecturer and director at Mount Kenya University before moving to Kisii University in the same capacity.

He has 13 publications in refereed journals and has successfully supervised over 50 Masters students who have graduated over the last seven years. He is currently supervising eight Masters and three PhD students.

Prof. Maende holds a PhD (Computer Applications) from the University of Newcastle Upon Tyne, UK, Master of Engineering (Industrial Engineering & Management) from the University of Sierra Leone and BSc. (Agricultural Engineering) from the University of Nairobi.

Prof. Cyrus Wekesa Wabuge

has been appointed Associate Professor in the School of Electrical and Electronics Engineering. Prior to his appointment, he was a senior lecturer at the University of Nairobi.

He has successfully supervised 18 Master's students and one PhD student. He has published widely and presented papers at international conferences. He is a member of the Institute of Electrical and Electronic Engineers and the Association for Computing Machinery.

Prof. Wabuge holds a PhD in Electrical and Electronics Engineering from the University of Tokushima, Japan. His PhD thesis was *General Purpose Inverter Control for Solar Photovoltaic Generation System*.

He holds a Master of Science in Electrical and Electronics Engineering and a Bachelor of Science in Engineering Electrical and Electronic Engineering, both from the University of Nairobi.



THE ALUMNI FLYING TU-K FLAG HIGH

The Technical University Alumni Association (TUKAA) prides in its alumni spanning all walks of life. The alumni spread across the globe have risen to become influencers and opinion shapers in their various professions. The association consists of alumni of the institution right from its inception in 1961 that is the Kenya Polytechnic, Kenya Polytechnic University College and currently the Technical University of Kenya (TU-K). Here are some of the alumni who have given words of inspiration and encouragement to the graduates — *Compiled by Larissa Odini.*



CT Akumu Owuor
Class of 1972

Director of TVET Programs and Partnerships, Technical University of Kenya; Former Principal, Mombasa Polytechnic

"This is your time, embrace it! No matter what, you are always learning and growing to have a better tomorrow."



Prof. George Thumbi
Class of 1977

Professor in Civil Engineering Technology

Technical University of Kenya
"Best of luck in all your endeavours."



Hannington Gaya
Class of 1980

Publisher and CEO, Media Seven Group

"Kenya Polytechnic faculty taught me to excel, listen, search and make hard but informed decisions."



Prof. Faustine Alloise Ondore
Class of 1974

Chairman, Aerospace and Aviation Engineering.

"Be good to others, be thoughtful and intentional."



Abdalla Masoud
Class of 1979

Head of Catering, Kenya Airways

"If you have a great idea, reach out to people. No one will advocate for you more than you."



J.J Okoth Obado
Class of 1983

Managing Director, Redhouse Public Relations

"Life is a collection of experiences which sharpen and mould you. Have as many enriching experiences as you can."



Prof Ahmed K. Ferej
Class of 1975

Associate Professor, University of Eldoret

"To succeed in the current competitive labour market, you will need to develop a strong foundation in soft skills (sometimes referred to as employability skills) in addition to your specific technical skills."



Dr Edward Odundo
Class of 1980

Director, School of Pension and Retirement Studies, former RBA CEO

"You can't paint the picture of your life with your hands in your pocket so remember to take risks to grow yourself further. There are ample opportunities out there. Seize them."



Dalmas Owira Ogutu
Class of 1984

Lecturer School of Computing and Information Technology

"Congratulations and all the best."



Dr Sam Ochieng'
Class of 1987

**International Businessman:
Director SACOMA Global UK**

"Fearless pursuit equals limitless opportunities. Hard work, endurance and perseverance truly actually pay."



Prof Eric Ogur
Class of 1996

**Director, Centre for Engineering,
Innovation and Production, Technical
University of Kenya.**

"Never give up on your dreams."



Adam Kasaine
Class of 2003

**Chief Executive Officer at
Letshego Holdings Limited**

"Keep learning as technology is moving really fast. The technology you are applying now may be obsolete in a few years."



Tedd Josiah
Class of 1990

**Music Producer, Technical
Producer and Digital Story Teller.**

"We are all were gifted by God. Discover your gift; you never know where it will take you."



Gerald Wambugu
Class of 2000

**Head, Laundry Services,
Serena Hotels**

"Build a strong network of support that includes family, friends and mentors."



Rita Damary
Class of 2004

**Nakuru Bureau Chief,
The Star Newspaper**

"Don't make excuses, don't blame the past. The rest of your life can be the best of your life."



Milton Otuoma
Class of 1991

**Founder of Bellaton
Consulting Group Ltd**

"Positive experiences should encourage you to do greater things and the negative experiences should be even greater stimulators to want to be more and achieve more."



Conrad Buddo
Class of 2002

**Businessman in the
transport and valuation.**

"Think entrepreneurship with or without a job, that's where financial freedom really is."



Erick Oduor
Class of 2005

**Secretary-General of Kenya Union of
Journalists (KUJ) and sub-editor with
Nation Media Group**

"Be prepared to navigate through the strong currents and grab opportunities available which are very limited and competitive."



Serah Musau
Class of 1995

**People and Administration Lead at
Uungwana Institute**

"Quote by Oprah Winfrey - Create the highest grandest vision possible for your life, because you become what you believe."



Hon Simba Arati
Class of 2003

**Member of Parliament (MP),
Dagoretti North Constituency**

"Think of your degree as a ticket to change the world. Graduation is not the end, it's the beginning."



James Ngugi
Class of 2006

**Business Development Manager,
Oryx Energies Kenya Ltd**

"Success is a journey and a process. Rome was not built in a day, patience is key."



David Macharia
Class of 2009

**Head of Records Management Unit,
National Treasury**

"As much as academic papers are a major milestone in one's career, employers take skills and the willingness to learn very seriously."



Gregory Opiyo
Class of 2012

Technical Services Manager, KICC

"Technology is the backbone of the Government's Big Four agenda."



Wamukoya Were
Class of 2013

**Superintendent Printer, Directorate
of Information and Research,
Parliament of Kenya**

"High standards of moral conduct and etiquette will be required of you to be competitive and enjoy good relations with the labour market stakeholders."



Catherine Maina
Class of 2014

**Engineer - Transmission and IP
Planning at Safaricom PLC**

"The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn," Alvin Toffler.



Elizabeth Ondula
Class of 2014

**PhD student in Computer Science in
USC Viterbi School of Engineering,
USA; Former Research Software
Engineer at IBM Kenya.**

"Sustain the friendships you have made even after your studies. Invest in them, stay close to them and cherish them."



Jared Miganda Njom
Class of 2015

**Head, Projects and Premises,
National Bank of Kenya**

"The zeal and urge to accomplish every task and goal should be a major motivation as you go out into the field."



Dorcas Murai
Class of 2015

**GIS Supervisor, PowerHive East
Africa**

"Female graduates should aim to uplift and encourage each other in various aspects. Family and career is possible."



Karen Kendi Gitonga
Class of 2016

**Raw Materials Lead, Mutsimoto
Motor Company Limited**

"Life can be challenging when changing phases – student to career. Seek mentors and supporters who will encourage you through it."



Maryolive Muigai
Class of 2017

**Music consultant at Pembroke
Preparatory House, Kenton College
and Kenya Conservatoire of Music.**

"Don't let the noise of others opinions drown out your inner voice. Have the courage to follow your heart and intuition."



Winfred Mwaniki
Class of 2017

**Domestic Taxes Department,
Kenya Revenue Authority (KRA)**

"Your career can look much different than you pictured. Be open-minded."

ENG. MWONGERA'S WORDS OF WISDOM

By Larrisa Odini

Eng. Erastus Mwongera is a distinguished engineer who has played a key role in the development of the engineering profession and practice in Kenya as a past chairman of the Engineers' Registration Board.

He is currently a Fellow of the Institute of Engineers of Kenya and Chairman of various organizations and professional bodies such as: Sameer Africa Ltd, Eminent Fellow Engineers Forum and Kenya National Highways Authority (KENHA).

He is also a director of Hillside Green Growers and Exporters Company Ltd and Chairman Linksoft Group Ltd responsible for policy direction and guidance on productivity and profitability.

Eng. Mwongera pursued a diploma in water engineering and graduated in 1974 before he attained a Higher Diploma in Construction Engineering in 1977 from the same institution. He describes education at the Kenya Polytechnic as impactful and well-defined.

"A majority of corporates used to scout for their technical employees from the Kenya Polytechnic as students studying there had both academic and technical training for industrial development, which was a plus," he recalls. After the Kenya Polytechnic, he joined the University of Wales in the United Kingdom where graduated in engineering.

Besides an illustrious career in the public service spanning thirty years, he has been privileged to serve in a number of private institutions in various roles and capacities.

Eng. Mwongera started his career in the water sector as Principal of the Kenya Water Institute and Director of Water Development for a combined period of 12 years. Thereafter, for over 15 years, he served as permanent secretary in the Office of the Vice President and Ministry of Home Affairs. Others were Ministries of Lands and Housing, Roads, Public Works and Housing, Water Resources, Land Reclamation, the Ministry of Regional and Water Development.

In recognition for his distinguished



Eng. Erastus Mwongera in his office.

career in the public sector he was decorated with the highest State honours of Chief of the Burning Spear (CBS) and Elder of the Burning Spear (EBS).

He cites relationship management as one of the most significant skills in career progression. Developing deep, meaningful, credible relationships that survive decades in some cases has been invaluable. "Even if you want to spend

"Corporates used to scout for their technical employees from the Kenya Polytechnic as students studying there had both academic and technical training for industrial development"

your life in the lab and be a pure scientist, you need communication, relationship and negotiation skills," he explains

"Experience is essential to assist you to advance more quickly and discover where your strengths lie. Don't have the fear to start working in smaller organizations as they still offer opportunities to work in different areas

of the business. Ultimately, be flexible, open to opportunity and take your chances," he added.

He commends graduates for persevering in the education journey and urges them to adapt a culture of patience and endurance: "Life is not a competition. An attitude of contentment is critical to accomplishments in life.

"Success and failure is attained depending on one's attitudes and comes naturally from investing in hard work. Find good mentors who possess the specific knowledge or skills that you must master as part of your growth. Don't be intimidated or afraid to reach out to prospective mentors," he noted.

He stresses the need to adopt a work-life balance as one of the keys to a fulfilling life. "Finding the means to balance the demands of our loved ones while staying true to our careers will enable us to not only succeed, but also keep us from experiencing high levels of stress and ultimately burnout. You need therefore to prioritize tasks that are absolutely necessary to your life and career. Also weed out time-wasting activities and invest in family instead," he said.

MR & MISS TU-K 2018 PICKED

Sammy Kisilu Mutungo, a Third Year B. Eng Civil Engineering and Rosemary Muthoni Kiama, a Fourth Year B.Tech design student, they emerged tops after a highly contested pageant.

Others were Akoko Joseph Junior who took 1st runners up position for Mr TU-K and Elly Chege, the 2nd runners up. In Miss TU-K category, Ada Madikizela became the 1st runners up and Vulegani Eulene took the 2nd runners-up position.

The winners who paid a courtesy call on the Vice-Chancellor said they were honoured and felt privileged to have coveted titles. They assured the VC that they will use the titles to portray a positive image of the university and serve the community diligently.

The Vice-Chancellor Prof. Francis Aduol on his part congratulated the winners terming the visit as an important step in the history of the university and urged the winners and participants to engage in community service as part of the University's Corporate Social Responsibility (CSR).

He advised students to think beyond academics and explore their talents.

"An event like this gives students a platform to express themselves. Academics alone will not take you far. Have an extra activity, you never know where life will take you," urged the VC.

He assured them that the management will support activities of the Mr.& Miss TU-K beyond the university.

He commended the good working relationship between SATUK, event organizers and the university.

The beauty queen emerged top in a contest that saw several models take to the catwalk where pomp, colour and pageantry defined the occasion. Music was the heartbeat driving the event. Out of the 19 contestants, seven were male and 12 female.

The judges were looking for creativity, uniqueness, intelligence among other things. Other students won in different categories such as; innovations, leadership, talent and sports.

The event was sponsored by Atari Kreation, Darling and 2Kosorted.



Mr & Miss TU-K, Rosemary Kiama and Sammy Kisilu.



VC Prof. Francis Aduol (Centre) poses for a photo with Mr & Miss TU-K and other runner-ups. (3rd right) is DVC-ARS Prof. Paul Shiundu and Prof. Omondi Oketch (3rd left).

CHINESE INSTITUTE TO LINK WITH TU-K



Chinese delegation from Zhejiang Institute of Mechanical and Electronic Engineering (ZIME) led by the institute's President Prof. Jin Chiang meet TU-K management led by the VC Prof. Francis Aduol.

A China-based mechanical and electronic engineering institute has expressed interest in partnering with TU-K to train students and staff members.

A delegation from Zhejiang Institute of Mechanical and Electronic Engineering (ZIME) led by the institute's President Prof. D. JinChiang disclosed that ZIME was interested in partnering with African institutions offering technical-based training. Prof. JinChiang said ZIME's mission to partner with local institutions was driven by the industrial and infrastructure growth in Africa that calls for technical skill-based workforce.

He noted that Chinese companies working in Kenya had seen the need for more skill-based workforce among locals. He referred to rapidly growing technology in China that calls on learning institutions to keep abreast of technological developments.

He said ZIME's visit aimed at understanding the level of engineering education in Africa and seek ways of partnering with local institutions. The institute's team of five met Vice-Chancellor Prof. Francis Aduol, Deputy Vice-Chancellor, Academics, Research and Students Prof. Paul Shiundu, Faculty of Engineering Sciences and Technology Executive Dean Prof. Alex Muumbo, School of Architecture and Built Environment Director Prof. S Masu, and Economics Lecturer Dr. Ongong'a Achieng.

Discussions explored possibility of establishing a joint staff training and instructor exchange programme that would see the launch of summer vocational camps and short-term skills training. ZIME has advanced training capacity in manufacturing and printing technology.

The leadership from the two institutions exchanged ideas on the historical and institutional developments and how students can be placed on internships in Kenya and China.

Zhejiang Institute has collaborations with several South African universities and has executed ten tutor exchange programmes and four student internship agreements. The beneficiaries spend a two-year training arrangement in South Africa and one year at ZIME.

Prof Aduol hailed the close working relationship with the government of China, noting that TU-K had benefited from a donation of advanced mechanical engineering equipment. He said ZIME had programmes similar to and of the same level with TU-K and would therefore be an excellent partner to collaborate with.

"I like the fact that Zhejiang Institute partnership proposal gives opportunities to both students and staff to also have experience in China through an exchange programme arrangement," Prof. Aduol added.

The VC tasked the Faculty of Engineering Sciences and ZIME counterparts to embark on the preparation of a memorandum of understanding (MoU) to enable the partnership mission come to fruition.

"I therefore request Prof. A Muumbo to coordinate the preparation of a proposed MoU with Zhejiang Institute of Mechanical and Electrical Engineering to take this forward," said Prof. Aduol.



The Chinese delegation inside the Engineering Workshop.

MINISTRY TO SUPPORT SKILLS TRAINING

Education Cabinet Secretary Amb. Dr. Amina Mohamed has asserted the Government's focus on technical-based learning institutions to prepare graduates properly for the industry.

Applauding TU-K's world-class training, the CS said the Government would help in capacity building and seeking out industrial partnerships locally and globally. Speaking after witnessing the manufacturing capacity of TU-K that coincided with the 5th Edition of the Africa Tech Challenge, Amb. Amina said the university's efforts were extremely important at this period in the country's history.

The six-week technology competition hosted at TU-K attracted teams from Gabon, Ivory Coast, Ghana, Zambia and Kenya. The challenge was facilitated by Avic International in conjunction with Kenya's Education ministry to showcase Africa's training in technical skills in engineering and technology.

Participants were given an engineering artefact to manufacture a part for a machine. The best performing team was determined by a team of experts and awarded a contract to manufacture an engineering tool to be exported to China.

"This Africa Tech Challenge brings President Uhuru Kenyatta's vision to the fore. His message during the address at the 2017 Jamhuri Day Celebrations serves as our delivery benchmark for the next five years.

"The creativity I have witnessed during this Tech Challenge is indicative of the potential of our youth, the immense capacity of this institution and the strength of partnerships to harness Kenya's productive capacity," said Amb Mohamed.

The CS challenged technical universities and institutions to take up the challenge required in production capacity in, among others, the four front running sub-sectors - blue economy, agro-processing, leather and textiles.

She affirmed the ministry's openness to facilitating financial assistance and reinforcing partnerships with micro, medium and small enterprises (MSMEs)



Education Cabinet Secretary Amb. Amina Mohamed (middle) tours the Advanced Mechanical Engineering Workshop during the 5th Edition of the Africa Tech Challenge that attracted teams from Gabon, Ivory Coast, Ghana, Zambia and Kenya.

and financing technical training to attract the best minds to fully implement the provisions of the TVET Act, 2013. In line with the manufacturing industry's vision of 'Buy Kenya, Build Kenya', the ministry committed to support the university in attracting collaborations.

Vice-Chancellor Prof. Francis Aduol said the university was ready to support the government's 'Big 4 Agenda' through hands-on training to nurture students with key technical and innovative skills.

He said the university had huge capacity for production that meets international standards, adding that manufacturers in Kenya need not to seek services abroad.

"We were earlier challenged by limited electricity supply to support

full functioning of the workshop, but that has now been solved and we can comfortably handle any kind of work from industry players," said Prof. Aduol.

A member of the University Council, Ms Isabella Ocholla-Wilson, challenged the management to market the university's strengths in technology, especially the housing and manufacturing components.

"You note that this university is different from other higher learning institutions. Therefore, we need to take the lead in driving the country's manufacturing and industrialization agenda," she advised. The Cabinet Secretary was accompanied by Principal Secretaries Alfred Cheruiyot (Post-Training and Skills Development), Dr. Kevit Desai (TVET), Technical and Vocational Education and Training Authority (TVETA), CEO Dr. Kipkirui Langat and the Director, University Education James Muchiri. Cheruiyot praised the university's training and facilities, noting that he was interested in supporting TU-K to achieve its mandate. "I will be glad to receive you in my office to further discuss how we can support the university in the aspect of skills based-training," said the PS.

"The creativity I have witnessed during this Tech Challenge is indicative of the potential of our youth, the immense capacity of this institution and the strength of partnerships to harness Kenya's productive capacity," —Amb Mohamed.

HYPNO LTD KITS TU-K HANDBALL TEAM



TU-K Handball team players pose for a group photo with Hypno Energy Drink staff led by the company's distributing agency in Kenya Managing Director Lawrence Mwai (back-row holding ball), FEST Executive Dean, Prof. Peter Matu (back-row in black suit), Student Support Services Assistant Director Maurice Ochieng', soccer coach Francis Oduor, Sports Assistant Chris Ojwange and hockey coach Simiyu Nyaranga.

Hypno Energy Drink has partnered with TU-K, with the manufacturer donating 25 pieces of playing kits to the university men's handball team.

Hypno's distributing agency in Kenya, Lakcy Enterprises Managing Director Lawrence Mwai said the Turkey-based company was impressed by TU-K's excellent performance in sports, hence the decision to support the handball team. Mr Mwai said the distributor is coming in as the league kicks off and assured the team of support and capacity building through to the final stages of the competition.

Speaking when he handed over the playing gear, Mr Mwai disclosed that the energy distributor was embarking on an elaborate programme to support sporting teams in a partnership that would include industrial placements to continuing students and possibly offer job opportunities to graduates.

TU-K's Faculty of Social Sciences and Technology Executive Dean, Prof. Peter Matu, alongside Student Support Services Assistant Director Maurice Ochieng', and team captain, Walter

Ang'wenyi, received the kit.

"We are starting an exciting partnership as result of TU-K's impressive performance in sports. The league has just started and we need to be on board right away; we will of course discuss with the university management how we can work together in a bigger way," said Mr Mwai.

Hypno is also supporting the Jomo Kenya University of Agriculture and Technology rugby team and the Catholic University of Eastern Africa handball team. In turn, Hypno seeks to market its energy drink through this campaign. The energy drink is produced in Turkey and exported globally.

"Essentially, the rankings heavily favour research-intensive, well-resourced universities. They say nothing about the actual quality of teaching as experienced by students or academics."

"Hypno targets young people. It is important that while we do business, we also support young people's sporting talents through corporate and capacity building," said Mr Mwai.

Mr Ochieng' welcomed Hypno's partnership with TU-K, crediting the sponsorship to the players' and staff members' discipline and hard work, which has in the past yielded corporate partnerships.

"This handball team for instance has in the past failed to travel to Angola and Algeria due to financial constraints despite winning regional competitions. The coming in of corporates like Hypno will help us overcome such challenges," Mr Ochieng' added.

Prof Matu commended Hypno's interest in supporting TU-K students' sporting activities and encouraged the energy drink manufacturer to expand the relationship to academic engagement including scholarships, mentorship, internships and job placements.

He challenged experienced players in their final year at the university to mentor junior players.

HOW TO SET AND MARK VARSITY EXAMS



Lecturers and Technicians in the School of Biological and Life Sciences during a workshop on exam setting held at the University.

Consistency in preparing examinations plays an important role in testing students.

"This is one of the many characteristics of what a 'good exam paper' should have, but how to achieve this poses the biggest challenge for lecturers," said Dr. Eunice Kairu an external examiner when she addressed lecturers and technicians at TU-K's School of Biological and Life Sciences during a workshop.

The one-day symposium was hosted by the School's Director, Prof. Dorcas Yole, with workshop's key discussion being essentials key in setting and marking examinations.

Dr. Kairu who is a lecturer at Kenyatta University's School of Pure and Applied Sciences was the guest speaker during the workshop.

The Executive Dean Faculty of Applied Sciences and Technology, Prof. Francis Gatheri commended Dr. Kairu for leading excellent discussions. Prof. Gatheri advised lecturers to always keep records of their student's results, challenging them to adopt technology and use dedicated software that would help in orderly storage and retrieval of results.

Dr. Kairu, who has taught at university level for over 20 years, challenged the lecturers to prepare examinations ahead of time. "The best time to set exams is while teaching, always consider the time students will take to answer the questions depending on their level. For instance, a student in First Year will take longer to answer a question than a Fourth Year student," she advised.

Dr. Kairu also asked the lecturers to ensure questions they set are consistent with the learning progress and expected outcome. She said course outlines helps in preparing examinations that cover whole coursework. She however cautioned lecturers against setting exam questions first then deciding on

what to teach later, noting that some smart students could pick on the trend along the semester and concentrate on highlighted areas.

"What is termed as a 'good exam paper' should be a paper that it's consistent in a way that if different students were to sit that paper, the outcome would have minimum differences," she said.

"Questions must be valid so as to measure what you intended them to do. The paper should be free of bias, and a lecturer should not use terms or abbreviations only understood by certain students. Also ensure exam questions address the needs of special students in your class. For instance, some might have poor eyesight and may need papers with bigger fonts," she added. Dr. Kairu also tipped the participants on the preparation of a good marking scheme noting that it should be objective and consistent, and which other examiners can use, and should draw certain expectations.

In her conclusion, she asked lecturers to strive in interacting with students and accept comments from them on their thoughts about testing processes.

"What is termed as a 'good exam paper' should be a paper that it's consistent in a way that if different students were to sit that paper, the outcome would have minimum differences." — Dr. Eunice Kairu



THE TECHNICAL UNIVERSITY OF KENYA

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SCHOOL OF ARCHITECTURE AND THE BUILT ENVIRONMENT

COURSE TITLE	REQUIREMENTS	DURATION	COURSE TITLE	REQUIREMENTS	DURATION
Master of Science in Electrical and Electronic Engineering	At least Second Class (Upper Division) honors degree in Electrical Engineering or its equivalent from a recognized university OR Second Class (lower Division) honors degree in the relevant disciplines with a Postgraduate certificate and 1 year of relevant work experience	4 Semesters	Bachelor of Technology (Building Construction)	KCSE mean grade 'C+' (plus) with at least C+ in Mathematics, Physics, any Group III and 2 nd Group II/2 nd Group III, any Group IV/V Diploma in Technology (Building Technology) or Equivalent with at least 2 years relevant work experience Diploma in Building and Architecture KNEC or Equivalent with at least 2 years relevant work experience	8 Semesters plus attachments
Bachelor of Architectural Studies	KCSE mean grade 'C+' (plus) with at least C+ in Mathematics, Physics, any Group III and 2 nd Group II/ 2 nd Group III, any Group IV/V	12 Semesters plus attachments	Diploma in Technology (Building Construction)	KCSE mean grade 'C' (plain) with at least C in Mathematics, Physics/ Physical Science, Group III and 2 nd Group III or Group IV/V or Certificate in Building Construction; OR Certificate Technician Part 1 (having done Physics at KCSE), plus 1 year relevant experience	8 Semesters
Bachelor of Architecture	Bachelor of Architectural studies or Bachelor of Technology (Architecture)	4 Semesters	Bachelor of Real Estate	KCSE mean grade 'C+' (plus) with at least C+ in respective cluster subjects (Mathematics, Physics/Physical Science and English/Geography) Diploma in Technology in Valuation and Property Management from the TU-K or equivalent institution	8 Semesters plus attachments
Diploma in Technology (Architecture)	KCSE mean grade 'C' (plain) with at least C in Mathematics, Physics/Physical Science, Group III and 2 nd Group III or Group IV/V or Certificate in Architectural Draughtsmanship plus 1 year relevant experience	6 Semesters plus attachments	Diploma in Technology (Real Estate)	KCSE mean grade 'C' (plain) with at least C in Mathematics, Physics/ Physical Science and English/ Geography Certificate in Estate Agency and Real Property	8 Semesters plus attachments
B.Tech Architecture	Diploma in Technology (Architecture) or Equivalent with at least 2 years relevant work experience	6 Semesters plus attachments	Bachelor of Built Environment (Urban and Regional Planning)	KCSE mean grade 'C+' (plus) with at least C+ in respective cluster subjects (Mathematics, Physics/Physical Science and English/Geography) Diploma in Technology in Spatial Planning and Design, Architecture, Geospatial Science from the TU-K or equivalent institution	8 Semesters plus attachments
Bachelor of Quantity Surveying	Diploma in Building, Civil, Quantity Surveying and Architecture KNEC or Equivalent with at least 2 years relevant work experience KCSE Mean grade 'C+' (plus) with at least C+ in English/Geography, Maths, Physical Science or Physics, CTI	8 Semesters plus attachments	Bachelor of Built Environment (Urban and Design and Development)	KCSE mean grade 'C+' (plus) with at least C+ in respective cluster subjects (Mathematics, Physics/Physical Science and English/Geography) Diploma in Technology in Spatial Planning and Design, Architecture, Geospatial Science from the TU-K or equivalent institution	8 Semesters plus attachments
Bachelor of Built Environment (Construction Management)	Diploma in Construction Management, Building, Civil, Quantity Surveying and Architecture KNEC or Dip Tech or Equivalent with at least 2 years relevant work experience KCSE Mean grade 'C+' (plus) with at least C+ in English/Geography, Maths, Physical Science or Physics, CTI	8 Semesters plus attachments	Diploma in Technology in Spatial Planning and Design	KCSE mean grade 'C' (plain) with at least C in Mathematics, Physics/ Physical Science and English/ Geography	6 Semesters
Diploma in Technology in Construction Management	KCSE Mean grade 'C' (plain) with at least C in English/Geography, Maths, Physical Science or Physics, CTI	6 Semesters			
Diploma in Technology in Quantity Surveying	KCSE Mean grade 'C' (plain) with at least C in English/Geography, Maths, Physical Science or Physics, CTI	6 Semesters			



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Technical University of Kenya is the leading university in technological training in Kenya. The University was awarded a Charter in 2013, making it a full public university. The University specialises in training at the Postgraduate, Undergraduate and Diploma levels, while at the same time engaging in research. It has a clear upward movement policy, which makes it easy for students to move from one level to the next and recognise prior training by awarding students credit transfers. **Interested individuals are encouraged to apply for the programmes listed below:**



COURSE TITLE	REQUIREMENTS	DURATION
FACULTY OF ENGINEERING SCIENCE AND TECHNOLOGY		
SCHOOL OF ARCHITECTURE AND THE BUILT ENVIRONMENT		
Bachelor of the Built Environment (Construction Management)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A, Physics and Eng./Kis.	11 semesters (integrated programme)
Bachelor of Quantity Surveying	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A, Physics and Eng./Kis.	11 semesters (integrated programme)
Bachelor of Technology (Building Construction)	• KCSE Mean Grade C+ (plus) with C+ (plus) in Maths A and Physics OR • Credit Level Diploma in Technology in Building, Civil, Quantity Surveying or Architecture together with KCSE Mean Grade C- (Minus) or • Credit Level TEP Diploma in Building and Architecture KNEC or Equivalent with at least 2 years relevant work experience together with KCSE Mean Grade C- (Minus)	11 semesters (integrated programme) 6 semesters (part time)
Bachelor of Real Estate	• KCSE Mean Grade C+ together with C+ (plus) in Maths A	11 semesters (integrated programme) 6 semesters
Diploma in Technology (Real Estate)	• KCSE Mean grade 'C' (Plain) together with at least C (plain) in Maths	8 semesters (integrated programmes)
Diploma in Technology (Quantity Surveying)	• KCSE Mean grade 'C' (Plain) together with C (plain) in Maths A, Physics and Eng./Kis.	
Diploma in Technology (Construction Management)		
Diploma in Technology (Building Construction)	• KCSE Mean grade 'C' (Plain) with C (plain) in Maths A and Physics.	
Diploma in Technology Architecture	• KCSE Mean grade 'C' (Plain) together with C (plain) in Maths A, Physics and Eng./Kis	8 semesters (integrated programme)
SCHOOL OF SURVEYING AND GEOSPATIAL SCIENCES		
Bachelor of Engineering (Geospatial Engineering)	• KCSE Mean Grade C+ (plus) with C+ (plus) in Maths A and Physics	13 semesters (integrated programme)

COURSE TITLE	REQUIREMENTS	DURATION
Bachelor of Technology (Surveying Technology)	• KCSE Mean Grade C+ (plus) with C+ (plus) in Maths A and Physics	11 semesters (integrated programme)
Bachelor of Science (Land Administration)	• KCSE Mean Grade C+ (plus) and C+ (plus) in Maths A	13 semesters (integrated programme)
Bachelor of Technology: • Geoinformation Technology • Surveying Technology	• Credit Level Diploma in Technology – Geoinformation Technology • Surveying Technology OR Equivalent together with KCSE Mean Grade C- (Minus)	6 semesters (part time)
Diploma in Technology: • Geoinformation Technology • Surveying Technology	• KCSE Mean grade 'C' (Plain) with C (plain) in Maths A and Physics.	8 semesters (integrated programme)
SCHOOL OF ELECTRICAL AND ELECTRONIC ENGINEERING		
Bachelor of Engineering (Electrical and Electronic Engineering)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A, Physics, Chemistry and Eng./Kis.	13 semesters (integrated programme)
Bachelor of Engineering Technology in Electrical and Electronic Engineering Technology	• Higher Diploma in Technology (Electrical and Electronic Engineering Technology) together with KCSE Mean Grade C- (Minus) • 3-year Credit Level Diploma in Technology (Electrical and Electronic Engineering Technology) together with KCSE Mean Grade C- (Minus) • 3-year Credit Level TEP Diploma In Electrical and Electronic Engineering with 2 yrs working experience together with KCSE Mean Grade C- (Minus)	6 semesters (part time) 7 semesters 7 semesters
Diploma in Technology (Electrical and Electronic Engineering)	• KCSE mean grade of C (plain) with at least C (plain) in Maths, Physics, Chemistry and Eng/ Kis.	9 semesters (integrated programme)
SCHOOL OF INFRASTRUCTURE AND RESOURCE ENGINEERING		
Bachelor of Engineering (Civil Engineering)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A, Physics, Chemistry and Eng./Kis.	13 semesters (integrated programme)

COURSE TITLE	REQUIREMENTS	DURATION
Bachelor of Engineering Technology (Civil Engineering)	<ul style="list-style-type: none"> 3-year Credit Level Ordinary Diploma or Diploma in Civil, Highway, Water Engineering, Building Construction or equivalent together with KCSE Mean Grade C- (Minus) Credit Level Diploma in Technology Civil Engineering or equivalent together with KCSE Mean Grade C- (Minus) 	6 Semesters (part time)
Diploma in Technology (Civil Engineering)	KCSE Mean grade C (Plain) with at least C (plain) in Maths, Physics, Chemistry and English/Kiswahili or Certificate in Civil or Water Engineering	6 Semesters (part time)
SCHOOL OF MECHANICAL AND PROCESS ENGINEERING		
Bachelor of Engineering (Chemical Engineering)	KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A, Physics, Chemistry and Eng./Kis.	13 semesters (integrated programme)
Bachelor of Engineering Technology in Chemical Engineering	3-year Credit Level Diploma in Technology (Chemical Engineering) and KCSE Mean Grade C- (Minus)	6 Semesters (part time)
Bachelor of Engineering (Mechanical Engineering)	KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A, Physics, Chemistry and Eng./Kis.	13 semesters (integrated programme)
Bachelor of Engineering Technology in Mechanical Engineering Technology	3-year Credit Level Diploma in Mechanical Engineering Or Equivalent together with KCSE Mean Grade C- (Minus)	7 Semesters (part time)
Bachelor of Engineering (Aeronautical Engineering)	KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A, Physics, Chemistry and Eng./Kis.	13 semesters (integrated programme)
Diploma in Technology (Chemical Engineering Technology)	KCSE Mean grade C (Plain) with at least C (plain) in Maths, Physics, Chemistry and English/Kiswahili	9 Semesters (Integrated programme)
Diploma in Technology (Mechanical Engineering – Options: <ul style="list-style-type: none"> Manufacturing Engineering Industrial Plant and Energy Engineering Automotive and Autotronic Engineering Structural Fabrication and Metallurgical Engineering Refrigeration and Air Conditioning Engineering Mechatronic Engineering 	KCSE Mean grade C (Plain) with at least C (plain) in Maths, Physics, Chemistry and English/Kiswahili	9 Semesters (Integrated programme)
Diploma in Technology Aeronautical Engineering		
FACULTY OF APPLIED SCIENCES AND TECHNOLOGY		
SCHOOL OF MATHEMATICS AND STATISTICS		
Bachelor of Technology (Applied Statistics)	KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A	10 Semesters (integrated programme)
Bachelor of Science (Mathematics)	KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A	10 Semesters (integrated programme)
Diploma in Technology: (Options) <ul style="list-style-type: none"> Applied Statistics Actuarial Science 	KCSE Mean grade of C- (Minus) with C- (Minus) in Maths A	7 Semesters
SCHOOL OF COMPUTING AND INFORMATION TECHNOLOGY		
Bachelor of Technology (Information Technology)	KCSE Mean Grade C+ (plus) with C (Plain) in Maths A	10 Semesters (integrated programme)
Bachelor of Technology (Computer Technology)	KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A and Physics	10 Semesters (integrated programme)
Bachelor of Technology (Communication and Computer Networks)	KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A and Physics	10 Semesters integrated
Bachelor of Technology In: <ul style="list-style-type: none"> Computer Technology Information Technology Communication and Computer Networks. 	3-year Diploma in Technology or Equivalent together with KCSE Mean Grade C- (Minus)	6 semesters (TU-K) 7 Semester (TEP) (part time)
Diploma in Technology (Information Technology)	KCSE Mean Grade C- (minus) with C- (minus) in Maths A	8 semesters (integrated programme)
Diploma in Technology <ul style="list-style-type: none"> Computer Technology Communication and Computer Networks 	KCSE Mean Grade C- (minus) with C- (minus) in Maths A and Physics	8 semesters (integrated programme)
SCHOOL OF PHYSICAL SCIENCES AND TECHNOLOGY		
Bachelor of Technology (Technical and Applied Physics)	KCSE Mean Grade C+ (plus) with C+ (Plus) in Physics and C (plain) Maths A OR 3 Year Diploma in Technical and Applied Physics together with KCSE Mean Grade C- (minus)	10 Semesters (integrated programme) 6 semesters
Bachelor of Technology (Industrial and Applied Chemistry)	KCSE Mean Grade C+ (plus) with C+ (Plus) in Chemistry, C (Plain) in Maths A and Physics. OR 3-year Dip. Tech in Analytical/Industrial Chemistry or equivalent qualification together with KCSE Mean Grade C- (Minus)	10 semesters (integrated programme) 6 semesters
Diploma in Technology in Analytical Chemistry	KCSE Mean Grade C- (minus) with C- (minus) in Chemistry, D+ (Pus) in Maths A and Physics.	7 semesters
Diploma in Technology in Industrial Chemistry		
Bachelor of Technology in Environmental Science	KCSE mean grade C+ (plus) with C+ (plus) in Biology and Chemistry OR 3-year Diploma in Technology in Environmental and Resource Management together with KCSE Mean Grade C- (Minus)	10 semesters (integrated programme) 6 semesters
Diploma in Environmental Resource Management	KCSE mean grade C- (minus) with C- (minus) in Biology and Chemistry Or a 1-year Certificate with KCSE D+ in relevant areas from a recognized institution	7 semesters

COURSE TITLE	REQUIREMENTS	DURATION
Diploma in Technology: Technical and Applied Physics	KCSE Mean Grade C- (minus) with C- (minus) in Physics and D+ (plus) in Maths A	8 semesters
SCHOOL OF BIOLOGICAL AND LIFE SCIENCES		
Bachelor of Technology (Applied Biology)	KCSE Mean Grade C+ (plus) with C+ (Plus) in Biology, C (Plain) in Maths A and Chemistry. OR 3-year Diploma in Technology in Applied Biology or equivalent together with KCSE mean grade C- (minus)	10 semesters (integrated programme) 6 semesters.
Bachelor of Technology (Biotechnology)	KCSE Mean Grade C+ (plus) with C+ (Plus) in Biology, C (Plain) in Maths A and Chemistry. OR 3-year Diploma in Technology in Biotechnology or equivalent together with KCSE mean grade C- (minus)	10 semesters (integrated programme) 6 semesters (part time)
Bachelor of Technology (Food Science and Technology)	KCSE Mean Grade C+ (plus) with C+ (Plus) in Biology, Chemistry and Physics/ Maths A OR 3-year Diploma in Technology in Food Science Together with KCSE Mean Grade C- (Minus)	11 semesters (integrated programme) 6 semesters (part time)
Bachelor of Technology (Biochemistry)	KCSE Mean Grade C+ (plus) with C+ (Plus) in Biology, C (Plain) in Maths A and Chemistry.	10 semesters (integrated programme)
Diploma in Technology In Industrial and Applied Biology	KCSE Mean Grade C- (minus) with C- (minus) in Biology, D+ (plus) in Maths A and Chemistry.	7 semesters.
Diploma in Technology in Biotechnology	KCSE Mean Grade C- (minus) with C- (minus) in Biology, D+ (plus) in Maths A and Chemistry.	7 semesters
Diploma in Technology in Biochemistry	KCSE Mean Grade C- (minus) with C- (minus) in Biology, D+ (plus) in Maths A and Chemistry.	7 semesters.
Diploma in Technology In Ecology and Conservation Biology	KCSE Mean Grade C- (minus) with C- (minus) in Biology, D+ (plus) in Maths A and Chemistry.	7 semesters.
Diploma in Technology (Food Science and Technology)	KCSE Mean Grade C- (minus) with C- (minus) in Biology, Chemistry and Physics/ Maths A	7 semesters
SCHOOL OF HEALTH SCIENCES AND TECHNOLOGY		
Bachelor of Technology in Community Health and Wellness	KCSE Mean Grade C+ (plus) with C+ (Plus) in Biology, Chemistry, Maths A/Physics and Eng./Kis. OR 3-year Diploma of Technology in Community and Public Health together with KCSE Mean Grade C- (Minus)	11 Semesters (integrated programme) 6 semesters (part time)
Diploma in Community and Public Health	KCSE Mean Grade C- (minus) with C- (minus) in Biology, Chemistry, Maths A/Physics and Eng./Kis.	8 semesters
Diploma in Technology in Health Records and Information Technology	KCSE Mean Grade C- (minus) with D+ (plus) in Maths A/B.	
Bachelor of Science (Medical Laboratory Science)	KCSE Mean Grade C+ (plus) with C+ (Plus) in Biology, Chemistry, Maths A/Physics and Eng./Kis.	11 Semesters (integrated programme)
Bachelor of Technology in Medical Laboratory Technology	3-year Diploma in Medical Laboratory Technology together with KCSE Mean Grade C (Plain)	6 semesters (part time)
Bachelor of Science (Nutrition and Dietetics)	KCSE Mean Grade C+ (plus) with C+ (Plus) in Biology, Chemistry, Maths A/Physics and Eng./Kis.	11 Semesters integrated
Bachelor of Technology in Nutrition and Dietetics	3-year Diploma in Technology in Nutrition and Dietetics together with KCSE Mean Grade C- (minus)	6 semesters
Diploma in Technology Nutrition and Dietetics	KCSE Mean Grade C- (minus) with D+ (plus) in Biology, Chemistry, Maths A/Physics and Eng./Kis. OR Certificate with KCSE D+ in a related course	8 semesters (integrated programme)
Diploma in Medical Laboratory Technology	KCSE mean grade C (plain) With C (Plain) in Biology, Chemistry, Maths/Physics, Eng/Kis	9 Terms (Integrated full time)
Diploma in Pharmaceutical Technology	KCSE Mean grade C (plain) with C (Plain) in Biology, Chemistry, Maths/Physics, Eng/Kis	9 Terms (Integrated full time)
FACULTY OF SOCIAL SCIENCES AND TECHNOLOGY		
SCHOOL OF BUSINESS AND MANAGEMENT STUDIES		
Bachelor of Science in Accountancy	KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A and Eng./Kis.	10 semesters (integrated programme)
BACHELOR OF COMMERCE	KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B.	10 semesters (integrated programme)
Bachelor of Business Studies	3-Year Diploma together with KCSE C- (minus) or Certificate together with KCSE D+ (plus) followed by 3 year Diploma in: <ul style="list-style-type: none"> Business Administration Human Resource Management Sales and Marketing Management Procurement and Supply Chain Management 	6 semesters
Bachelor of Technology (Business Information Technology)	KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B. OR Higher/Advanced Diploma in Information Technology or Computer Science OR 3-year Dip. Tech. Business Information Technology (BIT), Diploma in Information Technology, Computer Science or Equivalent together with KCSE Mean Grade C- (Minus)	10 semesters (integrated programme) 6 semesters (part time)
Bachelor of Technology in Office Administration and Technology	KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B. OR Higher Diploma (HDip.) in Secretarial Studies or 3-year Diploma in Secretarial Studies or Equivalent together with KCSE Mean Grade C- (Minus)	10 semesters (integrated programme) 6 semesters (part time)

COURSE TITLE	REQUIREMENTS	DURATION
Diploma in Business Information Technology	• KCSE Mean Grade C- (Minus) with D+ (plus) in Maths A/B OR Certificate in Information Technology together with KCSE D+ (Plus).	8 semesters
Diploma in Entrepreneurship		
Diploma in Business Studies Options: • Business Administration • Human Resource Management • Sales and Marketing Management • Procurement and Supply Chain Management	• KCSE Mean Grade C- (Minus) with D+ (plus) in Maths A/B OR: • 1-year Certificate together with KCSE D+ (Plus) in a relevant area.	8 semesters (integrated programme)
Diploma in Accountancy	• KCSE Mean Grade C+ (plus) with C+ (plus) in Maths A and Eng./Kis.	8 semesters (integrated programme)
Diploma in Office Administration: • Legal Secretarial • Medical Secretarial • Business Secretarial • Foreign Language Secretarial	KCSE Mean Grade C- (Minus) with D+ (plus) in Maths A/B OR: • 1-year Certificate together with KCSE D+ (Plus) in a relevant area.	8 semesters (part time)
SCHOOL OF INFORMATION AND COMMUNICATION STUDIES		
Bachelor of Science (Information Science)	• KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B.	8 semesters (integrated programme)
Bachelor of Technology (Information Studies)	• 3-year Diploma in Technology (Library & Information Technology) or Diploma in Technology (Archive and Records Managements) or Diploma in Information Science together with KCSE Mean Grade C- (Minus)	6 semesters (part time)
Bachelor of Technology in Journalism and Mass Communication	• KCSE Mean Grade C+ (plus) with C+ (plus) in Eng./Kis. OR • 3-year Diploma in Journalism and Mass Communication from TUK or Equivalent together with KCSE Mean Grade C- (Minus)	10 semesters (integrated programme) 6 semesters (part time)
Diploma of Technology in Journalism and Mass Communication	• KCSE Mean Grade C- (Minus) and at least C- (minus) in English/Kiswahili	8 semesters (part time)
Diploma in Technology in: • Archives and Records Management • Library and Information Technology	• KCSE Mean Grade C- (Minus) and D+ (plus) in Maths A/B or relevant certificate together with KCSE D+ (Plus).	8 semesters (part time)
SCHOOL OF SOCIAL AND DEVELOPMENT STUDIES		
Bachelor of Economics	• KCSE Mean Grade C+ (plus) and C+(plus) in Maths A	10 semesters (integrated programme)
Bachelor of Science Counseling Psychology	• KCSE Mean Grade C+ (plus) OR • 3-year Diploma In Counseling Psychology or related discipline together with KCSE Mean Grade C- (Minus)	10 semesters (integrated programme) 6 Semesters (part time)
Diploma in Social Work and Community Development	• KCSE Mean Grade C- (Minus)	7 Semesters (part time)
Diploma in Counseling Psychology		
Bachelor in International Relations and Diplomacy	• KCSE Mean Grade C+ (plus) with C+ (plus) in Eng./Kis OR • 3-year Diploma in International Relations together with KCSE Mean Grade C- (Minus) . Knowledge of French is recommended.	10 semesters (integrated programme) 6 semesters (part time)
Diploma in International Relations and Diplomacy	• KCSE Mean Grade C- (Minus) with C- (Minus) in English/Kiswahili	8 semesters (part time)
Diploma in Disaster Management		
Diploma in Criminology and Security Studies	• KCSE Mean Grade C- (minus)	7 semesters (part time)
Diploma in Legal Studies	• KCSE Mean Grade C (plain) with C+(plus) in English/Kiswahili OR, • KCSE Mean grade C- (minus) and C (plain) in English/Kiswahili together with Certificate in Criminology. Criminal Investigations, Disaster Management, Criminal Justice or Crime Prevention or its equivalent	7 semesters (part time)
SCHOOL OF CREATIVE ARTS AND TECHNOLOGIES		
Bachelor of Technology in Design	• KCSE Mean Grade C+ (plus) with C (plain) in Maths A OR • 3-year Diploma in Design from TUK or Equivalent together with KCSE Mean Grade C- (Minus)	10 semesters (integrated programme) 6 semesters (part time)
Diploma in Technology in Design	• KCSE mean grade C- (Minus) and D+(plus) in Maths A. Applicants are advised to provide portfolios for verification by the University.	8 semesters (part time)
Bachelor of Music	• KCSE Mean Grade C+ (plus) with C+ (plus) in Music. OR • 3-year Diploma in Music from TU-K Or ABRSM/LCM/ UNISA/LRSM/Trinity College or equivalent together with KCSE Mean Grade C- (Minus)	11 semesters (integrated programme) 6 semesters (integrated programme)
Diploma in Music	• KCSE C- (minus) with C-(Minus) in Music. OR Grade 5 theory and/or practical of ABRSM, LCM or equivalent body together with KCSE D+ (Plus). Involvement in Music Festivals, Church Music/Gospel Music performance will be an added advantage.	8 semesters (integrated programme)
Bachelor of Philosophy in Technology (Printing)	• Higher Diploma in Printing Technology together with KCSE Mean Grade C- (Minus) or equivalent	5 semesters (part time)
Diploma in Technology in Printing	• K.C.S.E Mean Grade C- with C- (Minus) in English/Kiswahili or Certificate in Machine Printing, Print Finishing, Print Origination together with KCSE D+	8 Semesters (integrated programme)

COURSE TITLE	REQUIREMENTS	DURATION
Diploma in Technology (Fashion Design)	• KCSE Mean grade C- (minus) with D+ (plus) in Chemistry or a one year relevant certificate with KCSE D+ (Plus)	8 semesters (integrated programme)
SCHOOL OF HOSPITALITY AND TOURISM STUDIES		
Bachelor of Science (Tourism and Travel Management)	• KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B	11 Semesters (integrated programme)
Bachelor of Technology (Tourism and Travel Management)	• 3-year Diploma in Tourism and Travel or Equivalent PLUS A mandatory 2 years relevant industry experience together with KCSE Mean Grade C- (Minus)	6 Semesters (part time)
Bachelor of Science (Hospitality Management)	• KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B	11 Semesters (integrated programme)
Bachelor of Technology in Hotel and Restaurant Management	• 3-year Diploma in Technology (Dip-Tech) in Hotel and Restaurant Management from TUK, or equivalent qualification together with KCSE Mean Grade C- (Minus)	6 semesters (part time)
Bachelor of Technology in Institutional Catering and Accommodation Management	• KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B OR • 3-year Diploma of Technology in Institutional Catering and Accommodation Management/ Diploma in Housekeeping and Office Management from TU-K/KPUC or equivalent together with KCSE Mean Grade C- (Minus)	11 semesters (integrated programme) 6 semesters (part time)
Bachelor of Science (Event and Convention Management)	• KCSE Mean Grade C+(plus)	10 semesters (integrated programme)
Diploma of Technology in Tourism and Travel Management	• KCSE C- (minus) Mean grade and D+ (plus) in Maths A/Maths B or relevant certificate together with KCSE D+ (plus).	8 Semesters (part time)
Diploma In Technology in Event and Convention Management	• KCSE C- (minus) Mean grade or relevant certificate together with KCSE D+ (plus).	8 Semesters (part time)
Diploma in Technology in Hotel and Restaurant Management	• KCSE C- (minus) Mean grade and D+ (plus) in Maths A/Maths B or relevant certificate together with KCSE D+ (plus).	8 Semesters (part time)
Diploma in Technology (Dip-Tech) in Institutional Catering and Accommodation Management	• KCSE C- (minus) Mean grade and D+ (plus) in Maths A/Maths B or relevant certificate together with KCSE D+ (plus).	8 Semesters (part time)

ONLINE APPLICATION PROCEDURE

Please read the following application guidelines carefully before you apply:

- Visit the University website www.tukenya.ac.ke and locate the menu "Intake September 2018";
- Sign Up and create an account;
- Enter your personal details to obtain a **REFERENCE NUMBER**;
- Copy the **REFERENCE NUMBER** and quote it as you pay a non-refundable application fees of **KES 2000** at any branch of Kenya Commercial Bank. Use the **REFERENCE NUMBER AS ONE OF YOUR NAMES**. Your payment will be confirmed automatically after 24 hours;
- After 24 hours elapse, return to the University website, log in and proceed to enter your academic qualifications
- Upload a scanned copy of the corresponding certificate/result slip against each qualification;
- Choose your preferred programme of study; then
- SUBMIT** the application and wait for the selection process to be completed. You can always login and check for your application status using your account details.

NOTE:

- Bank Account Details: Kenya Commercial Bank (KCB); Account Number: 1101632445
- Your payment will FAIL if you pay before obtaining a **REFERENCE NUMBER**
- You can apply for another course if you pay for it using the same **REFERENCE NUMBER**.

The successful applicants will be expected to pay the **FULL TUITION FEES FOR THE SEMESTER**. For Details of Fees, please check on the website within the admission menu.

The applications should be completed and submitted **NOT LATER THAN 30th April, 2018**.



THE TECHNICAL UNIVERSITY OF KENYA

SCHOOL OF GRADUATE AND ADVANCED STUDIES

POSTGRADUATE DEGREE PROGRAMMES STARTING SEPTEMBER 2018

THE Technical University of Kenya (TU-K) is one of the special public universities in Kenya providing technical education and training. At the same time, it engages in research and innovation that is focused on application of technological knowledge and skills in the solution of societal problems. The University invites applications from suitable and qualified persons to enrol for the following postgraduate programmes:

PROGRAMME	ELIGIBILITY	DURATION
SCHOOL OF MATHEMATICS AND ACTUARIAL SCIENCE		
Master of Science in Applied Statistics	<ul style="list-style-type: none"> a) At least a Second Class (Upper division) Honours degree from a recognized university OR b) Second Class (Lower Division) Honours degree from a recognized university and at least two years working experience. The candidate must also have taken at least 12 units in Mathematics in their last two years of undergraduate studies. And have a minimum average of 58% in the Mathematics area of specialisation, namely Pure or Applied at undergraduate level 	5 semesters
Master of Science in Applied Statistics	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 2 years of relevant work experience 	4 semesters
Master of Science in Mathematical Statistics	<ul style="list-style-type: none"> a) At least a Second Class (Upper Division) Honours degree from a recognized university OR b) Second Class (Lower division) Honours degree from a recognized university and at least two years working experience. The candidate must also have taken at least 12 units in Mathematics in their last two years of undergraduate studies. And have a minimum average of 58% in the Mathematics area of specialisation, namely Pure or Applied at undergraduate level. 	5 semesters
Master of Science in Mathematical Statistics	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 2 years of relevant work experience 	4 semesters
Master of Science in Mathematics (Pure or Applied Mathematics)	<ul style="list-style-type: none"> a) At least a Second Class (Upper division) Honours degree from a recognized university OR b) Second Class (Lower Division) Honours degree from recognized university and at least two years working experience. The candidate must also have taken at least 12 units in Mathematics in their last two years of undergraduate studies. And have a minimum average of 58% in the Mathematics area of specialisation, namely Pure or Applied at undergraduate level. 	5 semesters
SCHOOL OF BIOLOGICAL AND LIFE SCIENCES		
Master of Technology in Applied Parasitology	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 1 year of relevant work experience 	5 semesters
Master of Science in Forensic Biochemistry	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 1 year of relevant work experience. 	5 semesters
Master of Philosophy in Applied Parasitology	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 1 year of relevant work experience 	5 semesters
Master of Science in Applied Parasitology	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 1 year of relevant work experience 	5 semesters
SCHOOL OF HEALTH SCIENCES AND TECHNOLOGY		
Master of Science in Community Nutrition	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 2 years of relevant work experience 	4 semesters
Master of Science in Medical Laboratory Sciences	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 2 years of relevant work experience 	4 semesters
Master of Technology in Applied Entomology	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 2 years of relevant work experience 	4 semesters
Master of Public Health	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 2 years of relevant work experience 	4 semesters
SCHOOL OF PHYSICAL SCIENCES AND TECHNOLOGY		
Master of Technology in Environmental Resource Management	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 1 year of relevant work experience 	4 semesters

PROGRAMME	ELIGIBILITY	DURATION
SCHOOL OF MECHANICAL AND PROCESS ENGINEERING		
Master of Technology (Mechanical Engineering)	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 1 year of relevant work experience in the following areas: <ul style="list-style-type: none"> i. Bachelor of Technology in Mechanical Engineering Technology ii. Bachelor of Philosophy in Mechanical Engineering Technology iii. BSc/B.Eng in Mechanical Engineering or its equivalent 	5 semesters
SCHOOL OF ELECTRICAL AND ELECTRONIC ENGINEERING		
Doctor of Philosophy in Electrical and Electronic Engineering	<ul style="list-style-type: none"> A holder of a Master's degree of TU-K in the relevant field, or A holder of a relevant Master's degree from another institution recognized by Senate 	3 Years
Master of Science in Electrical and Electronic Engineering	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 2 years of relevant work experience 	4 semesters
Master of Science (Electrical Engineering)	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 1 year of relevant work experience in BSc/B.Eng in Electrical Engineering or its equivalent 	
SCHOOL OF BUSINESS AND MANAGEMENT STUDIES		
Master of Arts in Entrepreneurship	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 1 year of relevant work experience 	4 semesters
Master of Business Administration		
SCHOOL OF INFORMATION AND COMMUNICATION STUDIES		
Master of Applied Linguistics	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 1 year of relevant work experience 	4 semesters
Master of Science in Information and Knowledge Management	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 1 year of relevant work experience 	4 semesters
SCHOOL OF SOCIAL AND DEVELOPMENT STUDIES		
Master of Science in International Relations	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 1 year of relevant work experience. 	4 semesters
SCHOOL OF CREATIVE ARTS AND TECHNOLOGIES		
Master of Music in Music Education or African Music Studies	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 1 year of relevant work experience. 	4 semesters
Master of Musical Arts in Composition or Performance		4 semesters
Postgraduate Certificate in Research Methods	<ul style="list-style-type: none"> At least a Second Class (Upper division) Honours degree from a recognized university OR Second Class (Lower Division) Honours degree in the relevant disciplines with a Postgraduate certificate and 2 years of relevant work experience 	1 semesters

Applications for the Programmes above should be made by completing the online application form available on the Technical University of Kenya application portal: intake.tukenya.ac.ke.

The application form should be accompanied by copies of ACADEMIC CERTIFICATES, ID CARD and a bank deposit slip of a NON-REFUNDABLE APPLICATION FEES of Ksh 2,000/= paid against the application form REFERENCE NUMBER.

Bank Account Details

NOTE:

- Bank Account Details: Kenya Commercial Bank (KCB); Account Number: 1101632445
- Your payment will FAIL if you pay before obtaining a REFERENCE NUMBER
- You can apply for another Programme if you pay for it using the same REFERENCE NUMBER.

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The applications should be completed and submitted **NOT LATER THAN 30th April, 2018**.

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THE TECHNICAL UNIVERSITY OF KENYA
Education and Training for the Real World

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