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
Education and training for the real world

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**FACULTY OF ENGINEERING SCIENCES AND TECHNOLOGY**
1. School of Architecture and the Built Environment
2. School of Electrical and Electronic Engineering
3. School of Infrastructure and Resource Engineering
4. School of Mechanical and Process Engineering
5. School of Surveying and Geospatial Sciences
6. Centre for Engineering Innovation and Production

**FACULTY OF APPLIED SCIENCES AND TECHNOLOGY**
1. School of Biological and Life Sciences
2. School of Computing and Information Technologies
3. School of Health Sciences and Technology
4. School of Mathematics and Actuarial Science
5. School of Physical Sciences and Technology
6. Centre for Science and Technology Studies

**FACULTY OF SOCIAL SCIENCES AND TECHNOLOGY**
1. School of Business and Management Studies
2. School of Creative Arts and Technologies
3. School of Hospitality and Tourism Studies
4. School of Information and Communication Studies
5. School of Social and Development Studies
6. Centre for Creative and Cultural Industries
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!
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)

Mr. Bernard Malenya

Hon. David Kibet Koech

Dr. Angelina Awino Kinya

FA. Alexander Mwanthi
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 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 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.
ORIENTATION

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 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 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 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
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.

Student loans

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.

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.’

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 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.

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.
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 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.
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.

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.fco.gov.uk/about-us/scholarships/
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 availed, 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 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.

“"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
ANTI-PLAGIARISM

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.

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 Ayum Teye 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 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.

Dr. Sarah Kibugi
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 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 worldwide 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.

### University Rankings

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<tr>
<th>University</th>
<th>Kenya Rank</th>
<th>Africa Ranking</th>
<th>World Ranksort Descending</th>
<th>Presence Rank</th>
<th>Impact Rank</th>
<th>Openness Rank</th>
<th>Excellence Rank</th>
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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.

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 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.
COVID-19 RESPONSE

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 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.

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.
KEBS certifies sanitisers, detergents

The Kenya Bureau of Standards (KEBS) has approved TU-K’s hand sanitizers and cleaning detergents to help in combating the spread of coronavirus (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 rations 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.
COVID-19 RESPONSE

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.

Prof. Yole joins Covid-19 Global College of Experts

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 Depart 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.
COVID-19 RESPONSE

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

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 Nabukwesi, 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-Kenyaatta 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, SDEU&R and Mr. Evans Atambo, ADE- SDEU&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 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). 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 (KOBS), 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

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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

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 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 Intellectual 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. Ellyjoy 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. Aduel 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.
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 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.
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:

### SCHOOL OF ARCHITECTURE AND SPATIAL PLANNING

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<tr>
<td>Bachelor of Architectural Studies</td>
<td>• KCSE Mean Grade C+ (plus) with C (Plain) in Maths, Physics and Eng./Kis.</td>
<td>4 years (B.Arch)</td>
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<tr>
<td>Bachelor of Architecture</td>
<td>• KCSE Mean Grade C (Plain) together with C (Plain) in Maths, Physics and Eng./Kis.</td>
<td>2 years (B. Arch)</td>
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### SCHOOL OF AEROSPACE AND AVIATION ENGINEERING

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<td>Bachelor of Engineering</td>
<td>• KCSE Mean Grade C+ (plus) with C (Plain) in Maths, Physics, Chemistry and Eng./Kis.</td>
<td>5 years (Integrated programme)</td>
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<td>Diploma in Technology: Aeronautical Engineering</td>
<td>• KCSE Mean Grade C (Plain) with at least C (plain) in Maths, Physics, Chemistry and English (Kiswahili)</td>
<td>3 years (Integrated programme)</td>
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### SCHOOL OF CHEMICAL AND BIOLOGICAL SYSTEM ENGINEERING

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<td>Bachelor of Engineering (Chemical Engineering)</td>
<td>• KCSE Mean Grade C+ (plus) with C (Plain) in Maths, Physics, Chemistry and Eng./Kis.</td>
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<tr>
<td>Bachelor of Engineering Technology (Chemical Engineering Technology)</td>
<td>• KCSE Mean Grade C- (Minus) with at least C (plain) in Maths, Physics, Chemistry and English (Kiswahili)</td>
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### SCHOOL OF CONSTRUCTION AND PROPERTY STUDIES

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<td>Bachelor of Built Environment (Construction Management)</td>
<td>• KCSE Mean Grade C (Plain) with C (Plain) in Maths and Pass in Physics, Eng./Kis. And 2nd Group II/Group III/IV</td>
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<td>Diploma in Technology: Quantity Surveying</td>
<td>• Diploma in Technology in Quantity Surveying, Building Construction, Civil Engineering, Architecture (for Diploma in Building Construction, Civil Engineering)</td>
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<tr>
<td>Diploma in Technology: Quantity Surveying</td>
<td>• Diploma in Quantity Surveying, Building Construction, Civil Engineering, Architecture, Quantity Surveying or equivalent with at least 2 years of relevant work experience</td>
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### SCHOOL OF CIVIL AND RESOURCE ENGINEERING

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<td>Bachelor of Engineering (Civil Engineering)</td>
<td>• KCSE Mean Grade C+ (plus) with C (Plain) in Maths, Physics, Chemistry and Eng./Kis.</td>
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### SCHOOL OF TECHNOLOGY AND THE BUILD ENVIRONMENT TECHNOLOGY

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<tr>
<td>Bachelor of Quantity Surveying</td>
<td>• KCSE Mean Grade C+ (plus) with C (Plain) in Maths, Physics and Eng./Kis. And a Pass in 2nd Group II/Group III/IV.</td>
<td>4 years (Integrated programme)</td>
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<tr>
<td>Bachelor of Technology (Building Construction)</td>
<td>• KCSE Mean Grade C+ (plus) with C+ (plus) in Maths and Physics together with a Pass in 2nd Group II/Group III/IV 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,</td>
<td>4 years (Integrated programme)</td>
</tr>
<tr>
<td>Bachelor of Engineering (Civil Engineering)</td>
<td>• KCSE Mean Grade C+ (plus) with C (Plain) in Maths and a Pass in Eng./Kis., Group II/III/IV.</td>
<td>3 years (Part-time or evening)</td>
</tr>
<tr>
<td>Bachelor of Real Estate</td>
<td>• KCSE Mean Grade C+ (plus) with C (Plain) in Maths and a Pass in Eng./Kis., Group II/III/IV.</td>
<td>4 years (Integrated programme)</td>
</tr>
<tr>
<td>Diploma in Technology (Real Estate)</td>
<td>• KCSE Mean Grade C (Plain) together with at least C (Plain) in Maths, Physics, Chemistry and Eng./Kis.</td>
<td>3 years (Integrated programme)</td>
</tr>
</tbody>
</table>

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.
<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>REQUIREMENTS</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Engineering Technology (Civil Engineering)</td>
<td>• 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.</td>
<td>5 years (Part-Time)</td>
</tr>
<tr>
<td>Diploma in Technology (Civil Engineering)</td>
<td>• KCSE Mean Grade C (Plus) with at least C (plus) in Maths, Physics and English/Kiswahili or Certificate in Civil or Water Engineering.</td>
<td>3 years (Part-Time)</td>
</tr>
<tr>
<td>Bachelor of Engineering Technology (Electrical and Electronics Engineering)</td>
<td>• Higher Diploma in Technology in Electrical and Electronic Engineering Technology or its equivalent recognized by Senate of TU-K or TEP Diploma in the above disciplines.</td>
<td>3 years (Part-Time)</td>
</tr>
<tr>
<td>Diploma in Technology (Electrical and Electronics Engineering)</td>
<td>• KCSE Mean Grade C (plus) with at least C (plus) in Maths, Physics, Chemistry and English/Kiswahili.</td>
<td>3 years (Part-Time)</td>
</tr>
<tr>
<td>Bachelor of Engineering Technology (Mechanical Engineering Technology)</td>
<td>• KCSE Mean Grade C (minus) and Diploma in Technology in Mechanical Engineering Technology.</td>
<td>3 years (Part-Time)</td>
</tr>
<tr>
<td>Diploma in Technology (Mechanical Engineering Technology)</td>
<td>• KCSE Mean Grade C (plus) with at least C (plus) in Maths, Physics, Chemistry and English/Kiswahili.</td>
<td>3 years (Part-Time)</td>
</tr>
<tr>
<td>Bachelor of Science (Geospatial and Geoinformatics Sciences)</td>
<td>• KCSE Mean Grade C (plus) with Cplus (plus) in Maths, Physics and C (plain) in Geography</td>
<td>5 years (Integrated Programme)</td>
</tr>
<tr>
<td>Bachelor of Applied Science (Geospatial Information and Communication)</td>
<td>• KCSE Mean Grade C (plus) with Cplus (plus) in Maths, Physics and C (plain) in Geography</td>
<td>5 years (Integrated Programme)</td>
</tr>
<tr>
<td>Bachelor of Technology (Surveying Technology)</td>
<td>• KCSE Mean Grade C (plus) with Cplus (plus) in Maths, Physics and C (plain) in Geography.</td>
<td>4 years (Part-Time)</td>
</tr>
<tr>
<td>Bachelor of Technology (Geoinformation Technology)</td>
<td>• KCSE Mean Grade C (plus) in Maths, C (plain) in Physics and C (plain) in Geography.</td>
<td>4 years (Part-Time)</td>
</tr>
<tr>
<td>Bachelor of Science (Land Administration)</td>
<td>• KCSE Mean Grade C (plus) and Diploma in Surveying or Cartography with Mean Grade D (plus).</td>
<td>3 years (Integrated programme)</td>
</tr>
<tr>
<td>Diploma in Technology in Geoinformation Technology</td>
<td>• KCSE Mean Grade C (plus) and Diploma in Technology in Geoinformation Technology.</td>
<td>3 years (Integrated programme)</td>
</tr>
<tr>
<td>Diploma in Technology in Surveying Technology</td>
<td>• KCSE Mean Grade C (plus) and Diploma in Technology in Surveying Technology or equivalent.</td>
<td>3 years (Integrated programme)</td>
</tr>
<tr>
<td>Bachelor of Technology (Industrial and Applied Physics)</td>
<td>• KCSE Mean Grade C (plus) with Cplus (plus) in Physics and C (plain) in Maths.</td>
<td>6 years (Integrated programme)</td>
</tr>
<tr>
<td>Bachelor of Technology (Biology)</td>
<td>• KCSE Mean Grade C (plus) with Cplus (plus) in Biology and C (plain) in Maths.</td>
<td>5 years (Part-Time)</td>
</tr>
<tr>
<td>Bachelor of Technology (Food Science and Technology)</td>
<td>• KCSE Mean Grade C (plus) with Cplus (plus) in Biology, Chemistry, Physics and English/English as a Second Language.</td>
<td>4 years (Integrated programme)</td>
</tr>
<tr>
<td>Bachelor of Science (Biochemistry)</td>
<td>• KCSE Mean Grade C (minus) and Diploma in Technology in Biochemistry or equivalent.</td>
<td>3 years (Part-Time)</td>
</tr>
<tr>
<td>Bachelor of Technology (Bionotechnology)</td>
<td>• KCSE Mean Grade C (plus) with Cplus (plus) in Biology, C (plain) in Maths and C (plain) in Chemistry.</td>
<td>3 years (Part-Time)</td>
</tr>
<tr>
<td>Diploma in Technology (Bionotechnology)</td>
<td>• KCSE Mean Grade C (plus) with Cplus (plus) in Biology, C (plain) in Maths and C (plain) in Chemistry.</td>
<td>3 years (Part-Time)</td>
</tr>
<tr>
<td>Bachelor of Technology in Biosafety</td>
<td>• KCSE Mean Grade C (plus) with Cplus (plus) in Biology, C (plain) in Maths and C (plain) in Chemistry.</td>
<td>3 years (Part-Time)</td>
</tr>
<tr>
<td>Bachelor of Technology (Environmental Science)</td>
<td>• KCSE Mean Grade C (plus) with Cplus (plus) in Biology, C (plain) in Maths and C (plain) in Chemistry.</td>
<td>3 years (Part-Time)</td>
</tr>
<tr>
<td>Bachelor of Technology (Information Technology)</td>
<td>• KCSE Mean Grade C (plus) with Cplus (plus) in Biology, C (plain) in Maths and C (plain) in Chemistry.</td>
<td>3 years (Part-Time)</td>
</tr>
<tr>
<td>Bachelor of Technology (Computer Technology)</td>
<td>• KCSE Mean Grade C (plus) with Cplus (plus) in Biology, C (plain) in Maths and C (plain) in Chemistry.</td>
<td>3 years (Part-Time)</td>
</tr>
</tbody>
</table>
Bachelor of Science (Accountancy)
- KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B and Eng./Kis.
- Diploma in Accounting and KCSE Grade C (Minus)
  4 years (Integrated programme)

Bachelor of Commerce
- KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B
  4 years (Part-time)

Bachelor of Business Studies
- KCSE Mean Grade C (minus) and Diploma in Technology in any business area
  4 years (Part-time)

Bachelor of Technology (Business Information Technology)
- KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B
  4 years (Integrated programme)

Bachelor of Technology (Office Administration and Technology)
- KCSE Mean Grade C (minus) and Diploma in Technology in any business area
  4 years (Part-time)

Bachelor of Technology (Printing Technology)
- KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B, Physics, English/Kiswahili
  Any Group IV/IV OR

Bachelor of Philosophy in Technology (Printing)
- KCSE Mean Grade C (minus) and Diploma in Technology in any business area
  4 years (Part-time)

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 IV OR Group II or Group IV OR Group II
  4 years (Integrated programme)

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 IV OR Group II or Group IV OR Group II
  4 years (Integrated programme)

Bachelor of Science (Hotel and Restaurant Management Technology)
- KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B
  4 years (Part-time)

Bachelor of Technology (Institutional Catering and Accommodation Management)
- KCSE Mean Grade C (minus) and Diploma in Technology in Institutional Catering and Accommodation Management or its equivalent recognized by Senate of TU-K

Diploma in Business Information Technology
- KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B OR Certificate in Information Technology together with KCSE D+ (plus)
  4 years (Integrated programme)

Diploma in Entrepreneurship
- KCSE Mean Grade C (Minus) with Diploma in Technological Studies or equivalent
  3 years (Part-time)

Diploma in Business Studies: Business Administration
- KCSE Mean Grade C (minus) with Diploma in Technological Studies or equivalent

Diploma in Accounting
- KCSE Mean Grade C (minus) with C (plain) in Maths A/B and Eng./Kis.
  3 years (Part-time)

Diploma in Office Administration: Legal Secretarial
- KCSE Mean Grade C (minus) with C (plain) in Maths A/B OR Certificate in a relevant area together with KCSE D+ (plus)

Diploma in Technology (Catering and Accommodation Management)
- KCSE Mean Grade C+ (plus) with C (plain) in Maths A/B OR Pass in Eng./Kis., Group II or Group IV OR Group II or Group IV OR Group II
  4 years (Integrated programme)

Diploma in Social Work and Community Development
- KCSE Mean Grade C (Minus)
  3 years (Integrated programme)

Diploma in Computer Forensics
- KCSE Mean Grade C (minus) with C (plain) in Maths A/B OR Diploma in Technology in Design or equivalent
  3 years (Part-time)

Diploma in Technology (Design)
- KCSE Mean Grade C (minus) with D (plus) in Maths A/B OR Diploma in Technology in Design or equivalent
  3 years (Part-time)

Diploma in Technology (Journalism and Mass Communications)
- KCSE Mean Grade C (minus) with C (plain) in Eng./Kis. OR Diploma in Technology in Design or equivalent
  3 years (Part-time)

Diploma in Technology (Chemistry)
- KCSE Mean Grade C (minus) with C (plain) in Eng./Kis. OR Diploma in Technology in Design or equivalent
  3 years (Part-time)

Diploma in Technology (Food Preparation and Service)
- KCSE Mean Grade C (minus) with C (plain) in Eng./Kis. OR Diploma in Technology in Design or equivalent
  3 years (Part-time)

Diploma in Music
- KCSE Mean Grade C (minus) with C (plain) in Maths A/B
  4 years (Part-time)

Diploma in Music
- KCSE C- (minus) with C (minus) in Music and a Pass in Eng./Kis. OR Diploma in Technology in Design or equivalent
  4 years (Part-time)

Diploma in Technology (Library and Information Science)
- KCSE Mean Grade C (minus) and Diploma in Technology in Design or equivalent
  3 years (Part-time)

Diploma in Technology (Library and Information Science)
- KCSE Mean Grade C (minus) with C (plain) in Maths A/B and a Pass in Eng./Kis., Group II or Group IV OR Group II or Group IV OR Group II
  4 years (Integrated programme)

Diploma in Technology (Library and Information Science)
- KCSE Mean Grade C (minus) and Diploma in Technology in Design or equivalent
  3 years (Part-time)

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- KCSE Mean Grade C (minus) with C (plain) in Maths A/B and a Pass in Eng./Kis., Group II or Group IV OR Group II or Group IV OR Group II
  4 years (Integrated programme)

Diploma in Technology (Library and Information Science)
- KCSE Mean Grade C (minus) and Diploma in Technology in Design or equivalent
  3 years (Part-time)
### COURSE TITLE REQUIREMENTS DURATION

**Diploma in Technology in:**
- Library and Information Technology

**Bachelor of Economics:**
- KCSE Mean Grade C-(Minus) with D+ (plus) in Eng./Kis., Group III, 2nd Group IV or Group V

**Bachelor of Arts (International Relations and Diplomacy):**
- KCSE Mean Grade C-(Minus) with D+ (plus) in Eng./Kis., and a Pass in Math A/B or Group IV, Group III, 2nd Group IV or Group V

**Diploma in International Relations and Diplomacy:**
- KCSE Mean Grade C-(Minus) with Diploma in International Relations and Diplomacy or equivalent

**Diploma in Disaster Management:**
- KCSE Mean Grade C-(Minus) and Diploma in Disaster Management

**Diploma in Criminology and Security Studies:**
- KCSE Mean Grade C-(Minus) or Diploma in Criminology, Criminal Justice or Crime Prevention or equivalent

**Bachelor of Arts (Criminology and Security Management):**
- KCSE Mean Grade C-(Minus) or Diploma in Criminology together with Certificate in Crime Investigation, Disaster Management, Criminal Justice or Crime Prevention or equivalent

**Diploma in Legal Studies:**
- KCSE Mean Grade C-(Plus) with C+(Plus) in Eng./Kiswahili OR KCSE Mean Grade C-(Minus) and Diploma in Criminal Justice or equivalent

Integrate 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.

---

**The Technical University of Kenya**

**Education and training for the real world**

ISO 9001:2015 Certified

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**COVID-19 CONTAINMENT PROTOCOLS**

**ENTRY AND EXIT FROM TU-K PREMISES**

- All persons entering through the gate must sanitise or hose down; 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.

**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.
- Cleansing/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.

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**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.

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TUKNEWS September - December 2020
## 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:

### SCHOOL OF BIOLOGICAL AND LIFE SCIENCES
- **Master of Science in Applied Parasitology**
- **Master of Science in Forensic Biochemistry**
- **Master of Science in Linguistics**
- **Master of Science in Performance Arts in Composition or Research**

### SCHOOL OF MATHEMATICS AND ACTUARIAL SCIENCE
- **Master of Science in Applied Statistics**
- **Master of Science in Mathematics (Pure or Applied Mathematics)**
- **Master of Science in Actuarial Science**
- **Master of Science in Mathematical Statistics**

### SCHOOL OF MECHANICAL AND MANUFACTURING ENGINEERING
- **Master of Science in Mechanical Engineering**
- **Master of Science in Petroleum Chemical Technology**

### SCHOOL OF TECHNOLOGY AND INFORMATION MANAGEMENT
- **Master of Science in Information and Communication Technology**
- **Master of Science in Information Systems Management**

### SCHOOL OF INNOVATION AND SOCIAL STUDIES
- **Master of Arts in Development and Community Planning**
- **Master of Arts in Development Studies**

### SCHOOL OF MANAGEMENT AND BUSINESS
- **Master of Science in Innovation Management**
- **Master of Science in Public Administration**

### SCHOOL OF ENGINEERING AND TECHNOLOGY
- **Master of Science in Electrical and Electronic Engineering**
- **Master of Science in Mechanical Engineering**

### SCHOOL OF INFORMATION AND COMMUNITY SERVICES
- **Master of Arts in Information Management**
- **Master of Science in International Relations**
- **Master of Science in Linguistics**

### SCHOOL OF TECHNOLOGY AND INNOVATION
- **Master of Science in Nanotechnology**
- **Master of Science in Robotics**

### SCHOOL OF HEALTH AND BIOLOGICAL SCIENCES
- **Master of Science in Community Nutrition**
- **Master of Science in Medical Laboratory Science**
- **Master of Science in Applied Parasitology**

### SCHOOL OF PHYSICS AND EARTH SCIENCES
- **Master of Science in Environmental Resource Management**
- **Master of Science in Geophysics**

### SCHOOL OF CREATIVE ARTS AND MEDIA
- **Master of Arts in Music Education or African Music Studies**
- **Master of Science in Arts Composition or Performance**

### PROGRAMME ELIGIBILITY DURATION

<table>
<thead>
<tr>
<th>Programme</th>
<th>Eligibility</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Science in Biological and Forensic Science</td>
<td>At least a Second Class Honours (Upper Division) degree in Biological or Forensic Science</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Community Nutrition</td>
<td>At least a Second Class Honours (Upper Division) degree in Biological or Forensic Science</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Medical Laboratory Science</td>
<td>At least a Second Class Honours (Upper Division) degree in Biological or Forensic Science</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Applied Parasitology</td>
<td>At least a Second Class Honours (Upper Division) degree in Biological or Forensic Science</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Applied Statistics</td>
<td>At least a Second Class Honours (Upper Division) degree in Statistics or equivalent from another university recognized by the Senate of TU-K or equivalent from a university recognized by the Senate of TU-K with either at least two (2) years of relevant experience or a postgraduate certificate in Statistics and one (1) year of relevant work experience</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Mathematics (Pure or Applied Mathematics)</td>
<td>At least a Second Class Honours (Upper Division) degree in Mathematics or equivalent from a university recognized by the Senate of TU-K</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Applied Mathematics</td>
<td>At least a Second Class Honours (Upper Division) degree in Mathematics or equivalent from a university recognized by the Senate of TU-K with either at least two (2) years of relevant experience or a postgraduate certificate in Mathematics and one (1) year of relevant work experience</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Forensic Biochemistry</td>
<td>At least a Second Class Honours (Upper Division) degree in Forensic Biochemistry or equivalent from another university recognized by the Senate of TU-K</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Applied Polytechnics</td>
<td>At least a Second Class Honours (Upper Division) degree in Applied Polytechnics or equivalent from a university recognized by the Senate of TU-K</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Applied Parasitology</td>
<td>At least a Second Class Honours (Upper Division) degree in Applied Parasitology or equivalent from a university recognized by the Senate of TU-K</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Molecular Biology</td>
<td>At least a Second Class Honours (Upper Division) degree in Molecular Biology or equivalent from a university recognized by the Senate of TU-K</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Community Nutrition</td>
<td>At least a Second Class Honours (Upper Division) degree in Community Nutrition</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Medical Laboratory Science</td>
<td>At least a Second Class Honours (Upper Division) degree in Medical Laboratory Science</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Applied Parasitology</td>
<td>At least a Second Class Honours (Upper Division) degree in Applied Parasitology</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Environmental Resources Management</td>
<td>At least a Second Class Honours (Upper Division) degree in Environmental Resources Management</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Geophysics</td>
<td>At least a Second Class Honours (Upper Division) degree in Geophysics</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Electrical and Electronic Engineering</td>
<td>At least a Second Class Honours (Upper Division) degree in Electrical and Electronic Engineering</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Mechanical Engineering</td>
<td>At least a Second Class Honours (Upper Division) degree in Mechanical Engineering</td>
<td>2 years</td>
</tr>
<tr>
<td>Master of Science in Petroleum Chemical Technology</td>
<td>At least a Second Class Honours (Upper Division) degree in Petroleum Chemical Technology</td>
<td>2 years</td>
</tr>
<tr>
<td>Doctor of Philosophy in Electrical and Electronic Engineering (Electrical)</td>
<td>At least a Second Class Honours (Upper Division) degree in Electrical and Electronic Engineering (Electrical)</td>
<td>2 years</td>
</tr>
</tbody>
</table>

### SCHOOL OF BUSINESS AND MANAGEMENT STUDIES
- **Master of Science in Business Administration**
- **Master of Science in Business Management**
- **Master of Science in Business Information Technology**

### SCHOOL OF INFORMATION AND COMMUNITY SERVICES
- **Master of Science in Information and Communication Technology**
- **Master of Science in Information Systems Management**

### SCHOOL OF TECHNOLOGY AND INNOVATION
- **Master of Science in Nanotechnology**
- **Master of Science in Robotics**

### SCHOOL OF ENGINEERING AND TECHNOLOGY
- **Master of Science in Electrical and Electronic Engineering**
- **Master of Science in Mechanical Engineering**

### SCHOOL OF HEALTH AND BIOLOGICAL SCIENCES
- **Master of Science in Community Nutrition**
- **Master of Science in Medical Laboratory Science**
- **Master of Science in Applied Parasitology**

### SCHOOL OF PHYSICS AND EARTH SCIENCES
- **Master of Science in Environmental Resources Management**
- **Master of Science in Geophysics**

### SCHOOL OF CREATIVE ARTS AND MEDIA
- **Master of Science in Performance Arts in Composition or Research**

### SCHOOL OF TECHNOLOGY AND INNOVATION
- **Master of Science in Nanotechnology**
- **Master of Science in Robotics**

### SCHOOL OF ENGINEERING AND TECHNOLOGY
- **Master of Science in Electrical and Electronic Engineering**
- **Master of Science in Mechanical Engineering**

### SCHOOL OF HEALTH AND BIOLOGICAL SCIENCES
- **Master of Science in Community Nutrition**
- **Master of Science in Medical Laboratory Science**
- **Master of Science in Applied Parasitology**

### SCHOOL OF PHYSICS AND EARTH SCIENCES
- **Master of Science in Environmental Resources Management**
- **Master of Science in Geophysics**

### SCHOOL OF CREATIVE ARTS AND MEDIA
- **Master of Science in Performance Arts in Composition or Research**

### SCHOOL OF TECHNOLOGY AND INNOVATION
- **Master of Science in Nanotechnology**
- **Master of Science in Robotics**

### SCHOOL OF ENGINEERING AND TECHNOLOGY
- **Master of Science in Electrical and Electronic Engineering**
- **Master of Science in Mechanical Engineering**
**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.