



Covid-19 products receive KEBS nod

- Virtual orientation held
- New varsity council appointed
- Dons land government jobs
- Staff make exciting innovations
- TU-K ranked 7th in Kenya
- Staff win research grants



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We have done well amid Covid-19 threat

The year 2020 has been both unique and interesting in different ways. Since the outbreak of the novel coronavirus in March, each one of us has adopted a new normal to curb the spread of the virus. Despite this, university has done exceedingly well to ensure smooth operation of business while protecting all its staff and students from the Covid-19 virus.

Some of the milestones attained include the successful admission of First Year students. I am glad to say that they have been fully inducted following a successful week-long virtual orientation. I am sure the new students are now ready to commence their studies come January 2021.

The university has also set in place an online-based learning schedule that will see students undertake their coursework virtually, while allowing face-to-face interactions during practical sessions in laboratories, studios and workshops.

We must realise that in every problem lies an opportunity. In the midst of Covid-19, our staff have come up with innovative interventions to address the challenges posed by the virus. Amongst them are top quality hand sanitizers and washing detergents, already approved by the Kenya Bureau of Standards paving way for mass production and commercialisation.

To help reduce cross-contamination risk hence minimize the spread of the virus, our Department of Computational Science and Engineering has developed computer-based algorithms that can easily monitor interactions of newly-diagnosed Covid-19 patients and automatically raise alerts without manual follow-ups. In addition to the above, the university has also developed a non-contact temperature measuring system that is more affordable than the commercially available ones.

As a learning institution, our priority to contribute towards the advancement of society through research and innovation remains unbowed. In this regard, I am happy to note that a team of researchers from the School of Information and Social Studies, won a Sh9.4 million grant from Facebook to study cyber-bullying among undergraduate students in Kenyan universities. The findings of this study will be instrumental in developing a policy framework to mitigate cyber-bullying and make Facebook safe.

Researchers from the Department of Computational Science and Engineering also received grant to map and model the magnitude and distribution of different types of cancers in time and space as well as trace the possible intervening environmental factors over the same space.

These rewarding efforts not only show our dedication to offer quality education to our students but also positively influence our society. The year 2020 may have been filled with uncertainty, but for TU-K, the future looks bright. I urge all members of staff and students to usher in the new year with renewed sense of hope and strive to excel in our individual spaces.

Merry Christmas and do enjoy your read!



Prof. Francis W.O. Aduol

University Council appointed

The Technical University of Kenya (TU-K) has a new Council. This follows the gazette notice dated 4th November this year. The Council is headed by Dr. Halima Saado who serves as the Chairperson. Other members are; FA. Alexander Mwanthi,

Mr. Benard Malenya, Dr. Angelina Awino Kinya and Mr. David Kibet Koech. Mr. James Kiburi will be representing the Principal Secretary, Ministry of Education (MoE) while Ms. Isabella Kogei represents the Cabinet Secretary (CS), National Treasury.

COUNCIL MEMBERS



*Dr. Halima Saado Abdillahi
Chairperson*



*Prof. Francis W.O. Aduol
Vice-Chancellor and Secretary
to the Council*



*Mr. James Kiburi
(Representing the Principal Secretary,
State Department for University Education
and Research, Ministry of Education)*



*Ms. Isabella Kogei (Representing
the Cabinet Secretary for National
Treasury and Planning)*



FA. Alexander Mwanthi



Mr. Bernard Malenya



Hon. David Kibet Koech



Dr. Angelina Awino Kinya

The VC welcomes First Year students

The Vice-Chancellor, Prof. Francis Aduol's address on the 18th December 2020 to First Year students marked the climax of the week-long virtual orientation streamed live on the University's YouTube and Facebook channels. This year's orientation was done virtually due to Covid-19 restrictions.

The VC took the students through the structure of the university, stating that the university focuses a lot on practical training to impart the best knowledge that models its students into well educated and informed professionals to influence the society in a positive way.

He further stated that the University is currently the largest engineering institution in the East African region and urged the students to give their studies the seriousness it deserves.

"The most exciting experience for a student is that of being in a university and in this institution, make the best use of the opportunity," he said.

He explained that in the medieval period, universities empowered students in the liberal arts. They provided seven subjects grouped into two parts. The first part known as the Trivium offered three subjects namely, Grammar, Logic and Rhetoric. He said, "Grammar helped students build a good command of language, Logic nurtured students to be reasonable and work in a sequential manner, building critical thinkers and philosophers while Rhetoric modelled public orators."

The second part, Quadrivium, consisted of, arithmetic, geometry, music and astronomy. Arithmetic increases mathematical literacy in students, geometry helped them appreciate shapes and structures, music helped students appreciate culture in music, drawing, drama and theatre and lastly, astronomy allowed students to appreciate heavenly bodies and the environment we live in.

"The Technical University of Kenya is conceptualised as a combination of three types of universities, a classical university, a technological university and a polytechnic and each one of these are represented in elements of what and how we will teach you," said the Vice Chancellor.

As a classical university, the objective is to make sure students leave as



VC Prof. Francis Aduol speaking to first years during the virtual orientation at the university.

educated persons; as a technological university the institution focuses on academic training in the technical disciplines at the philosophical level with elements of practical training while as a polytechnic, students can still undertake diploma programmes.

He emphasized on practical training as a means of ensuring students firmly fit in the real world and produce practical results. It is for this reason that students must undertake industrial attachment for three months for every program that lasts for at least a year. Those pursuing Diplomas will be on attachment for a minimum of six months. A three-month period will be carried out on campus for internal industry-based learning while one term of three months will be in industry. For those pursuing degrees,

this will vary from two to three terms of three months each. Students who would not have accomplished the practical industrial training are usually not eligible for graduation.

In addition, the VC said that lectures were compulsory and students must attend at least seventy-five per cent of the lectures to take examinations.

Due to the pandemic, the VC confirmed that a lot of the lectures would be held online but where this would not be feasible, a few would be allowed to attend the lectures in-person. However, practical sessions and examinations will be held physically.

He asserted that all examinations were compulsory and students would undertake continuous assessment tests which will contribute to the final mark of the term and final academic year examinations. Students who fail will be forced to repeat and those who fail after repeating will be discontinued.

The VC encouraged the students to pay their school fees in good time urging those facing financial difficulties to apply for loans from the Higher Education Loans Board (HELB). Students who would wish to transfer from one faculty to another will be allowed to do so when they report in January and will be adequately assisted throughout the process.

"The Technical University of Kenya is conceptualised as a combination of three types of universities, a classical university, a technological university and a polytechnic and each one of these are represented in elements of what and how we will teach you," said the Vice Chancellor.

Prof Shiundu tips Freshers

The Deputy Vice-Chancellor, Academic and Students Affairs, Prof Paul Shiundu addressed First Year students on the first day of the University's virtual orientation. In his address, the DVC explained that his office had the primary responsibility and latitude of ensuring that daily student interactions in campus are peaceful and productive, as well as ensuring that learning is harmonized and beneficial to the students.

He congratulated the freshmen and freshwomen for not only passing their examinations but also gaining admission to the university. He further urged the students not to take their admission for granted urging them to put their best foot forward to attain the highest academic standards to reap the expected benefits.

"With the admission comes serious responsibilities and challenges that you must be consciously aware of. We must position TU-K as a distinctive player in the provision of quality technological education and training towards the advancement of society through research and innovation in Kenya and regionally," he said. He further encouraged the students to be good ambassadors of the university by mentoring others and sharing their views and experiences in the university.

In their journey for academic excellence, he urged the students to observe good time management. "University is the first real experience of freedom. Freedom of movement, intellect, expression amongst others, but with each of them comes responsibility. I urge you to exercise this freedom responsibly," he remarked. He advised the first years to work out a daily schedule so as to be at the right place at the right time for the right activity and this will see them excel in their student life.

He reminded them that at the university, their obligation was principally academic; they are expected to study and pass their examinations thus requiring them to accord their academic work the seriousness it deserves. Those who do not pass can only proceed to the next year upon passing their supplementary examinations. But if one fails a certain number of course units, the university would have no choice but to discontinue



Prof. Paul Shiundu, DVC - Academic and Students Affairs

the student. As such, as they celebrate their admission, they should put a lot of effort to avoid discontinuation.

"Each programme within TU-K has its corresponding regulations that govern its operations or implementation. It's therefore incumbent upon yourself to be familiar with these regulations," he said.

He added that attending lectures was inevitable, noting that students were required to attend a basic minimum of seventy-five per cent of the lectures to qualify to sit for the end of semester examinations. He encouraged those enrolled for certificate and diploma programmes to take advantage of opportunities for further growth to attain the highest level of education. He mentioned that the university recognizes prior learning as the design of the curriculum gives provision for students with Diploma in Technology to join Bachelor of Technology in the third year.

On student discipline, the DVC had the following to say: "All students shall

University is the first real experience of freedom, freedom of movement, intellect, expression amongst others but each of them comes consequence. So I urge you to exercise this freedom responsibly.

"Attending lectures is inevitable, students are required to attend a basic minimum of seventy-five per cent of the lectures to qualify to sit for the end of semester examinations" — Prof. Paul Shiundu

be expected to conduct themselves in accordance with the highest standards of integrity, personal discipline and morality, respect and adhere to the administrative and academic procedure and structures established for the university," he said.

He added that the students are expected to respect the rights and privileges of the members of university community and general public and act with humility and dignity in all their dealings while refraining from activities that may bring disrepute to the University.

"To mitigate conflict, the University allows for dialogue through the Student Union officials and class representatives. Any grievances should be addressed through them. The Academic Team Leaders handle all academic concerns, and if they are unable to assist, the matter will follow a chain of escalation for resolution from the Director of School to The Executive Dean, The DVC (Academic and Students Affairs) and further to the Vice-Chancellor, The Council and Ministry in that order. All these initiatives are geared towards seeing each student reach their highest potential and lead a meaningful life to become fair minded, ethical, informed and intellectually sound citizen of the global community," said Prof. Shiundu.

He concluded his address by wishing the students all the best in their new academic journey to achieve all their goals and aspirations at the university and in life while making TU-K an institution of choice for prospective students.

University students will get a Sh44,000 loan to buy laptops under a project proposed by the Higher Education Loans Board, the Star has established.

On Thursday, HELB Chief Executive Officer Charles Ringera, who introduced the idea, told the Star that the board is awaiting Treasury to approve the economic stimulus package to begin the process of providing the loans.

For a start, the project is for half of those joining university as first years – at least 61,000. The laptop project is estimated to cost about Sh2.5 billion.

While making the proposal to Parliament in November, Ringera said those to benefit will be the most-needy from the 'freshers pool.'

Postgraduate and diploma students will not be eligible. Since the onset of Covid-19, a number of universities have adopted online learning.

Many students, however, cannot afford computers and some depend on gadgets such as mobile phones to attend the online sessions. Using a phone is limiting. Ringera said not only will the provision of laptops aid in online learning, but it will also help students to work online and get an income.

Stephen Kiama, the University of Nairobi vice-chancellor, praised the project as timely.

Varsity students to receive Sh44,000 loan to buy laptops

He said the devices will enable institutions to offer more online courses.

"This will greatly reduce operating expenses and will be more flexible for students who might not be able to physically attend class sessions," Kiama told the Star on the phone.

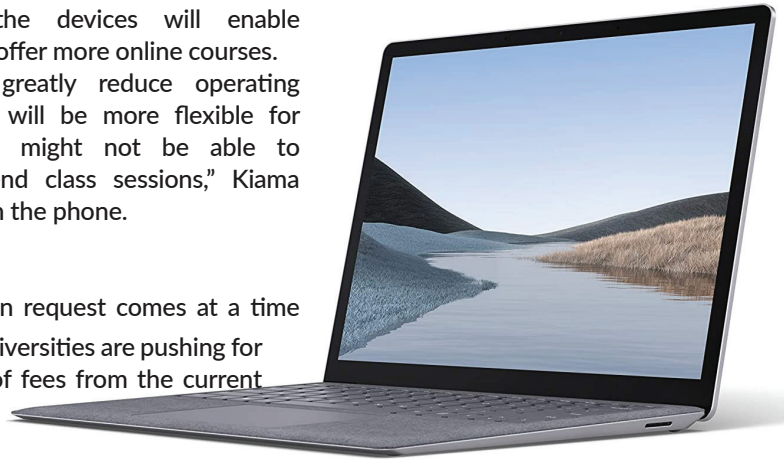
Student loans

The laptop loan request comes at a time when public universities are pushing for an increment of fees from the current Sh16,000 to Sh48,000.

Ringera said increased fees will mean increased loans advanced to students.

He said Helb has requested an estimated Sh6.2 billion to cover the shortfall witnessed this year. The increased fees will mean the board will

The project will initially target 61,000 students. Helb chief executive Ringera said those to benefit will be the most-needy from the 'freshers pool.'



require Sh14 billion to allow students to borrow, Ringera said. He said that because of the pandemic, Helb has been forced to lower the loan amounts offered to students from Sh45,000 to Sh37,000. Helb estimates show a student needs an annual budget of about Sh200,000 to be comfortable.

"Given that Helb currently provides about Sh37,000, that means students or households have to raise another Sh162,000," Ringera said. — *Was first published by the Star Newspaper.*

World Environmental Day marked

Nature is the center stone of life and all life processes. The air we breath, the medicine we take to cure illness, food and water are all connected to natural existence. However, if not taken care of, nature may turn to be the most lethal bio-terrorist in the world.

It is therefore necessary to conserve nature and all under it to ensure continuity of life. As the world marked this year's environmental day, various institutions and organizations moved to actualise the global theme-"Time for nature," by organizing various programs with regards to nature conservation. Climate change has been experienced worldwide and this to a large extent may be attributed to the reduction in forest cover. In Kenya, this occurs at a rate of 0.32% every year according to statistics given by the Ministry of Environment and Forestry.

The Technical University of Kenya in its commitment to providing education



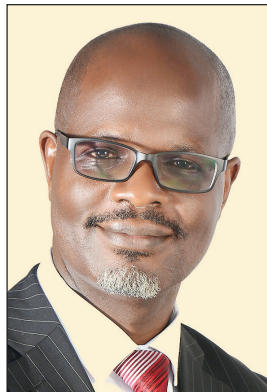
Prof. Omondi Oketch, the Dean of Student Affairs together with Mr. Cliff Oketch the SATUK Chairman lead staff and students in tree planting at South B Men's hostels.

and training for the real world was not left behind in this annual occasion. It contributed to reviving the environment by planting trees in the institution and its environs including the official student residences and staff quarters.

This will continue in the future to ensure biodiversity, providing a conducive learning

environment for students and making the city-based institution more habitable. Present during the occasion were Prof. Omondi Oketch - the Director, Student Affairs, Mr Cliff Oketch - the President SATUK, Mr. Tryphone Oloo - the Academic Secretary SATUK, students and staff residing at TU-K - South B Men's hostels.

Knowledge management team wins Sh9.4m Facebook grant to study cyber-crime



Prof. Tom Kwanya
Principal Investigator



Lucy Kibe



Erick Ogolla



Angella Kogos



Claudior Onsare

A team of researchers from the Technical University of Kenya has won a Sh9.4 million grant from Facebook to study cyber-bullying on Facebook among undergraduate students in Kenyan universities.

The research project titled ***"Pixels hurt more than sticks and stones: confronting cyber-bullying on Facebook"*** was selected from 189 applications worldwide. The one-year project will investigate the nature, prevalence and effects of cyber-bullying on Facebook among undergraduate students in 16 public and 8 private universities in Kenya.

Cyber-bullying is a form of harassment using electronic media. It has become increasingly common especially with the growing ubiquity of social media. Most cyber-bullying cases inevitably occur on Facebook because it is a widely used social media platform. Statistics on the nature, prevalence or consequences of cyber-bullying in Kenya are unknown. Nonetheless, anecdotal evidence suggests that cyber-bullying is increasingly becoming a major concern in the country. In the recent past, many suicide cases in Kenya have been linked to diverse forms of cyber-bullying. Coincidentally, many of the victims were reportedly bullied on Facebook. Knowing that most cyber-bullying cases go unreported, this is just the tip of the iceberg.

The study is part of the Content Policy

Research on Social Media Platforms which aims to support Facebook to develop better content policies and assess possible interventions, including experimental and observational studies, along with qualitative and analytic work to understand the mechanisms by which online rhetoric has the potential to influence offline events. It is part of the ongoing initiatives by Facebook to encourage expression and create an environment that is safe and respectful on its social media platforms. Although Facebook has already put in place several mechanisms to make its platform safe for its users, this study will contribute towards its efforts to enable its users to better control unwanted, offensive, or hurtful experiences arising from bullying and other forms of harassment.

The findings of this study will be

The findings of this study will be instrumental in developing a framework for mitigating cyber-bullying by providing both technological and non-technological solutions to making Facebook safer.

instrumental in developing a framework for mitigating cyber-bullying by providing both technological and non-technological solutions to making Facebook safer. The findings will also influence policy formulation and implementation on university students' support systems by agents of socialisation such as government, university management, family, and church, among others.

The expected outputs of the project include research publications such as peer-reviewed journal articles, conference papers and edited book chapters. The researchers will also publish a booklet (print and electronic) on how to minimise the prevalence, diversity and consequences of cyber-bullying among undergraduate students in Kenyan universities. One outcome expected from the project is a network of champions from among university students advocating against and educating fellow students on cyber-bullying as a means of stemming the tide of the vice in Kenyan universities. The project will also strengthen the capacity of deans of students to guide students under their care not to perpetrate or fall victim to cyber-bullying.

The five-member research team from the School of Information and Social Studies, is led by Prof. Tom Kwanya as the Principal Investigator. The other members are Angella Kogos, Lucy Kibe, Erick Ogolla and Claudior Onsare.

ICT dons win Sh16.9M grant from NRF

A team of researchers from the Technical University of Kenya working together with researchers from other universities have been awarded a Kshs. 16,957,125 research grant by National Research Fund (NRF). The research titled: 'Analytics Dashboard for Monitoring and Surveillance of Health Service Delivery to achieve Universal Health Care: Case of Cancer' was selected out of 800 proposals submitted on the NRF's second competitive research grants call for 2019/2020.

TU-K is the lead institution in the research effort, with Dr. Salesio Kiura being the Principal Investigator. Dr. Kiura is a Senior Lecturer in the Department of Computer Science and Informatics. Other institutions taking part are Strathmore University, Kenyatta University and Roless Media Institute.

Inspired by the Universal Health Coverage agenda by WHO, Africa Agenda 2063, Kenya's vision 2030 social pillar and the Big Four Agenda, the three-year research project seeks to map and model the magnitude and distribution of different types of cancers in time and space as well as trace the possible intervening environmental factors over the same space. In return, it will contribute to areas of technology and data driven surveillance which have received little attention in Kenya, since most efforts are focused on financing and social protection.

A major deliverable of the project will be an eManagement system that will incorporate dashboards capable of depicting such disease occurrences, their distribution, burden and causality indicators in real time within a catchment area. Cancer is used as the case study in three select counties but the system will be scalable to other diseases and regions.

The research project brings together ICT, mathematical modeling, GIS mapping, environmental health science, clinical health, public health, health records and information disciplines to develop an integrated eHealth Management platform (dashboard) for universal health care.

Each participating institution in the project research is expected to undertake different roles and research work packages. TU-K will provide overall project management and coordination, establish Temporal – Spatial Digital

Mapping of cancer cases and develop an eManagement Dashboard as well as an Analytics Software System. Roless Media Institute will deal with the Medical records (disease data) review, Kenyatta University will handle Environmental and Socio-cultural risk factors assessment and Strathmore University will work on Mathematical Modeling and application of Machine Learning Algorithms.

At the institutional level, this project will serve to catalyze the expansion of the Computational Science Engineering Department in the School of Computing, whose primary focus is on computational modeling and analytics using artificial intelligence-based algorithms. It will further develop a closer working relationship between the School of Computing and the School of Survey and Geosciences. Priority will be given to support research components of PhD and Masters students from the collaborating institutions. Already 50% of the funding has been disbursed to the university, and the project team has embarked on the research project.



Dr. Salesio Kiura



COMMONWEALTH
SCHOLARSHIPS

2021 COMMONWEALTH PHD SCHOLARSHIPS IN THE UNITED KINGDOM

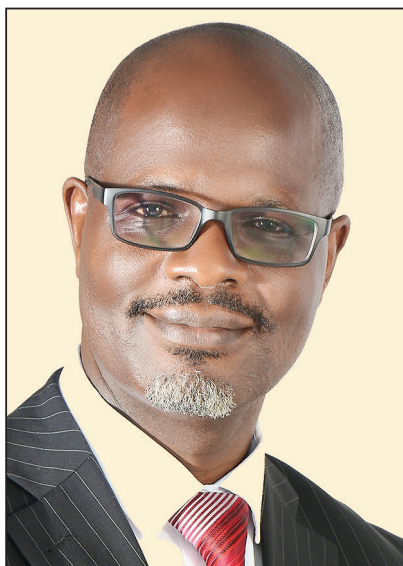
The Commonwealth Scholarships (CSC) Commission in the United Kingdom is offering eighteen (18) full scholarships for PhD only for Kenyan students, tenable from September/October 2021. The awards are tenable at any approved UK University or higher education institution with which the Commonwealth Scholarship Commission (CSC) has a part-funding agreement. The online Application to the Commonwealth Scholarship Commission (CSC) in UK are open as from 14th December 2020 to 18th January, 2021.

Full details of the scholarships are contained in the 2021 Terms and Conditions which are available on the CSC website: <http://cscuk.fcdo.gov.uk/about-us/scholarships/>

TU-K hosts successful webinar on information services for the future



Dr. Debra Wallace, the Executive Director, Knowledge and Library Services at the Harvard Business School in Boston, Massachusetts, USA.



*The Host: Prof. Tom Kwanya
(Host)*



Prof. Maria Musoke, Deputy Vice Chancellor for Academic Affairs, Kyambogo University, Uganda

The School of Information and Social Studies in conjunction with the Directorate of Research and Knowledge Exchange, on 28th October 2020, hosted an international webinar on redesigning information services to satisfy the emerging information needs of the society. The webinar, titled ***“Ahead of the Curve: redesigning information services for the future”***, was facilitated by Dr. Debra Wallace, the Executive Director, Knowledge and Library Services at the Harvard Business School in Boston, Massachusetts, USA.

In her opening remarks, TU-K's Director of Research and Knowledge Exchange, Prof. Fiona Mbai, emphasised the need for such discussions on how to catalyse knowledge exchange and use through effective information services anchored on the current technologically networked information systems.

Prof. Mbai stated that technology has enabled information users to overcome limitations of space and time to access resources globally conveniently at the click of a button. She urged the participants to increase their interactions with each other and the resources available, because the world has become “smaller” due to distributed technology. She also reiterated the commitment of TU-K to fostering technological innovations. She said that it is in the context of seeking solutions to current and emerging problems that this webinar was conceived. She added that new insights created and shared in fora such as webinars are the seeds that grow into outstanding innovations.

In her presentation, Dr. Wallace explained that although organisations

may not accurately predict the future, they can influence it, by creating it. She stated that information centres can become successful by combining appropriate strategy, execution, culture, and structure with talent and leadership in their efforts to design and deliver information services.

“The evolution of library services is a fascinating theme in modern times. At the core of this evolution are dialogues about how best to fit libraries in the lifestyles of library users”, she said. “The perception of libraries as those big brick and mortar buildings on campus has changed to conceiving them as customised spaces and services which help users to better perform their roles”, she added.

Dr. Wallace further explained that librarians need to provide services which are way above the average information experience delivered by search engines such as Google. She asserted that changes that information centres, like libraries, currently face are indeed opportunities to think differently about how to create value for the users. She also debunked the role of technology in facilitating redesign of information services. “Although technology

**“The evolution of library services is a fascinating theme in modern times. At the core of this evolution are dialogues about how best to fit libraries in the lifestyles of library users”
– Dr. Debra Wallace**

brings invaluable conveniences to delivering information services, we need to realise that we cannot digitise everything”, she said.

Contributing to the discussions, Prof. Maria Musoke, the Deputy Vice Chancellor for Academic Affairs, Kyambogo University, Uganda, urged the participants to be flexible in their thinking of what constitutes an information centre. She predicted that in future, the boundaries between information centres will be blurred by the need to offer seamless information services to largely dispersed users across the globe.

While giving closing remarks, Prof. Peter Matu, the Executive Dean, Faculty of Social Sciences and Technology, reminded the participants that change is inevitable. He also emphasised that change is a determinant of survival, sustainability and prosperity. He appealed to the participants to make optimal use of the knowledge shared during the webinar.

“I urge you to apply, share and multiply this knowledge to transform the information universe and occupy your space in the knowledge economy”, he challenged. Prof. Matu thanked the guest speaker for creating time to share her invaluable experience with the participants and assured her that the shared knowledge will be used by the participants resulting in better information services.

A total of 173 participants drawn from Kenya, Uganda, Tanzania, Nigeria, Ghana, Zimbabwe, Malawi, Lesotho, South Africa, United Arab Emirates, Hong Kong and the Netherlands attended the webinar.

Library trains over 200 academic staff in Turnitin anti-plagiarism software

The Technical University of Kenya (TU-K) together with Eiffel/Turnitin Corporation, has trained over 200 academic staff in the use of the Turnitin Anti-Plagiarism software.

The university recently acquired Turnitin anti-plagiarism software which is a plagiarism detection service.

The training was carried out in November of this year was meant to promote academic integrity and equip staff with the necessary skills of using the software. This will add value to teaching, learning and research which are the core values of a university.

In order to make use of this service effectively, staff needed to be trained

from a local perspective. Therefore, TU-K Library in collaboration with Kenyatta University Post Modern Library conducted a follow-up training on the use of Turnitin Anti-Plagiarism Software.

According to Dr. Sarah Kibugi, Director, Library, Learning and Resource Services, members of staff showed interest and are already intensively using the service. She added that the TU-K Plagiarism policy has already been drafted.

Eiffel/Turnitin Corporation is planning to conduct an intensive Training course for 30 TU-K members of staff in February 2021. The staff will thereafter train other staff.



Dr. Sarah Kibugi

INTERNATIONAL APPOINTMENT

VC to serve on ACU governing council

Prof. Francis Aduol has been elected to join the Association of Commonwealth Universities (ACU) as a Council member.

The Council has 23 members who are vice-chancellors of ACU member universities from across the Commonwealth. They are usually elected by their peers within the ACU membership network.

Others on the Council from Africa are: Prof Gabriel AyumTeye of the University for Development Studies, Ghana; Prof Barnabas Nawangwe of Makerere University, Uganda; Prof Dhanjay Jhurry of University of Mauritius; Prof Wim de Villiers of Stellenbosch University, South Africa; Prof Mamokgethi Phakeng of the University of Cape Town, South Africa; and Prof. Tawana Kupe of University of Pretoria, South Africa.

The current Patron of the Association of Commonwealth Universities is the Duchess of Sussex, Meghan Markle, while the Council is headed by Prof Edward Byrne of King's College, London. Dr Joanna Newman is the Chief Executive Officer and Secretary General.

The Council is ACU's governing body and is responsible for overseeing its activities and determining its future strategic direction, core policies, and procedures relating to governance. It is a UK-registered charity incorporated by the Royal Charter and the Council members are also the Trustees.

Having been established in 1913, ACU is the world's oldest international network of universities and its mission is to promote and support excellence

in higher education for the benefit of individuals and societies throughout the Commonwealth and beyond. Currently it has over 500 member institutions in more than 50 countries across the Commonwealth.

Prof. Aduol was also recently appointed to sit on ACU's Regional Committee for East, Central, and Southern Africa. His presence in ACU will be of significance to the East African higher education landscape, especially to Kenya's higher education as he will be in a pole position to influence policy issues that will favour the country and the region in general.

One of the ways in which ACU promotes higher education is through grant of scholarships and fellowships. Currently TU-K is a host to ACU's Queen Elizabeth Scholarship through which it has attracted graduate students from West and Eastern Africa.

Prof Aduol is the immediate former Chairman of the Vice-Chancellor's Committee of Public Universities in Kenya, where he served an unprecedented record three consecutive years.

He has extensive experience in academia and university administration. He is a Professor of Geospatial Science and Engineering at the University of Nairobi. Previously he served in various capacities at the University of Nairobi including Chair of the Department of Surveying, Dean of Faculty of Engineering and Principal of College of Architecture and Engineering. He



Prof. Francis W. Aduol

became the founding Principal of the Kenya Polytechnic University College in 2008 and later the founding Vice-Chancellor of the Technical University of Kenya in 2013.

Prof Aduol has served on numerous committees and taskforces in academia. In 2011-2012, he was a member of the National Task Force that prepared the Universities Act, 2012; TVET Act, 2013; and Science, Technology and Innovation Act, 2013. Prof. Aduol currently serves in the Boards of Kenya Universities and Colleges Central Placement Services and Higher Education Loans Board.

TU-K ranked 7th in Kenya

The Technical University of Kenya has been ranked number seven in Kenya in the latest world university ranking by Webometrics. In Africa, TU-K appears at number 144 while in the world it appears at number 3949 out of 12011 institutions that were ranked.

Universities are ranked under “Presence”, “Openness”, “Impact” and “Excellence” commonly known as research.

In this category of Excellence, only 12 Kenyan universities were ranked as follows: UoN (1), Moi (2), JKUAT (3), KU (4), Egerton (5), Maseno (6), TU-K (7), Strathmore (8), Masinde Muliro (9), Kenya Forestry Research Institute (10), Daystar University (11) and Catholic University of East Africa (12).

This was the first time TU-K was ranked in “Excellence”. The implication of the ranking in excellence is that the University’s contribution to knowledge through research has come of age. The University of Nairobi is ranked at number one in Kenya and East Africa. KU is ranked number two followed by Moi (3), JKUAT (4), Egerton (5), Strathmore (6), TU-K (7), Maseno University (8), Masinde Muliro (9) and Murang’a University closes the top ten category.

In Africa, the University of Nairobi is ranked number 10, while its contemporaries Makerere and the University of Dar es

University	Kenya Rank	Africa ranking	World Ranksort descending	Presence Rank*	Impact Rank*	Openness Rank*	Excellence Rank*
UoN	1	10	956	198	1075	749	1602
Kenyatta	2	28	1674	258	1590	1348	2988
Moi	3	47	2108	3027	3988	1669	2498
JKUAT	4	62	2436	1083	5642	1428	2755
Egerton	5	125	3622	3101	10033	3752	3024
Strathmore	6	134	3730	1130	3820	4220	4955
TU-K	7	144	3949	1501	6091	3622	4751
Maseno	8	154	4101	6073	10813	2693	4014
Masinde Muliro	9	202	4960	2645	12230	3212	4955
Murang’a	10	211	5160	3336	2939	4717	6528

Salaam are ranked number 12 and 35 respectively. The continent has 1902 universities. Only 8 Kenyan universities appear among the top 200 institutions of higher learning in Africa.

UoN appears at number 10, KU (28), Moi (47), JKUAT (62), Egerton (125), Strathmore (134), TU-K (144), Maseno (154). In the top 4000 universities in the world, only seven local universities appear out of the 12,011 institutions that were

ranked. UoN was ranked number 956 in the world followed by KU (1674), Moi (2108), JKUAT (2436), Egerton (3622), Strathmore (3730) and TU-K (3949).

Slightly over 30,000 institutions were evaluated world-wide but only 12,011 met the criteria for ranking by Webometrics. The Webometrics research data used for ranking is obtained through analysis of data from Scimago and Scopus.



Lecture Theatre

TU-K adopts blended learning

Varsity moves to ensure seamless teaching and learning during the Covid-19 pandemic



Dr. Moses Wamalwa,
Ag. Academic Registrar

The Technical University of Kenya (TU-K) has set-up an online-based learning schedule that will see students undertake their coursework digitally and partially attend face-to-face sessions that require practical learning in the form of laboratory experiments, workshops, studios and internal industry-based learning.

The University has also considered staggered sit-in examination where students in various years of their coursework are invited for a short period of time to write their examinations to give space to other groups of students.

The University has already developed an Open, Distance and e-Learning (ODEL) policy that is awaiting approval by the University Senate and Council.

Prior to the implementation of the ODeL, the University conducted a baseline survey among the staff and students to gauge their preparedness for online and blended learning. The findings offered a basis for provision of necessary materials and deployment of the basic infrastructure to support teaching and learning. The short-term targets included roll-out of online theoretical lectures, tutorials and



TU-K Graduands during a past graduation ceremony

implementation of continuous assessment tests (CATs) and the main examinations.

The University's blended learning comes at a time institutions of higher learning are expected to develop tailored short-term and long-term measures to mitigate the challenges posed by the Covid-19 pandemic. TU-K Senate has resolved that going forward, in a bid to observe Covid-19 protocols in regard to

social distancing, most theoretical courses will be offered online.

Acting Academic Registrar, Dr. Moses Wamalwa, says the University is diligently utilising space to ensure students learn and write their examinations.

Already several handwashing points have been set-up at various stations including outside of every block within the campus while fumigations are carried out after every lecture.

Eateries within the University are controlled to ensure high hygiene and strictly adhered to the Ministry of Health regulations. Social gatherings, club activities and events like sports and gym facilities have been suspended.

Sensitisation and training regarding the Covid-19 pandemic has been ongoing targeting both the staff and students. In addition, the University has provided personal protective equipment (PPEs) particularly to the frontline officers including the security; drivers, receptionists and public health personnel.

The University's blended e-learning comes at a time institutions of higher learning are expected to develop tailored short-term and long-term measures to mitigate the challenges posed by the COVID-19 pandemic.

Health and safety protocols for all at TU-K scaled up

The University Health and Wellness Services (UHWS) has set-up measures to ensure safety of students, staff and other stakeholders visiting the institution. Dr Argwings Kodhek, the Director says the University has already purchased personal protective equipment, set-up hand-washing stations, re-organised service provision and admission procedures at the clinic and prepared sensitisation and training materials. This also extends to setting up robust communication channels to help patients and the general university community especially those who need emergency services and information within the facility or at their homes particularly regarding Covid-19 pandemic.

"We have developed and placed conspicuous information at entry points and notice boards regarding social distancing, personal hygiene, put in place measures to handle anyone suspected of having contracted corona virus. We also periodically send bulk text messages to mobile phones of staff and students as part of awareness creation in regard to Covid-19," says Dr. Kodhek.

He said frontline staff including security officers have been trained on procedures to handle persons entering and exiting the university including taking body temperatures, protecting



Dr. Argwings Kodhek (left) the University Health, Safety and Wellness Services Chief Medical Officer (CMO) with EMS Driver Austin Kyalo during preparation exercise at the university to ensure safe handling of Covid-19 cases.

themselves and ensuring everyone washes their hands or use hand sanitizers and also wear face-masks. The University has also purchased full

personal protective gear to be used particularly by staff working at the health clinic including ambulance drivers who may be at high-risk.



University staff at hand to respond to medical emergencies

KEBS certifies sanitisers, detergents



Joseph Mukuna, a student at the Department of Chemistry with Technician Daniel Ouma, packaging cleaning detergents and sanitizers at lab.

The Kenya Bureau of Standards (KEBS) has approved TU-K's hand sanitizers and cleaning detergents to help in combating the spread of corona virus (Covid-19). The KEBS certification of TU-K products means the university can produce them in large quantities and commercialise them.

Dr. Geoffrey Otieno, the Director of the School of Chemistry and Material Science, says some of the products being sold in the market do not meet required standards particularly the chemical composition. With repeated application on the skin, such substandard products can cause far-reaching health effects.

"As a learning and research institution, we help address such shortfalls in the industry. Our duty is to carry out studies particularly on chemical composition of products to ensure human and environmental safety," says Dr. Otieno.

Some of the components used in industrial production of hand sanitizers for instance include; water, alcohol (at least 70 per cent), thickener, hydrogen peroxide and perfume. Composition and formation should have specific ratios and standard acidity (measured in pH) that ensures safe usage and effectivity of the product.

Viscosity and flow of properties are

other important qualities to consider. Some of the sanitizers and cleaning detergents the School has produced include; Bioklin hand sanitizer, *Tukleen general purpose detergent* and *Tukleen handwash*.

"We have actually been researching

and producing cleaning detergents and handwashing products at the School for many years and supplying them to the university and also to users outside the university," explained Dr. Austin Ochieng who is leading the project.



VC Prof. Francis Aduol (center) shows State Department of Housing and Urban Development PS Mr. Charles Hinga Mwaura some of the detergents and sanitizers the university produces.

Dons develop non-contact temperature device

The Technical University of Kenya is at an advanced stage of developing a non-contact temperature measuring system. The team from the Department of Physics developing the device is led by Prof Maxwell Odote. The device will be a walkthrough non-contact Infrared Temperature Sensing System designed to measure people's body temperature of people at entry points as a mitigation

measure to the spread of the pandemic. The device is safe because it will ensure recommended social distancing at entry points when reading body temperature as it will be done remotely. The system will cost less than Sh130,000 compared to commercially available non-contact temperature sensing systems that cost in the upwards of Sh300,000.



State Department of Housing and Urban Development PS Mr. Charles Hinga Mwaura inspects the non-contact temperature measuring system during visit to TU-K. He was accompanied by VC Prof. Francis Aduol, Ministry staff and the university staff.

Prof. Yole joins Covid-19 Global College of Experts



Prof. Dorcas Yole

The Director of the School of Biological and Life Sciences, Prof. Dorcas Yole, has been appointed to the Global College of Experts to help in understanding Covid-19 pandemic through research and seek ways to mitigate health impact in low and middle income countries.

Prof. Yole becomes a member of the College of Experts for joint Department of Health and Social Care (DHS) and the United Kingdom Research and Innovation (UKRI) Global Effort on Covid-19 (GECO) Health Research Call.

She will be part of the team charged with reviewing proposals addressing Covid-19 in low and middle income countries. The global effort on the pandemic is funded by Kingdom Research and Innovation and Medical Research Council (MRC, UK) together with the National Institute for Health Research (NIHR, UK). The call is based in the Department of Health and Social Care (DHS).

When reached for comment, Prof. Yole noted that this is an opportunity TU-K and Kenya at large would benefit from and join global efforts in research towards combating Covid-19 pandemic.

"I have already been involved in the review process, and I am grateful that TU-K is contributing in fight against Covid-19 in this aspect," said Prof. Yole.

The Vice-Chancellor, Prof Francis Aduol congratulated Prof Yole adding that "I trust our University will immensely benefit from the wealth of knowledge you will acquire from this health research call.

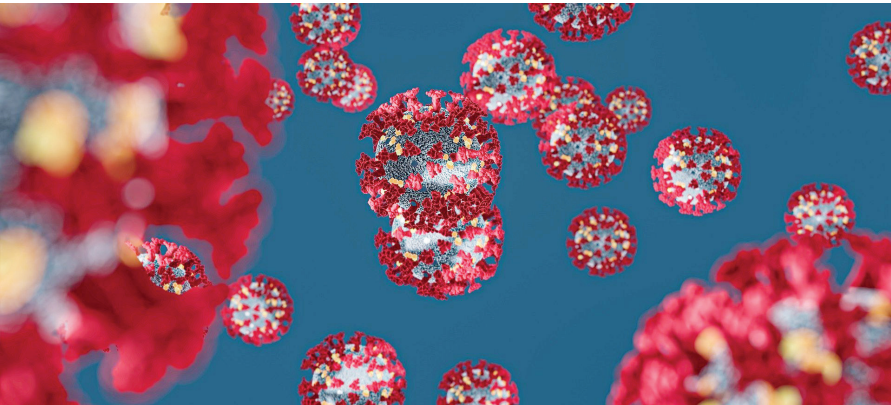
Staff develop Covid-19 tracing system

The Department of Computational Science and Engineering has developed computer-based algorithm that can help in tracing Corona virus-infected persons. According to Dr Winston Ojenge, a Lecturer at TU-K who is leading the development of the system, the algorithms are able to; monitor extent of social distancing, monitor breach by those on quarantine, identify historical contacts, and venues visited by newly-diagnosed Covid-19 patients (backtracking), forecast the pandemic in Kenya and monitor

individuals using 'panya routes' to get across restricted county borders. "The algorithm can monitor these events automatically and raise alerts, without manual and individual-by-individual tracking," explains Dr Ojenge. To operationalise it, the system requires individual human location data. However, due to the politics and legal challenges surrounding personal data and privacy laws, the University is unable to roll out this innovation that may help in the fight against Covid-19.



Dr Winston Ojenge



Corona Virus



Suki to lead Open Markets Team

The Cabinet Secretary, Ministry of Transport, Infrastructure, Housing, Urban Development and Public Works, Mr. James Macharia, has appointed a Taskforce to advise and oversee the implementation of measures aimed at mitigating the spread of Covid-19 in markets and maintaining hygiene of the food supply chain. This move is in line with the Government's strategy of gradually opening the economy.

Former Deputy Vice-Chancellor in-charge of Technology Innovation and Partnerships (TIP), Prof. Suki Mwendwa was appointed the chairperson.

Other Members include; Charles O. K'Onyango, Dr. Francis Muraya, Prof. Izael Da Silva, Dr. Lawrence Esho, Ms. Lilian Kieni, Ms. Ashely Toywa, Kennedy Mutisya, Joel Gichumu, Roy Otieno, Alex Makaliwa, Mathew Nyamu, Kingsley Kipury Joseph Ayieko, Prof. Alex Muumbo and Dr. Hezron Osano.

According to the Gazette Notice Vol 155, No. 5891, dated the 16th July, the Advisory Committee's mandate is to develop a strategy for keeping the markets open in major urban centers in compliance with the public health standards.

The Committee was mandated to

develop a self-sustaining, self-financing model for Covid-19 compliant market stalls and mobile market models and regulate its own procedures.

The Gazette Notice further states that the Committee shall identify and co-opt technical experts, who should not exceed more than one third of the Taskforce membership. It explains that it will solicit, receive and consider views from the members of the public and interest groups and promote constructive stakeholder engagement.

The Committee has already submitted the interim report to the Cabinet Secretary and will submit a final report at the end of its term.

The TU-K team in the task force.

1. Prof. Suki Mwendwa - Design and Creative Media
2. Dr. Lawrence Esho - Spatial Planning and Design
3. Prof. Alex Muumbo - Mechanical and Manufacturing Engineering
4. Alex Makaliwa - Aeronautical and Aircraft Engineering
5. Dr. Hezron Osano - Business Administration and Entrepreneurship



Prof. Suki Mwendwa

PS HINGA VISITS TU-K



Principal Secretary, State Department for Housing and Urban Development, Mr. Charles Hinga Mwaura, signs a visitors book when he visited TU-K in December 2020. Looking on is the VC, Prof. Francis Aduol.

Baki to chair taskforce on elite varsity

The Principal Secretary, State Department for University Education and Research, Ministry of Education, Amb. Simon Nabukwesii, has appointed Prof. Paul Baki from the Technical University of Kenya as the Chairperson of a special committee to develop a policy on Kenya Elite Universities Recognition Class to come up with a proposal on the Establishment of National University of Kenya (NUKE).

In a letter addressed to the Chairperson of the committee, the PS stated that due to the ongoing University Education Sector reforms and the need to fast track classification of Kenyan Public Universities through a developed criterion, he has appointed a committee to undertake the respective tasks.

Other members of the Committee include; Dr. George O. Nyandoro, Director of Postgraduate Studies - Kisii University, Dr. Guyo S. Huka, Director of Research and Innovation - Meru University, Prof. Anne A. Amadi, Vice Chancellor - Greatlakes University of Kisumu (GLUK), Prof. Alex Muumbo—School of Mechanical and Mechatronics, Engineering - TU-K, Prof. Josephine Khaoma Ngaira - Masinde Muliro University of Science and Technology, Dr. Fredrick Gravenir, DVC- Research and Outreach-Kenyatta University, Godrick Matthews B., DVC-Academic and Students Affairs, Masai Mara University, Dr. Rahma Udu, Senior Lecturer/Dean School of Applied and Health Sciences-Technical University of Mombasa, Prof. Ernest Sangai Muhochi, Registrar Academic Affairs - Kibabii University, Secretariat, Grace K. Mutisya, HRMO-I, SDUE&R and Mr. Evans Atambo, ADE-SDUE&R.

In developing a policy on Kenya Elite Universities Recognition Class, the Committee is expected to undertake a desktop study on available Government legal instruments to inform a situational analysis. Their mandate is to; Undertake a desktop study on global institutions and derive best practice guidelines for the recognition class, establish challenges facing Kenyan universities in terms of recognition and global competitiveness, provide policy statements for the policy, develop guidelines on how to address the challenges, state what is best practice, what is expected of university education in terms of governance and accountability; infrastructure; resources (financial and human resource); collaboration and linkages; curriculum development; access among other functions.

In the course of developing a proposal on the establishment of National University of Kenya, the Committee will



Prof. Paul Baki

be required to develop a proposal for NUKE as a model University to compete with the best in the world; including the Ivy League Universities. The focus will be on; cost, leadership, efficiency,

In the course of developing a proposal on the establishment of National University of Kenya, the Committee will be required to develop a proposal for NUKE as a model university to compete with the best in the world; including the Ivy League Universities. The focus will be on; cost, leadership, efficiency, advantages of scale, differentiation (based on better service), focus (strategy on target markets) and branding (market positioning).

advantages of scale, differentiation (based on better service), focus (strategy on target markets) and branding (market positioning). The committee will also propose a mandate and vision befitting a modern competitive university and position NUKE for competitiveness through; student learning experience; research prominence; financial sustainability and internationalization.

The Committee will propose a criterion on the best criteria for admitting students at all levels of training for both Kenyan and international students. It will also provide guidelines for employment of staff at NUKE at all levels including local and expatriates and will propose infrastructures, identifying notable available infrastructures or new infrastructures to be constructed/established. The Committee will propose special legal instruments to be developed and implemented in favour of NUKE, since NUKE will operate outside existing legal instruments and will also propose programmes to be offered by NUKE, the cost of establishing NUKE, a Log frame for establishing NUKE and any other tangible guideline/strategy/recommendations for NUKE.

NUKE is being proposed as the first candidate under Kenya Elite University Recognition Class. The Committee is expected to undertake both tasks and submit the results of the tasks to the Principal Secretary, State Department for University Education and Research.

TU-K leads in patenting intellectual property assets

The Technical University of Kenya is among the top four public universities patenting intellectual property (IP) assets in Kenya.

The University so far has 14 pending patents, 3 utility model applications, 2 industrial designs and 3 copyright certificates bringing them to a total of 22 IP assets. Patenting remains key in research, innovation and learning. It is the institution's responsibility to ensure that both researchers and the institutions legally own their innovations.

In this cause, the Technical University of Kenya has helped several researchers and students to patent their projects. Prof. Eric Ogur and Dr. Betty Mbatia from the School of Mechanical and Manufacturing Engineering teamed up to invent "a tank for the pre-treatment of waste oil/fat in biodiesel production" which is now in its final stages of patenting. Mr. Alex Mungai Muchiri, a TU-K alumnus, has patented a "computer implemented banking system for real estate management" that will revolutionize the real estate industry once commercialized. Through the facilitation of the School of Business and Management Studies (SBMS), Dr. Elyjoy Muthoni Micheni has worked with two students to develop and patent three ICT based innovations namely; KenyaOne, an application which provides a system for gathering and submitting criminal evidence, Lipa Mashinani, an electronic revenue collection tool and Kenya Online Booking System (KOBBS), an online hostel booking application. Once they hit the market, they will contribute to the eradication of corruption, enhance revenue collection and change the way university students

S. NO.	IP ASSET	FILE NO	INVENTORS	TITLE
1	Patent	KE/P/2014/2141	Prof. Ogur Eric et al	Biodiesel Tank Patent Application
2	Patent	KE/P/2016/2583	Alex Mungai	Real Estate App Patent Application
3	Utility Model	KE-UM/210 KE/U/2017/855	Dr. Micheni & Muuyi A Barasa	Online Booking System Petty-Patent (Utility Model)
4	Utility Model	KE-UM/209 KE/P/2017/854	Dr. Micheni & Ogolla E. O	E-revenue collection App Petty-Patent (Utility Model)
5	Utility Model	KE-UM/208 KE/P/2017/853	Dr. Micheni & Ogolla E. O	Criminal Evidence Gathering App Petty- Patent (Utility Model)
6	Copyright	LT-13478	Prof. Dr.-Ing. Francis W. Oduol	Full Time Staff Equivalent
7	Copyright	AV-02385	Francisca K. Kilokwe	Asante Mungu CD
8	Copyright	SR-01306	Francisca K. Kilokwe	TuombeUchagusi CD
9	Patent	KE/P/2018/3047	Wekesa Daniel et al	Automatic School Bell with GSM and Internet
10	Patent	KE/P/2018/3049	Jack Agwaya et al	Forum Management Tool
11	Patent	KE/P/2018/3048	Dr. Ojenje W. O.	Field Officer Monitoring Tool
12	Patent	KE/P/2018/3046	Mourice Ochola et al	School Bus Monitoring Tool
13	Patent	KE/P/2018/3045	Dr. Ojenje W. O.	TV Receiver Remote Channel Monitoring Device
14	Industrial Design	KE/ID/2018/1990	Ombaso M. B	Birdcage Teardrop Collection Design
15	Industrial Design	KE/ID/2018/1991	Ombaso M. B	Teardrop Table Collection Design
16	Patent	KE/P/2020/3604	Prof. Ogur et al	Postal Address
17	Patent	KE/P/2020/3602	Prof. Ogur et al	PSV Location
18	Patent	KE/P/2020/3603	Prof. Ogur et al	Water Tank
19	Patent	KE/P/2020/3605	Prof. Ogur et al	PSV Overloading
20	Patent	KE/P/2020/3601	Prof. Ogur et al	PSV Over-speeding
21	Patent	KE/P/2020/3607	Dr. Kirwa W	In Vitro Micro-propagation of Sugarcane
22	Patent	KE/P/2020/3606	George K. Kioko	Improved Potato Cutter

Status of Intellectual Property Rights of Technical University of Kenya



Prof. Eric Ogur



Dr. Betty Mbatia, Former Lecturer, School of Mechanical and Manufacturing Engineering



Dr. Elyjoy Muthoni Micheni

“Today, TU-K is ranked among the few public universities with patents in Kenya. It is among the top four public universities with patenting assets.”

— Ms. Ruth Kirwa



Mr. Muuyi Andre Barasa



Mr. Evans Onyango

reserve hostels respectively.

The KenyaOne application was developed by Mr. Evans Onyango, a TU-K alumnus who graduated with a Bachelor of Business Information Technology. This mobile application will be available for download on android and iOS operating systems. It provides a platform for reporting unlawful acts like crimes, terrorist activities, corruption among other offenses via mobile phone in real-time. Lipa Mashinani is also the brain child of Mr. Onyango. It is a web-based e-revenue collection App targeted at helping the County Governments automate revenue collection to promote transparency and accountability. Kenya Online Booking System (KOBS) on the other hand is a web-based platform mapping out available hospitality facilities and offering an avenue for students to book commercial hostels and boarding facilities. The developer, Mr. Muuyi Andre Barasa, is also a TU-K alumnus who pursued Bachelor of Business Information Technology.

The patenting process is both legal and technical. Due to the complexity in drafting patent claims, it is advisable to invoke the services of patent consultants or patent attorneys to help in documentation procedures and filing the patent application with the Kenya Industrial Property Institute (KIPI). Patent specialists have legal knowledge in Intellectually Property Rights (IPRs) and play a major role in fast-

tracking preparation and prosecution of the application before KIPI.

Kenya Industrial Property Institute is a government agency under the Ministry of Industry, Trade and Cooperatives, mandated to grant intellectual property and rights relating to patents and utility models among others. The Institute's other responsibilities include; provision of technological information to the public, administering industrial property rights, promoting inventiveness in Kenya and providing training on industrial property.

According to the Director, School of Business and Management Studies Dr. Elyjoy Micheni, innovators partner with a research institution when seeking to patent their innovations with KIPI. She notes that research institutions such as universities support innovators in bringing new knowledge to life, as well as in meeting standard invention's procedures and threshold. "Research institutions also help in publishing and marketing these projects," Dr. Micheni said. She added, "Through our School for instance, the university out-sourced an intellectual property rights consultant to help patent two student innovations."

The IP Manager, Ms. Ruth Kirwa said that the University has hired a patent consultant to assist the university in preparing and filing patents. She said that the entire procedure for acquiring a utility model takes four months following

the recent amendments to the Industrial Property Act, 2001. The patent consultant is a registered patent agent and a seasoned patent drafter who previously served as a patent examiner at KIPI for more than ten years. The two patents filed through TU-K have already received a notification, marking part of the last stage before the researchers are awarded with patent certificates.

Dr. Micheni said that the patent agent took the innovators and support staff through documentation, innovation thresholds and filing procedures among other key areas, making their work much easier. Some of the major conditions an invention should meet before getting a patent include ingenuity and that the project has to not have been done anywhere. The invention should contribute to society's knowledge and development. Once the patenting agency awards the certificate, the inventors can seek funding to implement and commercialise their projects.

Currently, the royalty sharing policy stipulates that the supporting research institution receives up to 20 percent of the benefits while the inventor receives 80 percent as an incentive to researchers.

Today, TU-K is ranked among the few public universities with patents in Kenya. In addition to patents, TU-K has three copyrights formally registered with the Kenya Copyright Board (KECOBO); Full Time Staff Equivalent (FTSE), Asante Mungu CD and Tuombe Uchaguzi CD as literary and audi-visual works created by the VC Prof. Dr.-Ing. Francis W. Aduol and Ms. Francisca Kamanthe Kilokwe respectively. The university plans to use flexibilities in the IP regime to emerge a regional leader in patented inventions that can solve immediate problems in the society.

Kenya Industrial Property Institute is a Government agency under the Ministry of Industry, Trade and Cooperatives, mandated to grant intellectual property and rights relating to patents and utility models among others.

Student wins award at drama symposium

A Technical University of Kenya student won the third place at a drama Symposium, organized by Tangaza University College and Universal Peace Federation. The theme for the event was *"Impact of Covid-19 on Human Thoughts- Reflections"*.

Ms. Paige Wamboi received a trophy, a certificate and a token from the organizers. She presented a solo verse encouraging young women to look out for better days despite the effects of Covid-19.

The inter-university poetic symposium was officiated by UPF Ambassador for peace Suntider Singh Jabbal and Prof Chacha Nyaigoti Chacha, Commission for University Education (CUE) Chairman, who was representing the Ministry of Education.

The symposium began with a presentation on the relevance of poetry in reflecting on the effects of Covid-19 to the society. The digital age is booming and new media has taken center stage in investigative reports, agenda setting and educating the masses on public interest issues. Despite these advancements, the importance of poetry cannot be underestimated. Poetry provides hidden meanings and aesthetics to messages and events allowing the mind to pause and reflect on societal issues to develop lasting solutions to our problems.

The novel coronavirus remains a public health crisis, claiming many lives and putting a strain on our socio-economic system. Therefore, there is no better time



Paige Wamboi (left) receives a trophy during the drama symposium

to ignite our talent in poetic discourse to highlight the impacts of the virus to society.

The competition featured the following categories; Spoken word, Songs, Solo verses and dramatized skits. A total of twenty items were presented. Amongst them were ten spoken word pieces, a Solo verse, eight skits and two songs. TU-K was led by Mr. Patrick Ogutu, the Drama Patron. Other TU-K students who participated were; Timabel Master who presented a spoken word piece dubbed 'Lamentation by university students' and Arnold Nadecho who presented a song; 'Results of Quarantine'.

The Judges lauded the TU-K students for exhibiting high standard performances in all their items which were highly creative, entertaining and educative.

The teams which participated in the poetry competition came from: -Technical University of Kenya, University of Nairobi, Moi University, Kenyatta University, The Catholic University of Eastern Africa, Tangaza University College, Cooperative University and Marist University College.

The event was broadcasted by KBC and KTN, and attracted audience from Zambia, Tanzania, Nigeria, Kenya, Uganda, Ghana, Rwanda, and Zimbabwe.



Paige Wamboi performing during the drama symposium



Timabel Master



THE TECHNICAL UNIVERSITY OF KENYA

MODULE II PROGRAMMES AT UNDERGRADUATE AND DIPLOMA



THE Technical University of Kenya (TU-K) is the leading university in technological education and training in Kenya. The University was awarded a Charter in 2013, making it a fully-fledged 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 student upward movement policy, which makes it easy for students to move from one level of training to the next, and recognise prior training by awarding students credit transfers. The University has developed and implemented a digitised and completely paperless student applications process; from application to registration. Students are therefore, advised to make their applications on-line for the programmes listed below:

COURSE TITLE	REQUIREMENTS	DURATION
FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT TECHNOLOGY		
SCHOOL OF ARCHITECTURE AND SPATIAL PLANNING		
Bachelor of Architectural Studies/ Bachelor of Architecture	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A, Physics and Eng./Kis.	4 years (BAS) 2 years (B. Arch) Integrated
Diploma in Technology (Architecture)	• KCSE Mean Grade C (Plain) together with C (plain) in Maths A, Physics and Eng./Kis	3 years (Integrated programme)
SCHOOL OF AEROSPACE AND AVIATION ENGINEERING		
Bachelor of Engineering (Aeronautical Engineering)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A, Physics, Chemistry and Eng./Kis.	5 years (Integrated programme)
Diploma in Technology (Aeronautical Engineering Technology)	KCSE Mean Grade C (Plain) with at least C (plain) in Maths, Physics, Chemistry and English/Kiswahili	3 years (Integrated programme)
SCHOOL OF CHEMICAL AND BIOLOGICAL SYSTEM ENGINEERING		
Bachelor of Engineering (Chemical Engineering)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A, Physics, Chemistry and Eng./Kis.	5 years (Integrated programme)
Bachelor of Engineering Technology (Chemical Engineering Technology)	• KCSE Mean Grade C- (Minus) and Diploma in Technology in Chemical Engineering Technology or equivalent	3 years (Part-time)
Diploma in Technology (Chemical Engineering Technology)	• KCSE Mean Grade C (Plain) with at least C (plain) in Maths, Physics, Chemistry and English/Kiswahili	3 years (Integrated programme)
SCHOOL OF CONSTRUCTION AND PROPERTY STUDIES		
Bachelor of Built Environment (Construction Management)	• KCSE Mean Grade C+ (plus) with C (Plain) in Maths A and Pass in Physics, Eng./Kis. And 2 nd Group II/Group III/IV/V	4 years (Integrated programme)
	• Diploma in Technology in Quantity Surveying, Building Construction, Civil Engineering, Architecture OR	3 years (Part-time)
	• TEP Diploma in Building Construction, Civil Engineering, Architecture, Quantity Surveying or equivalent with at least 2 years relevant work experience	

Integrated programmes will be taught during the day on weekdays together with Government-sponsored students
Part-time programmes will be taught in the evenings and on weekends

COURSE TITLE	REQUIREMENTS	DURATION
Bachelor of Quantity Surveying	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A, Physics and Eng./Kis. And a Pass in 2 nd Group II/Group III/IV/V. • Diploma in Quantity Survey together with Mean Grade C- (minus)	4 years (Integrated programme) 3 years (Part-time or Integrated)
Bachelor of Technology (Building Construction)	• KCSE Mean Grade C+ (plus) with C+ (plus) in Maths A and Physics together with a Pass in 2 nd Group II/III/IV/V OR • KCSE Mean Grade C- (Minus) and Diploma in Technology in either: Building Technology, Civil Engineering, Quantity Surveying or Architecture or equivalent or TEP Diploma in the above areas,	4 years (Integrated programme) 3 years (Part-time or evening)
Bachelor of Real Estate	• KCSE Mean Grade C+ together with C+ (plus) in Maths A and a Pass in Eng./Kis., Group II/III/IV/V • KCSE Mean Grade C- (Minus) and Diploma in Technology in Real Estate or equivalent or TEP Diploma in the above areas,	4 years (Integrated programme) 3 years (for Diploma holders)
Diploma in Technology (Real Estate)	• KCSE Mean Grade C (Plain) together with at least C (plain) in Maths and a Pass in Eng./Kis., Group II/III/IV/V	3 years (Integrated programmes)
Diploma in Technology (Quantity Surveying)	• KCSE Mean Grade C (Plain) together with C (plain) in Maths A, Physics And a Pass in 2 nd Group II/Group III/IV/V	
Diploma in Technology (Construction Management)	• KCSE Mean Grade C (Plain) together with C (plain) in Maths A, and Pass in Physics, Eng./Kis. And 2 nd Group II/Group III/IV/V	
Diploma in Technology (Building Construction)	• KCSE Mean Grade C (Plain) with C (plain) in Maths A, Physics and Eng./Kis.	
SCHOOL OF CIVIL AND RESOURCE ENGINEERING		
Bachelor of Engineering (Civil Engineering)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A, Physics, Chemistry and Eng./Kis.	5 years (Integrated programme)

Integrated programmes will be taught during the day on weekdays together with Government-sponsored students
Part-time programmes will be taught in the evenings and on weekends

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COURSE TITLE	REQUIREMENTS	DURATION
Bachelor of Engineering Technology (Civil Engineering)	• KCSE Mean Grade C- (Minus) and Diploma in Technology in either: Civil Engineering, Highway Engineering, Water Engineering, Building Construction or equivalent or TEP Diploma in the above areas,	3 years (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	3 years (Integrated programme)
SCHOOL OF ELECTRICAL AND ELECTRONIC ENGINEERING		
Bachelor of Engineering Technology (Electrical and Electronic Engineering Technology)	• Higher Diploma in Technology (Electrical and Electronic Engineering Technology) together with KCSE Mean Grade C- (Minus)	3 years (Part-time)
	• KCSE Mean Grade C- (Minus) and Diploma in Technology in Electrical and Electronic Engineering Technology or its equivalent recognised by senate of TU_K or TEP Diploma in the above disciplines.	3 years (Part-time)
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.	3 years (Integrated programme)
SCHOOL OF MECHANICAL AND MANUFACTURING ENGINEERING		
Bachelor of Engineering (Mechanical Engineering)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A, Physics, Chemistry and Eng./Kis.	5 years (Integrated programme)
Bachelor of Engineering Technology (Mechanical Engineering Technology)	• KCSE Mean Grade C- (Minus) and Diploma in Technology in Mechanical Engineering Technology	3 years (Part-time)
Diploma in Technology (Mechanical Engineering Technology): - • 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	3 years (Integrated programme)
SCHOOL OF SURVEYING AND GEOSPATIAL SCIENCES		
Bachelor of Engineering (Geospatial Engineering)	• KCSE Mean Grade C+ (plus) with C+(plus) in Maths A, Physics and C (plain) in Geography	5 years (Integrated programme)
Bachelor of Applied Science (Geospatial Information and Communication)	• KCSE Mean Grade C+ (plus) with C+(plus) in Maths A, Physics and C (plain) in Geography	5 years (Integrated programme)
Bachelor of Technology • Surveying Technology • Geo-information Technology	• KCSE Mean Grade C+ (plus) with C+(plus) in Maths A, Physics and C (plain) in Geography • KCSE Mean Grade C- (Minus) and Diploma in Technology in Geo-information Technology, Surveying Technology or equivalent	4 years (Integrated programme) 3 years (Part-time)
Bachelor of Science (Land Administration)	• KCSE Mean Grade C+(plus) and C+ (plus) in Maths A and a Pass in Physics, Group III, 2 nd Group II/Group IV/V	5 years (Integrated programme)
Diploma in Technology in: - • Geo-information Technology • Surveying Technology	• KCSE Mean Grade C (Plain) with C (plain) in Maths A, Physics and Geography OR • Certificate in Land Surveying or Cartography with Mean Grade D+ (Plus)	3 years (Integrated programme)
FACULTY OF APPLIED SCIENCES AND TECHNOLOGY		
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 • KCSE Mean Grade C- (Minus) and Diploma in Technology in Applied Biology or equivalent	4 years (Integrated programme) 3 years (Part time)
Bachelor of Technology (Biotechnology)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Biology, C (Plain) in Maths A and Chemistry • KCSE Mean Grade C- (Minus) and Diploma in Technology in Biotechnology or equivalent	4 years (Integrated programme) 3 years (Part-time)
Bachelor of Technology (Food Science and Technology)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Biology, Chemistry, Physics/Maths A and English/Kiswahili • KCSE Mean Grade C- (Minus) and Diploma in Technology in Food Technology or equivalent	4 years (Integrated programme) 3 years (Part-time)
Bachelor of Science (Biochemistry)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Biology, C (Plain) in Maths A and Chemistry	4 years (Integrated programme)
Diploma in Technology (Industrial and Applied Biology)	• KCSE Mean Grade C- (minus) with C- (minus) in Biology, D+ (plus) in Maths A and Chemistry.	3 years (Part-time)
Diploma in Technology (Biotechnology)	• KCSE Mean Grade C- (Minus) with C- (Minus) in Biology, D+ (plus) in Maths A and Chemistry.	3 years (Part-time)
Diploma in Technology (Biochemistry)	• KCSE Mean Grade C- (Minus) with C- (Minus) in Biology, D+ (plus) in Maths A and Chemistry	3 years (Part-time)
Diploma in Technology (Ecology and Conservation Biology)	• KCSE Mean Grade C- (minus) with C- (minus) in Biology, D+ (plus) in Maths A and Chemistry.	3 years (Part-time)
Diploma in Technology (Food Science and Technology)	• KCSE Mean Grade C- (minus) with C- (minus) in Biology, Chemistry, Physics/ Maths A and English/Kiswahili	3 years (Integrated programme)
SCHOOL OF COMPUTING AND INFORMATION TECHNOLOGY		
Bachelor of Technology (Information Technology)	• KCSE Mean Grade C+ (plus) with C (Plain) in Maths A	4 years (Integrated programme)
Bachelor of Technology (Computer Technology)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A and Physics	4 years (Integrated programme)
Integrated programmes will be taught during the day on weekdays together with Government-sponsored students Part-time programmes will be taught in the evenings and on weekends		


COURSE TITLE	REQUIREMENTS	DURATION
Bachelor of Technology (Communication and Computer Networks)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A and Physics	4 years (Integrated programme)
Bachelor of Technology in: - • Computer Technology • Information Technology • Communication and Computer Networks.	• KCSE Mean Grade C- (Minus) and Diploma in Technology in Computer Technology or Information Technology or Communication and Computer Networks or equivalent	3 years (TU-K) 7 Semester (TEP) (Part-time)
Diploma in Technology (Information Technology)	• KCSE Mean Grade C- (minus) with C- (minus) in Maths A	3 years (Integrated programme)
Diploma in Technology in: - • Computer Technology • Communication and Computer Networks	• KCSE Mean Grade C- (minus) with C- (minus) in Maths A and Physics	3 years (Integrated programme)
SCHOOL OF CHEMICAL SCIENCE AND TECHNOLOGY		
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 • KCSE Mean Grade C- (Minus) and Diploma in Technology in Analytical/Industrial Chemistry or equivalent	4 years (Integrated programme) 2½ years
Diploma in Technology (Analytical Chemistry)	• KCSE Mean Grade C- (minus) with C- (minus) in Chemistry, D+ (Pus) in Maths A and Physics.	3 years (Integrated programme)
Diploma in Technology (Industrial Chemistry)	• KCSE Mean Grade C- (minus) with C- (minus) in Chemistry, D+ (Pus) in Maths A and Physics.	3 years (Part-time)
SCHOOL OF HEALTH AND BIOMEDICAL SCIENCES		
Bachelor of Technology (Community and Public Health)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Biology, Chemistry, Maths/Physics and English/ Kiswahili	4 years (Integrated programme)
	• KCSE Mean Grade C- (Minus) and Diploma in Technology in Community and Public Health or equivalent	3 years (Part-time)
Diploma in Community and Public Health	• KCSE Mean Grade C- (Minus) with C- (minus) in Biology, Chemistry, Maths/Physics and English/ Kiswahili	3 years (Integrated)
Diploma in Technology (Health Records and Information Technology)	• KCSE Mean Grade C- (minus) with D+ (plus) in Maths A/B	
Bachelor of Science (Nutrition and Dietetics)	• KCSE Mean Grade C+ (Plus) with C+ (Plus) in Biology, Chemistry, Maths/Physics, Geography/ Agriculture/Home Science and English/Kiswahili	4 years (Integrated programme)
Bachelor of Technology (Nutrition and Dietetics)	• KCSE Mean Grade C- (Minus) and Diploma in Technology in Nutrition and Dietetics or equivalent	3 years (Part-time)
Diploma in Nutrition and Dietetics	• KCSE Mean Grade C- (Minus) with D+ (Plus) in Biology, Chemistry, Maths/Physics, Geography/ Agriculture/Home Science and English/Kiswahili Or • Certificate in a related course, with KCSE D+	3 years (Integrated Programme)
Diploma in Pharmaceutical Technology	• KCSE Mean Grade C (plain) with C (Plain) in Biology, Chemistry, Maths/Physics, English/ Kiswahili	3 Year (Integrated full time)
SCHOOL OF MATHEMATICS AND ACTUARIAL SCIENCE		
Bachelor of Science (Actuarial Science)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths and a Pass in any Group II, Group III and Group IV/V • Diploma in Technology in Actuarial Science and KCSE Mean Grade C- (Minus)	4 years (Integrated programme) 3 years Part-time
Bachelor of Technology (Applied Statistics)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A	4 years (Integrated programme)
Bachelor of Science (Mathematics)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A	4 years (Integrated programme)
Diploma in Technology in: - • Applied Statistics • Actuarial Science	• KCSE Mean Grade of C- (Minus) with C- (Minus) in Maths A	3 years (Integrated)
SCHOOL OF PHYSICS AND EARTH SCIENCES		
Bachelor of Technology (Technical and Applied Physics)	• KCSE Mean Grade C+ (plus) with C+ (Plus) in Physics and C (plain) in Maths A OR • KCSE Mean Grade C- (Minus) and Diploma in Technology in Technical and Applied Physics or equivalent	4 years (Integrated programme) 3 years (Part time)
Bachelor of Technology (Environmental Science)	• KCSE mean Grade C+ (plus) with C+ (plus) in Biology and Chemistry • KCSE Mean Grade C- (Minus) and Diploma in Technology in Resource Management or equivalent	4 years (Integrated programme) 3 years (Part-time)
Diploma in Technology (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 an institution recognised by the Senate of TU-K	3 years (Integrated programme)
Diploma in Technology (Technical and Applied Physics)	• KCSE Mean Grade C- (minus) with C- (minus) in Physics, Maths A and Pass in 2 nd Group II, Group III/IV/V	3 years (Integrated programme)
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COURSE TITLE	REQUIREMENTS	DURATION
FACULTY OF SOCIAL SCIENCES AND TECHNOLOGY		
SCHOOL OF BUSINESS AND MANAGEMENT STUDIES		
Bachelor of Science (Accountancy)	<ul style="list-style-type: none"> • KCSE Mean Grade C+ (plus) with C+ (Plus) in Maths A and Eng./Kis. And a Pass in Group III, 2nd Group II/III or Group IV/V • Diploma in Accountancy and KCSE Grade C- (Minus) 	4 years (Integrated programme)
Bachelor of Commerce	• KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B.	3 years (Part-time)
Bachelor of Business Studies	• KCSE Mean Grade C- (Minus) and Diploma in Technology in any business area	4 years (Integrated programme)
Bachelor of Technology (Business Information Technology)	<ul style="list-style-type: none"> • KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B • 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 its equivalent recognised by senate of TU_K together with KCSE Mean Grade C- (Minus) 	3 years (Part-time)
Bachelor of Technology (Office Administration and Technology)	<ul style="list-style-type: none"> • KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B • KCSE Mean Grade C- (Minus) and Diploma in Technology in Secretarial Studies or equivalent 	4 years (Integrated programme)
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).	3 years (Part-time)
Diploma in Entrepreneurship	• KCSE Mean Grade C- (Minus) with D+ (plus) in Maths A/B OR Certificate in Information Technology together with KCSE D+ (Plus).	3 years (Integrated programme)
Diploma in Business Studies: <ul style="list-style-type: none"> • Business Administration • Human Resource Management • Sales and Marketing Management • Procurement and Supply Chain Management 	<ul style="list-style-type: none"> • KCSE Mean Grade C- (Minus) with D+ (plus) in Maths A/B OR: • 1-year Certificate in a relevant area together with KCSE D+ (Plus) 	3 years (Integrated programme)
Diploma in Accountancy	• KCSE Mean Grade C- (minus) with C- (minus) in Maths A and Eng./Kis.	3 years (Part-time)
Diploma in Office Administration: <ul style="list-style-type: none"> • Legal Secretarial • Medical Secretarial • Business Secretarial • Foreign Language Secretarial 	<ul style="list-style-type: none"> • KCSE Mean Grade C- (Minus) with D+ (plus) in Maths A/B OR: • 1-year Certificate in a relevant area together with KCSE D+ (Plus) 	3 years (Part-time)
SCHOOL OF CREATIVE ARTS AND MEDIA		
Bachelor of Technology (Design)	<ul style="list-style-type: none"> • KCSE Mean Grade C+ (plus) with C (plain) in Maths A and a Pass in Physics, Group III, 2nd Group II or 2nd Group III or Group IV/V • KCSE Mean Grade C- (Minus) and Diploma in Technology in Design or equivalent 	4 years (Integrated programme)
Diploma in Technology (Design)	• KCSE mean Grade C- (Minus) with D+(plus) in Maths A and a Pass in Physics, Group III, 2 nd Group II or 2 nd Group III or Group IV/V. Applicants are advised to provide portfolios for verification by the University.	3 years (Part-time)
Bachelor of Technology (Journalism and Mass Communication)	<ul style="list-style-type: none"> • KCSE Mean Grade C+ (plus) with C+ (plus) in Eng./Kis. And a Pass in Maths A/B, or any Group II, Group III, 2nd Group II or 2nd Group III or Group IV/V • KCSE Mean Grade C- (Minus) and Diploma in Technology in Journalism and Mass Communication or its equivalent recognised by senate of TU_K 	4 years (Integrated programme)
Diploma in Technology (Journalism and Mass Communication)	• KCSE Mean Grade C- (minus) with C- (minus) in Eng./Kis. And a Pass in Maths A/B, or any Group II, Group III, 2 nd Group II or 2 nd Group III or Group IV/V	3 years (Part-time)
Bachelor of Music	<ul style="list-style-type: none"> • KCSE Mean Grade C+ (plus) with C+ (plus) in Music • KCSE Mean Grade C- (Minus) and Diploma in Technology in Music or equivalent 	4 years (Integrated programme)
Diploma in Music	<ul style="list-style-type: none"> • KCSE C- (minus) with C- (Minus) in Music and a Pass in Eng./Kis. Maths A/B or any Group II or Group III, 2nd Group II or 2nd Group III of Group IV or Group V. 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. 	2½ years (Integrated programme)
Bachelor of Technology (Printing Technology)	<ul style="list-style-type: none"> • KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B, Physics, English/Kiswahili, Any Group II/IV/V OR • Diploma in Technology in Printing Technology and KCSE Mean Grade C- (Minus) 	4 years (Integrated programme)
Bachelor of Philosophy in Technology (Printing)	• KCSE Mean Grade C- (Minus) and Higher Diploma in Printing Technology or its equivalent recognised by senate of TU-K	3 years (Part-time)
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COURSE TITLE	REQUIREMENTS	DURATION
Diploma in Technology (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+ (Plus)	3 years (Integrated programme)
SCHOOL OF HOSPITALITY AND HUMAN ECOLOGY		
Bachelor of Science (Tourism and Travel Management)	• KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B and a Pass in Eng./Kis., Group II or Group III, a 2 nd Group II/III or any Group IV or Group V	4 years (Integrated programme)
Bachelor of Technology (Tourism and Travel Management)	• 3-year Diploma in Tourism and Travel Management from or Equivalent qualification from another institution recognised by Senate, together with KCSE Mean Grade C- (Minus)	3 years (Part-time)
Bachelor of Science (Hospitality Management)	• KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B and a Pass in Eng./Kis., Group II or Group III, 2 nd Group II or 2 nd Group III or Group IV or Group V	4 years (Integrated programme)
Bachelor of Technology (Hotel and Restaurant Management)	<ul style="list-style-type: none"> • KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B and a Pass in Eng./Kis., Group II or Group III, 2nd Group II or 2nd Group III or Group IV or Group V, OR • KCSE Mean Grade C- (Minus) and Diploma in Technology in Hotel and Restaurant Management or equivalent 	4 years (Integrated programme)
Bachelor of Technology (Institutional Catering and Accommodation Management)	<ul style="list-style-type: none"> • KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B and a Pass in Eng./Kis., Group II or Group III, 2nd Group II or 2nd Group III or Group IV or Group V, OR • KCSE Mean Grade C- (Minus) and Diploma in Technology in Institutional Catering and Accommodation Management or its equivalent recognised by senate of TU-K 	4 years (Integrated programme)
Bachelor of Science (Event and Convention Management)	• KCSE Mean Grade C+ (plus) with a Pass in Eng./Kis., Maths A/B, Group III, Group II or 2 nd Group III or any Group IV or Group V.	3 years (Part-time)
Bachelor of Science (Counselling Psychology)	<ul style="list-style-type: none"> • KCSE Mean Grade C+ (plus) and a Pass in Eng./Kis., Maths A/B or Group II, Group III, 2nd Group II or 2nd Group III or Group IV/V, OR • KCSE Mean Grade C- (Minus) and Diploma in Technology in Counselling Psychology or its equivalent recognised by senate of TU-K 	4 years (Integrated programme)
Bachelor of Technology (Textile Technology)	<ul style="list-style-type: none"> • KCSE Mean Grade C+ (plus) with C+ (plus) in Chemistry, Physics/Maths A, Biology/Home Science, English/Kiswahili or Group III or Group IV/V • Diploma in Technology in Fashion Design and KCSE Mean Grade C- (Minus) 	4 years (Integrated programme)
Diploma in Social Work and Community Development	• KCSE Mean Grade C- (Minus)	3 years (Integrated programme)
Diploma in Counselling Psychology	• KCSE C- (minus) Mean Grade and D+ (plus) in Maths A/Maths B and a Pass in Eng./Kis., Group II or Group III, a 2 nd Group II/III or any Group IV or Group V, OR relevant certificate from an institution recognised by Senate of TU-K, together with KCSE D+ (plus).	3 years (Integrated programme)
Diploma in Technology (Tourism and Travel Management)	• KCSE C- (minus) Mean Grade and D+ (plus) in Maths A/Maths B and a Pass in Eng./Kis., Group II or Group III, 2 nd Group II or 2 nd Group III or Group IV or Group V OR relevant certificate from an institution recognised by Senate of TU-K, together with KCSE D+ (plus).	3 years (Integrated programme)
Diploma in Technology (Event and Convention Management)	• KCSE C- (minus) Mean Grade with a Pass in Eng./Kis., Maths A/B, Group III, Group II or 2 nd Group III or any Group IV or Group V. OR relevant certificate from an institution recognised by Senate of TU-K, together with KCSE D+ (plus).	3 years (Integrated programme)
Diploma in Technology (Hotel and Restaurant Management)	• KCSE C- (minus) Mean Grade and D+ (plus) in Maths A/Maths B and a Pass in Eng./Kis., Group II or Group III, 2 nd Group II or 2 nd Group III or Group IV or Group V OR relevant certificate from an institution recognised by Senate of TU-K, together with KCSE D+ (plus).	3 years (evening) Expect for one practical day
Diploma in Technology (Institutional Catering and Accommodation Management)	• KCSE C- (minus) Mean Grade and D+ (plus) in Maths A/Maths B and a Pass in Eng./Kis., Group II or Group III, 2 nd Group II or 2 nd Group III or Group IV or Group V OR relevant certificate from an institution recognised by Senate of TUK, together with KCSE D+ (plus).	3 years (Integrated programme)
Diploma in Technology (Fashion Design)	• KCSE Mean Grade C- (minus) with D+ (plus) in Chemistry and a Pass in Maths A/B or Physics, BIO or HSC, Eng./Kis. or any Group III or Group IV or Group V OR a one-year relevant certificate with KCSE D+ (Plus)	3 years (Integrated programme)
Diploma in Technology (Textile Technology)	• KCSE Mean Grade C- (minus) with D+ (plus) in Chemistry and a Pass in Maths A/B or Physics, BIO or HSC, Eng./Kis. or any Group III or Group IV or Group V OR a one-year relevant certificate with KCSE D+ (Plus)	3 years (Integrated programme)
Diploma in Technology (Hairdressing and Beauty Therapy)	• KCSE Mean Grade C- (minus) with D+ (plus) in Chemistry and a Pass in Maths A/B or Physics, BIO or HSC, Eng./Kis. or any Group III or Group IV or Group V OR a one-year relevant certificate with KCSE D+ (Plus)	3 years (Integrated programme)
SCHOOL OF INFORMATION AND SOCIAL STUDIES		
Bachelor of Science (Information Science)	• KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B and a Pass in Eng./Kis., Group II/III and 2 nd Group II/III or Group IV or Group V.	4 years (Integrated programme)
Bachelor of Technology (Information Studies)	• KCSE Mean Grade C- (Minus) and Diploma in Technology in Library Information Technology, Archives and Records Management, Information Science or equivalent	3 years (Part-time)
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COURSE TITLE	REQUIREMENTS	DURATION
Diploma in Technology in: - • Archives and Records Management • Library and Information Technology	• KCSE Mean Grade C- (minus) with D+ (plus) in Maths A/B and a Pass in Eng./Kis., Group II/III and 2 nd Group II/III or Group IV or Group V.	3 years (Integrated programme)
Bachelor of Economics	• KCSE Mean Grade C+ (plus) and C+ (plus) in Maths A and a Pass in Eng./Kis., Group III, 2 nd Group II/III or Group IV/V	4 years (Integrated programme)
Bachelor of Arts (International Relations and Diplomacy)	• KCSE Mean Grade C+ (plus) with C+ (plus) in Eng./Kis. and a Pass in Math A/B or Group II, Group III, 2 nd Group II/III or Group IV/V	4 years (Integrated programme)
Diploma in International Relations and Diplomacy	• KCSE Mean Grade C- (Minus) and Diploma in International Relations and Diplomacy or equivalent	3 years (Part-time)
Diploma in Disaster Management	• KCSE Mean Grade C- (Minus) with C- (Minus) in English/Kiswahili a Pass in Math A/B or Group II, Group III, 2 nd Group II/III or Group IV/V	3 years (Part-time)
Diploma in Criminology and Security Studies	• KCSE Mean Grade C- (minus) a Pass in Eng./Kis., Math A/B or Group II, Group III, 2 nd Group II/III or Group IV/V	3 years (Part-time)
Bachelor of Arts (Criminology and Security Management)	• KCSE Mean Grade C+ (Plus) with a Pass in Eng./Kis., Math A/B or Group II, Group III, 2 nd Group II/III or Group IV/V, OR • KCSE Mean Grade C- (Minus) and Diploma in Criminology or equivalent	4 years (Part-time) 2½ years (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 equivalent	3 years (Part-time)

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THE TECHNICAL UNIVERSITY OF KENYA
Education and Training for the Real World
ISO 9001:2015 Certified

COVID-19 CONTAINMENT PROTOCOLS


ENTRY AND EXIT FROM TU-K PREMISES

- All persons entering through the gate must sanitise or handwash; have their body temperature taken, must have face masks properly worn and comply with social distancing requirements at all times.
- Those coming in with vehicles must cooperate to open windows and boots for security checks. Use of exit and entrance gates appropriately is advised.


HEALTH SERVICES

- Meeting venues must be well ventilated.
- Psychosocial/spiritual support is available at the Directorate of Student Services and the Health and Wellness Services.
- Anybody exhibiting Covid-19 related symptoms should report immediately to the Health Services. Calling when one is feeling sick is encouraged through the emergency hotline.


Emergency Hotline
0735 860611



YOUR MOUTH & NOSE
WHEN YOU COUGH OR SNEEZE



PLEASE WASH YOUR HANDS
FOR AT LEAST 20 SECONDS



NO ENTRY
Without A Mask

INTERNAL COMMUNICATION AND SOCIAL ACTIVITIES

- Communication through telephone calls, email and social media is preferred to paper communication.
- All forms of social activities such as games (video, weight lifting) are prohibited.
- All food handling areas must comply with relevant Covid-19 protocols.
- All activities at the Student Centre will be limited to those approved by the Health and Wellness Services. Food handling at Student Centre is prohibited.
- Cleaning/disinfection will follow approved infection control guidelines.
- Unnecessary gatherings are not allowed.
- Frequent hand washing, sanitisation, greeting by waving and proper disposal of masks/gloves in the bins provided is encouraged.

UNIVERSITY HEALTH, SAFETY AND WELLNESS SERVICES

<http://www.tukenya.ac.ke> Education and training for the real world

RESEARCH EXCHANGE



Douglas Kariuki Mundia (left), a Bachelor of Technology in Industrial Chemistry Fourth Year student demonstrate procedures to explore extraction of cellulose from waste materials and value addition to Faith Obange and Dr. Geoffrey Otieno, Director School of Chemistry and Material Science. Obange who is the Lwanda Biotech CEO visited the University recently to explore a possibility of collaboration between the School and his firm.



THE TECHNICAL UNIVERSITY OF KENYA

SCHOOL OF GRADUATE AND ADVANCED STUDIES

POSTGRADUATE DEGREE PROGRAMMES

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 finding solutions to 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 holder of at least an upper second class honours, Bachelor's degree in Statistics of TU-K; or equivalent from another university recognized by the Senate OR A holder of a lower second class honours Bachelor's degree in Statistics of TU-K, or equivalent from another university recognized by Senate with either at least two (2) years of relevant experience or a postgraduate certificate in Statistics and one (1) year of relevant work experience. 	2 years
Master of Science in Mathematics (Pure or Applied Mathematics)	<ul style="list-style-type: none"> A holder of at least an upper second class honours, Bachelor's degree in Mathematics of TU-K; or its equivalent from a university recognised by the Senate of TU-K OR A holder of a lower second class honours Bachelor's degree in Mathematics of TU-K, or equivalent from another university recognized by Senate with either at least two (2) years of relevant experience or a postgraduate certificate in Statistics and one (1) year of relevant work experience. 	2 years
SCHOOL OF BIOLOGICAL AND LIFE SCIENCES		
Master of Science in Applied Parasitology	<ul style="list-style-type: none"> At least a Second Class Honours (Upper Division) degree in Biological or related field of TU-K or its equivalent from a university recognised by the Senate of TU-K OR 	2 years
Master of Science in Forensic Biochemistry	<ul style="list-style-type: none"> Second Class Honours (Lower Division) degree in Biological or related field or its equivalent from a university recognised by the Senate of TU-K with either two (2) years relevant work experience OR a postgraduate diploma in relevant field of biology. 	
Master of Science in Applied Parasitology		
SCHOOL OF HEALTH AND BIOMEDICAL SCIENCES		
Master of Science in Community Nutrition	<ul style="list-style-type: none"> At least a Second Class Honours (Upper Division) degree of TU-K in the relevant field or equivalent from a university recognised by the Senate of TU-K OR At least a Second Class Honours (Lower Division) degree of TU-K or equivalent from a university recognised by the Senate of TU-K; with either at least two (2) years of relevant experience OR relevant Postgraduate Diploma 	2 years
Master of Science in Medical Laboratory Science	<ul style="list-style-type: none"> At least a Second Class Honours (Upper Division) degree of TU-K in the relevant field or equivalent from a university recognised by the Senate of TU-K OR 	2 years
Master of Technology in Applied Entomology	<ul style="list-style-type: none"> At least a Second Class Honours (Lower Division) degree of TU-K or equivalent from a university recognised by the Senate of TU-K; with either at least two (2) years of relevant experience OR relevant Postgraduate Diploma 	
Master of Public Health		
SCHOOL OF PHYSICS AND EARTH SCIENCES		
Master of Technology in Environmental Resource Management	<ul style="list-style-type: none"> At least a Second Class Honours (Upper Division) degree of TU-K in the relevant field or equivalent from a university recognised by the Senate of TU-K OR At least a Second Class Honours (Lower Division) degree of TU-K or equivalent from a university recognised by the Senate of TU-K; with either at least two (2) years of relevant experience OR relevant Postgraduate Diploma 	2 years
Master of Science in Computational Chemistry	<ul style="list-style-type: none"> At least a Second Class Honours (Upper Division) degree of TU-K in the relevant field or equivalent from a university recognised by the Senate of TU-K OR 	2 years
Master of Technology in Petroleum Chemical Technology	<ul style="list-style-type: none"> At least a Second Class Honours (Lower Division) degree of TU-K or equivalent from a university recognised by the Senate of TU-K; with either at least two (2) years of relevant experience OR relevant Postgraduate Diploma 	
Master of Science in Physics		
SCHOOL OF MECHANICAL AND MANUFACTURING ENGINEERING		
Master of Technology (Mechanical Engineering)	<ul style="list-style-type: none"> At least a Second Class (Upper Division) Honours degree or its equivalent from a university recognised by the Senate of TU-K OR Second Class (Lower Division) Honours degree or its equivalent in the relevant discipline 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 	2 years
SCHOOL OF ELECTRICAL AND ELECTRONIC ENGINEERING		
Doctor of Philosophy in Electrical and Electronic Engineering (By Research)	<ul style="list-style-type: none"> A holder of a Master's degree of in the relevant field from Technical University of Kenya, or A holder of a relevant Master's degree from another institution recognised by the Senate of TU-K 	3 years

PROGRAMME	ELIGIBILITY	DURATION
Master of Science in Electrical and Electronic Engineering	<ul style="list-style-type: none"> At least a Second Class Honours (Upper Division) degree of TU-K in the relevant field or equivalent from a university recognised by the Senate of TU-K OR A holder of a lower second class honours Bachelor's degree of TU-K in the relevant field, or equivalent from another university recognized by Senate with either at least two (2) years of relevant experience OR a relevant postgraduate certificate and one (1) year of relevant work experience. 	2 years
SCHOOL OF BUSINESS AND MANAGEMENT STUDIES		
Master of Arts in Entrepreneurship	<ul style="list-style-type: none"> At least a Second Class Honours (Upper Division) degree of TU-K in the relevant field or equivalent from a university recognised by the Senate of TU-K OR 	2 years
Master of Business Administration	<ul style="list-style-type: none"> A holder of a lower second class honours Bachelor's degree of TU-K in the relevant field, or equivalent from another university recognized by Senate with either at least two (2) years of relevant experience OR a relevant postgraduate certificate and one (1) year of relevant work experience. 	
SCHOOL OF INFORMATION AND SOCIAL STUDIES		
Doctor of Philosophy in Information and Knowledge Management	<ul style="list-style-type: none"> A holder of a Master's Degree of Technical University of Kenya in the relevant field; OR A holder of a relevant Master's Degree from another institution recognised by the Senate of TU-K, shown exceptional progress in the research work to merit upgrading. 	3 years
Doctor of Philosophy in Applied Linguistics		
Master of Applied Linguistics	<ul style="list-style-type: none"> At least a Second Class Honours (Upper Division) degree of TU-K in the relevant field or equivalent from a university recognised by the Senate of TU-K OR 	2 years
Master of Science in Information and Knowledge Management	<ul style="list-style-type: none"> A holder of a lower second class honours Bachelor's degree of TU-K in the relevant field, or equivalent from another university recognized by Senate with either at least two (2) years of relevant experience OR a relevant postgraduate certificate and one (1) year of relevant work experience. 	
Master of Science in International Relations	<ul style="list-style-type: none"> At least a Second Class Honours (Upper Division) degree of TU-K in the relevant field or equivalent from a university recognised by the Senate of TU-K OR A holder of a lower second class honours Bachelor's degree of TU-K in the relevant field, or equivalent from another university recognized by Senate with either at least two (2) years of relevant experience OR a relevant postgraduate certificate and one (1) year of relevant work experience. 	2 years
CENTRE FOR SCIENCE AND TECHNOLOGY (CSTS)		
Postgraduate Certificate in Research Methods	<ul style="list-style-type: none"> A holder of at least a first degree of the Technical University of Kenya (TU-K) or equivalent from another recognized university or institution, or any other qualifications recognized by Senate. 	3 months
SCHOOL OF CREATIVE ARTS AND MEDIA		
Master of Music in Music Education or African Music Studies	<ul style="list-style-type: none"> At least a Second Class Honours (Upper Division) degree of TU-K in the relevant field or equivalent from a university recognised by the Senate of TU-K OR 	2 years
Master of Musical Arts in Composition or Performance	<ul style="list-style-type: none"> A holder of a lower second class honours Bachelor's degree of TU-K in the relevant field, or equivalent from another university recognized by Senate with either at least two (2) years of relevant experience OR a relevant postgraduate certificate and one (1) year of relevant work experience. 	2 years

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Personal Care and Hygiene Products on sale



Bioklin hand sanitizer is non-sticky formulated anti-viral and anti-bacterial hand sanitizer rich in moisturizing and sanitising the skin free of germs.

Tukleen general purpose detergent is a multi-purpose cleaning detergent with a wide range of applicability in washing of household utensils, houses, offices, warehouses, fabric, glasses, cars and other surfaces that can be exposed to wet treatment.

Tukleen handwash is non-sticky formulated anti-viral and anti-bacterial hand wash soap rich in moisturizing the skin.

These products are available in quantities of 50ml, 100ml, 500ml, 5 litres and 20 litres with the smallest of the hand sanitizer selling as little as Sh100 with non-perfumed preference.



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

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