DEDAN KIMATHI UNIVERSITY OF TECHNOLOGY

UNIVERSITY

Souvenir Magazine



18th Graduation Ceremony

Souvenir Magazine

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MESSAGE
FROM THE CHANCELLOR



General (Rtd) Dr. Julius Waweru Karangi
EGH, CBS, DCO, LOM
Chancellor, DeKUT

On behalf of the entire Dedan Kimathi University of Technology community, I extend my heartiest congratulations to our graduating class. Today, we recognize not only your academic success but also the strength, resilience, and commitment that have carried you through this transformative journey.

As you turn the page to a new chapter, I wish you every success in the paths you choose to follow—be it further studies, professional pursuits, or personal ventures. The education and experience you've gained at DeKUT have equipped you with a solid platform to thrive and make a meaningful impact.

I encourage you to step into the future with courage, purpose, and the highest ethical standards. As ambassadors of DeKUT, let your actions reflect the values we hold dear—innovation, research-driven thinking, service to society, and a passion for excellence. These guiding principles will serve you well as you contribute to your communities and professions.

Congratulations once again on this exceptional accomplishment. May your journey ahead be rewarding, purpose-driven, and filled with opportunities to shine. We are proud of you and excited to see the difference you will make in the world.

Congratulations, Class of 2025!

MESSAGE
FROM THE COUNCIL CHAIRMAN



Dr. James Kariuki,
Council Chairman, DeKUT

On behalf of the University Council, it is my great pleasure to welcome you to this special edition celebrating the 18th Graduation Ceremony of Dedan Kimathi University of Technology (DeKUT). This day marks a proud moment in our University's journey and, most importantly, a monumental milestone in the lives of our graduands.

This year's graduation is not just a celebration of academic achievement—it is a reflection of the resilience, innovation, and excellence that define the DeKUT community. We applaud our students for their unwavering dedication and commend our faculty, staff, parents, and partners for the roles they have played in this collective success.

Our recognition among the Top 10 best-performing public institutions in Kenya and the second-best public university is a testament to our focus on integrity, transparency, and service excellence.

To the Class of 2025, I extend my heartiest congratulations. You are now equipped not only with academic credentials but also with the knowledge, skills, and values to shape industries, create impact, and drive positive change. May your journey ahead be defined by purpose, innovation, and service to humanity.

Congratulations once again to the Class of 2025!

MESSAGE FROM THE VICE CHANCELLOR



Prof. Eng. Peter. N. Muchiri, EBS
Vice Chancellor, DeKUT

It is with immense pride and joy that I welcome you to this 18th Graduation Magazine, commemorating a momentous occasion in the lives of our graduands and the history of Dedan Kimathi University of Technology (DeKUT). As we celebrate the Class of 2025, we recognize not only their academic achievements but also the resilience, dedication, and innovative spirit that have defined their journey at DeKUT.

This year marks a milestone in our academic excellence and global recognition. Our Bachelor of Science in Mechatronics Engineering programme received the prestigious Washington Accord Accreditation, placing DeKUT among a select group of institutions on the continent offering world-class engineering education. Furthermore, the Engineers Board of Kenya has formally recognized our Chemical Engineering and Telecommunication and Information Engineering programmes, reaffirming our commitment to industry-aligned, high-quality education.

At DeKUT, we believe in the power of collaboration. Our strong ties with industry—evident in partnerships with KenGen, GDC, and others—have positioned us as a leader in producing innovation-driven, career-ready graduates. From pioneering geothermal energy programmes to redefining technical and vocational education through continental initiatives like SIFA and TVETA, DeKUT continues to lead by example in bridging academia and industry.

We remain dedicated to equipping our students with future-ready skills through initiatives such as the Rapid Tech Skills Training Program and SKIES. Our graduates are prepared to excel in dynamic fields such as AI, Data Science, and Cybersecurity—ready to lead in a rapidly evolving global landscape.

To the Class of 2025, congratulations on your outstanding achievement. You are now part of a proud legacy—ambassadors of a university that stands for integrity, innovation, and impact. As you step into the world, carry forward the spirit of DeKUT. Go forth and lead change with confidence, courage, and compassion.

May your future be bright, and may your success inspire generations to come.

Congratulations, Class of 2025!

DeKUT Nominated as Best Performing Institution by the Public Service Commission



Dedan Kimathi University of Technology has received a prestigious national recognition, having been ranked as the Best Performing Institution by the Public Service Commission (PSC) in its annual "Values and Principles Report". This notable accolade affirms the University's unwavering commitment to upholding constitutional values and principles as enshrined in Articles 10 and 232 of the Constitution of Kenya, 2010.

The PSC's comprehensive evaluation focused on key performance indicators such as human resource management, public service delivery, ethical governance, and institutional accountability. DeKUT emerged as a standout institution, demonstrating excellence in embracing inclusivity, fostering integrity, and promoting transparency and accountability across all operational levels. These values are central to ensuring that public institutions serve the needs of Kenyan citizens with dedication and professionalism.

DeKUT's consistent investment in human capital, institutional capacity building, and governance reforms significantly earned this recognition. The University has made considerable strides in strengthening its research and innovation ecosystem, which has elevated academic standards and contributed to advancing national development goals. The institution's emphasis on strategic planning, ethical leadership, and stakeholder engagement has fostered a strong performance and service excellence culture.

Furthermore, DeKUT's adoption of modern administrative systems and digital solutions has enhanced the efficiency of service delivery to students, staff, and the wider community. By aligning its policies with national development agendas and the Constitution's vision for public service, the University continues to demonstrate how institutions of higher learning can serve as benchmarks for good governance and sustainable development.

This recognition also highlights the collaborative efforts of the entire DeKUT community — from the dedicated faculty and administrative staff to the proactive student body and visionary leadership. Their combined efforts have cultivated an environment that supports academic excellence, innovation, and societal impact.

As DeKUT continues to grow and evolve, this honour from the Public Service Commission is a testament to its leadership in higher education and public sector transformation. The University remains committed to setting high public service standards while nurturing future leaders who will champion integrity, accountability, and national progress.

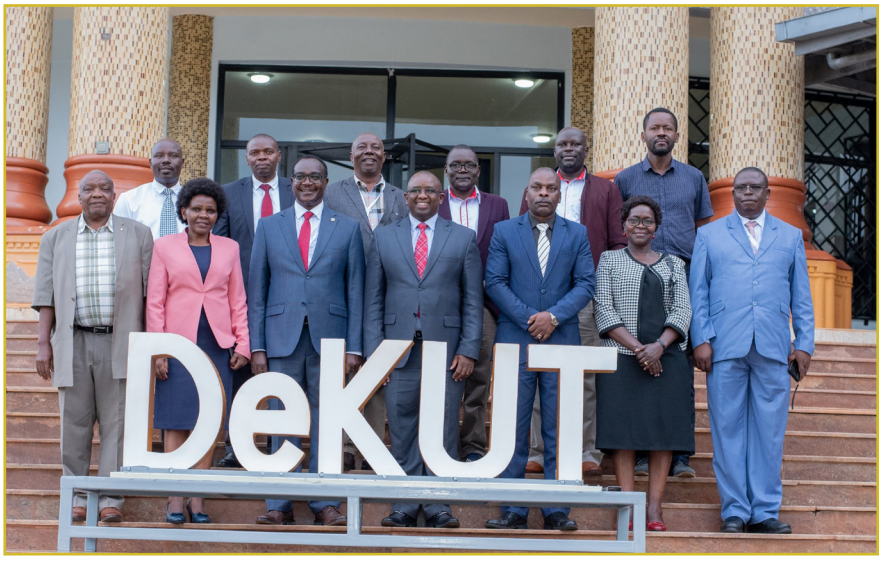
The Cabinet Secretary, Ministry of Education, Commends DeKUT for Advancing Technical Education and Innovation

The Cabinet Secretary for Education, Hon. Julius Ogamba, recently paid a courtesy visit to DeKUT, reaffirming the government's strong commitment to advancing technical education and innovation nationwide.

During his visit, the Cabinet Secretary addressed Principals of Technical and Vocational Education and Training (TVET) institutions at the Industrial Metaverse Stakeholders Workshop, held at DeKUT. The workshop, themed "Leveraging Digital Tools and 4IR Technologies to Enhance TVET Skills Development and Innovation as a Post-COVID-19 Resilience Strategy," brought together key stakeholders to explore how cutting-edge technologies—such as the Industrial Metaverse, Artificial Intelligence (AI), and the Internet of Things (IoT)—can revolutionize TVET training and equip learners with future-ready skills.

The Cabinet Secretary emphasized that institutions like DeKUT play a critical role in transforming Kenya's education system to meet the digital economy's demands. He noted that fostering innovation and adopting emerging technologies is essential for producing a skilled workforce capable of driving national development and industrial growth.





Prior to the workshop, the Cabinet Secretary toured various state-of-the-art facilities at DeKUT, including laboratories, innovation hubs, and digital learning spaces. He commended the University's leadership for cultivating a hands-on, technology-driven learning environment that aligns with the vision of the Fourth Industrial Revolution (4IR).

This visit underscores DeKUT's strategic role in shaping the future of technical education in Kenya. By equipping students with advanced digital competencies and practical skills, the University continues to position itself as a national leader in innovation, industrial research, and workforce development. DeKUT remains at the forefront of preparing the next generation of innovators, technologists, and change-makers through partnerships, forward-thinking leadership, and an unwavering commitment to excellence.

DeKUT Earns Prestigious Washington Accord Accreditation



Dedan Kimathi University of Technology proudly announces the full accreditation of its Bachelor of Science in Mechatronics Engineering program by the Engineers Board of Kenya (EBK) through the Engineering Accreditation Committee (EAC).

The accreditation, valid for five years, aligns with the Washington Accord standards, ensuring international recognition of the program and boosting the global competitiveness of DeKUT graduates. This milestone highlights the School of Engineering's dedication to delivering quality education that meets global benchmarks and prepares students for success in the local and international engineering arenas. This recognition not only validates the high standards of teaching, research, and innovation upheld at DeKUT but also reinforces the competitiveness of its graduates in both local and global job markets.

Siemens Training & Research Centre

Launched in 2016, the Siemens Mechatronic Systems Certification Program (SMSCP) blends German dual training principles with hands-on Industry 4.0 skills. It equips students and professionals with global automation, robotics, and systems thinking certification. Under Prof. Eng. Jean Bosco's leadership, the Centre has trained engineers from major firms like KPA, KenGen, and KPC, hosted WorldSkills events, and become a regional hub for innovation and excellence in mechatronic systems.



Full License Recognition of Bachelor of Science in Nutrition and Dietetics by KNDI

DeKUT is pleased to announce the full license recognition of the Bachelor of Science in Nutrition and Dietetics program by Kenya Nutritionists and Dieticians Institute (KNDI). This recognition is a testament to the University's commitment to academic excellence and the delivery of quality, industry-relevant programs.

The accreditation by the professional body (KNDI) underscores the credibility of our academic programs, ensuring that our graduates are well-equipped with the knowledge, skills, and competencies required in the field of nutrition and dietetics. It further positions DeKUT as a leading institution in producing qualified professionals who meet the national and global standards.

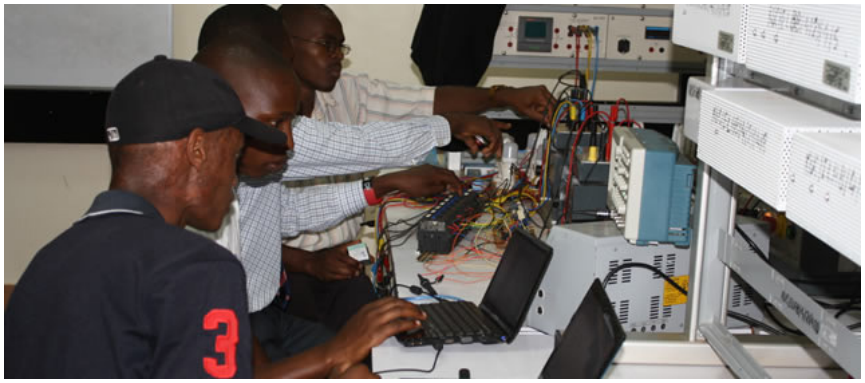
This milestone reaffirms our dedication to upholding academic quality and fostering innovation in health sciences education. As we continue to enhance our programs, we remain committed to empowering our students with the expertise needed to make significant contributions to the nutrition and dietetics profession in Kenya and beyond.



Recognition of BSc. Chemical Engineering and BSc. Telecommunications and Information Engineering

In a significant academic milestone, Dedan Kimathi University of Technology has received official recognition from the Engineers Board of Kenya (EBK) for its Bachelor of Science in Chemical Engineering and Bachelor of Science in Telecommunications and Information Engineering programs. This momentous achievement comes following an independent review by EBK.





The recognition affirms DeKUT's steadfast commitment to delivering quality, industry-relevant engineering education that meets national and international standards. It also marks a pivotal step for graduates of these programs, as EBK recognition is crucial for professional registration and practice in engineering.

It reinforces DeKUT's position as a centre of excellence in technological education and research, aligned with its mission to produce graduates who are not only technically competent but also innovative and solution-oriented.

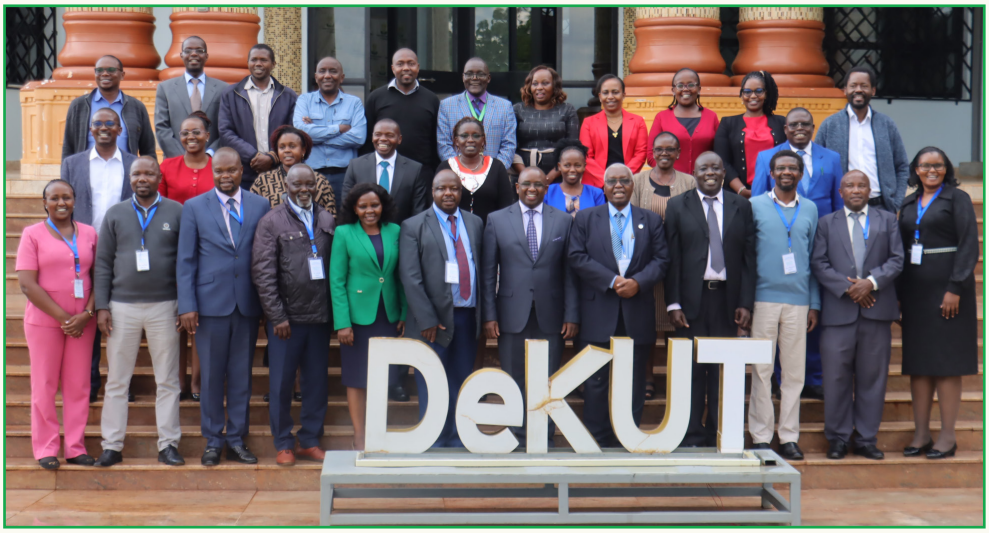
The EBK recognition also underscores the University's dedication to continuous improvement, stakeholder engagement, and adherence to regulatory benchmarks. Both programs underwent extensive curriculum reviews, infrastructure assessments, and faculty evaluations to ensure that graduates are well-prepared to contribute to Kenya's development goals and global engineering challenges.

Promoting a Culture of Excellence at Dedan Kimathi University of Technology

Dr. Juma Misiko, PhD., Director, Directorate of Quality Assurance

As we celebrate another milestone in the academic journey of our 18th graduating class, the Directorate of Quality Assurance at Dedan Kimathi University of Technology extends warm congratulations to all graduates, staff, and stakeholders who have played a role in this achievement.

At the heart of DeKUT's mission is a commitment to delivering high-quality education, and the DQA plays a critical role in supporting the University's mission of producing quality-driven graduates equipped to meet the demands of the 21st-century knowledge economy. In line with the University's Quality Management Systems and other local & international standards, the Directorate ensures that all academic and administrative processes adhere to globally recognized best practices.



DeKUT Institutional Accreditation by CUE led by Prof. Raphael Munavu, EBS.

A key part of our functions is coordinating and implementing internal quality audits across departments, schools, and directorates. These audits help identify strengths, address gaps, and foster continuous improvement. Additionally, the Directorate is deeply involved in monitoring the effectiveness of teaching and learning, supporting curriculum reviews to ensure relevance and alignment with national and international standards, and coordinating the stakeholder feedback mechanisms to uphold a culture of excellence across the University.

We are confident in the quality of graduates DeKUT produces. This confidence is grounded in our robust quality assurance framework that ensures our students are academically competent and equipped with the skills, values, and mindset necessary to thrive in today's competitive and dynamic world. Our graduates have consistently demonstrated innovation, professionalism, and ethical leadership in various sectors—proof of the solid foundation laid during their time at DeKUT.

Over the past years, the Directorate has intensified efforts to strengthen quality assurance processes, embrace digital tools for monitoring and evaluation, and support data-driven improvements across departments. These efforts aim to continuously enhance the student experience and ensure that DeKUT's programs remain relevant and impactful. DeKUT's commitment to data-driven decision-making ensures that DeKUT maintains its status as a centre of excellence in science, technology, innovation, and entrepreneurship.

To our graduates: You reflect DeKUT's dedication to quality, and we are proud of the knowledge, integrity, and resilience you embody. As you step into the next chapter of your journey, we are confident you will continue to make a meaningful difference in your communities and beyond. As you step into the world, carry with you the values of excellence, integrity, and continuous improvement.

Congratulations again, and may you continue to shine as ambassadors of quality!

The Uniqueness of Social Sciences and Humanities at the University of Technology

By Prof. Theuri M.M., PhD., Director, IGS



The Institute of General Studies (IGS) is unique in dealing with social sciences and humanities aspects at the University of Technology. Initially, Dedan Kimathi University of Technology (DeKUT) used to offer such academic units as philosophy, communication skills, sociology and anthropology, business and company law, governance and ethics to boost other disciplines offered in schools of Engineering, Science, Nursing, Information and Computer Science, Business Management and Economics, and in different institutes dealing with food and technology, geological and remote sensing, and technical and professional studies.

These units were housed in the School of Business under the Center of Communication Skills (CCS). In 2012, DeKUT became a fully-fledged University and an Institute of Pedagogical and Academic Writings (IPAWS) was established. All the University common units were housed there, safe for the law units placed under the Institute of Criminology, Forensics Studies (ICFoS). With the introduction of educational studies in the School of Engineering, the pedagogical aspects were placed in the Department of Technical Education. IGS was birthed as a curriculum in a Minor Degree in Critical Thinking and Communication Skills and was launched in 2021.

The curriculum introduced a wide range of academic knowledge to the learners, especially in the area of social sciences and humanities, emphasizing Africa's philosophy or sagacity, history and civilization, linguistics, traditional African health and environmental concerns, Africa's contribution to mathematics, music and performing arts, literature and technology.

This knowledge infuses a sense of confidence and social and humanistic awareness that would not have been achieved through mere technical and engineering knowledge to a learner who is supposed to be an innovator and an agent of transformation in society. Consequently, the minor degree seeks to inculcate in the learner skills that enable them to think critically, independently and rationally, thus discouraging dependency syndromes that destroy creativity and self-esteem.

Therefore, it is a curriculum that focuses on the logical connectivity between different competing ideas, hence spurring a spirit of enquiry, wonder and curiosity in the learners to harness their innovative potential for self-discovery and search for answers and solutions to challenges that do not only face the African continent but the globe as well. This is the background in which social scientists and humanist researchers find their place in the University of Technology. Working with their colleagues in technology, they are in a position to address complex societal issues, which, otherwise left to technology, would have appeared to be complicated. The key issues arising from the world of social sciences and humanities and which can blend well in areas of technology include, and are not limited to;

- ☑ Holistic and interdisciplinary approach to reality. This means that, with social sciences and humanities in the background, a harmonious co-existence is generated and strengthens the link between society, technology and its behaviour. This is captured in civil and ecosystem engineering, communication and digital media, social anthropology, ethics and technology.
- ☑ A University of Technology, unlike other universities, puts most emphasis on practical applications of knowledge which would not adequately be applicable in the absence of social sciences, which emphasize real-world issues affecting the world, such as technological changes, artificial intelligence, community development, or even the impact technology has had on climate and environmental changes, socio-political and governance enhancement. The effectiveness of a University of Technology is more felt with the inclusion of social units or curriculum, particularly socio-anthropological studies, philosophical and communication skills, development and administrative studies, social psychology, ethics and governance, as well as those touching on science, technology and society. Including these units or complete curricula in a University of Technology would add value because they have applied impetus that emphasizes the horizontal and vertical axis of society's challenges.
- ☑ While a University of Technology may put more emphasis on research and innovation, this impact can be of more excellent value if social sciences and humanities are utilized in establishing the value of ethics, good governance and social justice, youth empowerment and the digital world, and creating a society in which environmental sustainability is observed.
- ☑ Social sciences and humanities create a sense of collaboration among scholars and students in information technology, computer application and system engineering. This collaboration enables these groups of learners to analyze the wider society and its needs for technological innovation, thus creating a sense of creativity in search of solutions to issues challenging and affecting humanity.

In conclusion, the introduction of the Minor Degree at DeKUT is a plus to all the students because it widens their career and opportunity paths, and they can work in fields such as policy analysts, consultants in technology, urban planners and system engineers, extension officers in community projects, public relations officers, entrepreneurship or as researchers. They can also focus on corporate social responsibility (CSR) as their minds have been sharpened and enlightened through critical thinking and enhanced communication skills, putting them above any other graduates they may be competing with. It is in entrenching social sciences and humanities in engineering and other technical areas through this degree that a self-confident citizen, able to articulate professional and personal opinions, is created, thus diminishing any form of inferiority complex which might have dwarfed the learner's identity as an educated and knowledgeable person ready for any technical, social and political challenges towards development.

"All truth passes through three stages. First, it is ridiculed. Second, it is violently opposed. Third, it is accepted as being self-evident" (Arthur Schopenhauer)

Elevating Ethical Security Leaders

Mr. Dennis Miano, *Director, Institute of Criminology, Forensics and Security Studies (ICFoSS) & Director, Nairobi CBD Campus*

With immense pride and profound satisfaction, I write this note to celebrate the graduates of the Institute of Criminology, Forensics and Security Studies at Dedan Kimathi University of Technology and the University at large. Your journey, marked by intellectual rigour, ethical grounding, and practical excellence, has set a standard for the future of security and forensic practice in Kenya and beyond.

Established in 2011, our Institute runs robust programs across both Nyeri and Nairobi campuses: **Diploma in Criminology and Security Studies**, **Bachelor of Science in Criminology and Security Management** (Specializations: *Security Management & Loss Prevention, Forensics & Criminal Investigation, Cybercrime Forensics*) and **Master of Science in Forensics and Security Management** (Specializations: *Corporate Forensics, Cybercrime & Digital Forensics, Security Management*).

What sets us apart is our focus on *science, technology,* and *ethics* as the backbone of modern security management. The real-world applicability of our programs is sharpened through strategic field placements, short professional courses, and international collaborations, ensuring our students graduate as competent, ethical, and proactive professionals.

Situated in the heart of the capital at Kenya Pension Towers, our Nairobi campus is more than just a location; it's a living lab of criminological and forensic inquiry. With over 95% of our Nairobi-based students being active security personnel across ranks and formations, we offer unmatched access to the realities of contemporary corporate forensics, private security intelligence, and institutional safety strategies. Nairobi has fast become our hub of excellence, particularly in *corporate forensics*, where our presence is felt in boardrooms and field investigations.

This year, our students demonstrated exceptional leadership through their work with the **Dedan Kimathi Ethics and Integrity Club (DeEIC)**. Launched under the UNODC-supported Global Integrity Education (GIE) project, DeEIC has become a torchbearer for academic ethics and beyond. Guided by our very own Institute and based in Nairobi, the club's initiatives are reshaping the ethical landscape of University communities in Kenya. For instance, our students participated in the **UNCAC Youth Event** and the **Ethics Ambassadors Network launch** at UN Headquarters, Gigiri and also took part in a **Collaborative Online International Learning (COIL)** program with **Universidad Pan Americana (Mexico)** and **Florida International University (USA)**, reflecting our commitment to global engagement.

Our graduates are leaving not just with knowledge but with a mission. Trained in *forensic science*, *digital investigation*, *corporate compliance*, and *security governance*, they are now joining and reshaping governmental, private, and non-governmental institutions with a fierce commitment to *integrity, justice,* and *professionalism*.

To the Class of 2025, congratulations! You are the thinkers, enforcers, analysts, and reformers this country and continent need. May you become ethical warriors, not just solving crimes but transforming systems.

Let us continue to **Elevate, Empower, and Embrace Ethics**.

From Crisis to Innovation: A Vision Rooted in Virtual Worlds and African Collaboration



As a key partner in the Skills Initiative for Africa (SIFA)—a flagship program by AUDA-NEPAD, co-funded by BMZ and the European Union, Dedan Kimathi University of Technology (DeKUT) has emerged as a transformative force in technical and vocational education across the continent. Recognized for its cutting-edge infrastructure and forward-thinking pedagogy, SIFA's Financing Facility awarded to DeKUT has catalyzed the integration of immersive virtual technologies, mechatronics, and industry-relevant training. This model is modernizing learning environments, aligning with continental TVET frameworks, and preparing African youth for the demands of Industry 4.0.

Virtual Mechatronics Labs: Where Immersive Technology Meets African Ingenuity

In March 2025, DeKUT's innovation journey reached a milestone when the Virtual Mechatronics Labs proudly hosted Prof. Steve LaValle—global VR pioneer, founding member of Oculus VR, and architect of its revolutionary tracking system. Backed by Carnegie Mellon University, his visit was a powerful endorsement of DeKUT's leadership in immersive technology and human-machine interaction across Africa. His engaging discussions on virtual reality, creativity, and the future of tech reinforced the importance of innovation grounded in real-world impact.

Born in response to the COVID-19 pandemic, the Virtual Mechatronics Labs have grown into a model for immersive engineering education across the continent. Backed by SIFA, the labs offer fully interactive, simulated environments where students and professionals explore mechatronic systems hands-on. Under the leadership of Prof. Eng. Jean Bosco, the Siemens Centre has become a hub for cutting-edge research and workforce transformation—where learners tackle real-world challenges with the mindset and tools of tomorrow's industry leaders.



Engineering Excellence at DeKUT

Mechatronics Driving Innovation in East Africa

Dr. Titus Mulembo, CoD, Mechatronics Engineering

Dedan Kimathi University of Technology's Department of Mechatronic Engineering is revolutionizing East Africa's tech landscape through cutting-edge education and innovation. With over 400 students and a team of expert faculty, the program blends mechanical, electrical, and computer systems in a rigorous five-year curriculum. Students benefit from access to top-tier facilities like the VR Smart Industrial Fabrication and Assembly (VR SIFA) Lab, Siemens, MET Labs, and DeKUT's Centre for Development of Electronic Devices (CDED), which enhance hands-on learning, professional certification, and research opportunities.



Immersive Innovation at the Forefront of East Africa's Digital Revolution

The Virtual Reality Skills Initiative For Africa (VR SIFA) lab stands as a model of innovation, recently gaining global recognition with a visit from Professor Steven M. LaValle—pioneer of Oculus VR and a leading authority in virtual reality and robotics. His interaction with the lab's researchers underscored VML's role in merging Virtual Reality, Artificial Intelligence, and human-machine collaboration. The visit marked a milestone, affirming East Africa's growing stature in immersive technology and reinforcing the lab's commitment to scalable, inclusive digital ecosystems that shape the future of manufacturing and innovation. He praised the lab's role in bridging digital and physical manufacturing environments, helping students and researchers simulate factory automation, human-robot collaboration, and Industry 4.0 workflows. This visit placed DeKUT firmly on the global innovation map.

From Chalkboards to Smart Classrooms: Embracing Technology in Higher Education

Dr Anthony M. Maina, Director, ICT

Imagine a Kenyan university lecture hall 25 years ago: rows of students scribbling notes by hand, a chalkboard at the front, and a lecturer teaching from well-worn yellow notes. It was effective for its time but limited in interactivity and personalisation. Today, the transformation is profound. Technology has redefined how education is delivered, accessed, and experienced. At DeKUT, we embrace this shift and are actively shaping the future of innovative learning. Let us explore four ways technology has revolutionised education—and how DeKUT is aligning with these advancements.

- **Online Learning and MOOCs**
  Platforms like *Coursera*, *edX*, and *YouTube* have democratised education, offering high-quality courses from top institutions in diverse fields. With over 100 million users on *Coursera* alone, these platforms have removed barriers of cost and geography, enabling millions to learn anytime, anywhere.
- **Mobile Learning**
  Smartphones have made education mobile and accessible on the go—students now access textbooks, video lectures, and interactive apps from their devices. With the support of improved connectivity and affordable data, mobile learning has become a vital part of the academic experience.
- **Immersive Technologies**
  Virtual and Augmented Reality (VR and AR) are transforming experiential learning. Simulations—like exploring geothermal wells or surgical procedures—bring complex environments into the classroom, making learning more tangible, engaging, and effective across disciplines.
- **Artificial Intelligence and Personalised Learning**
  AI enables customised education by adapting content to students' learning styles and paces. These intelligent systems support mastery of complex topics and optimise learning paths, leading to deeper understanding and better outcomes.

How DeKUT Is Driving Smart Education

As a leading tech-focused institution, the University is not just adapting to change—we are driving it. Our efforts are centred on at least three areas:



- **Innovative Tools:** Through our eLearning Section, tools like ClassPoint have enhanced interactivity by turning presentations into game-based, engaging experiences with live quizzes and multimedia content.
- **Capacity Building:** We invest in pedagogical training and research for staff and students, equipping them with the skills to leverage new technologies and excel in today's digital learning environments. Recently, a team of three staff from the Department of Information Technology were part of the 21st Century Learning Design (21CLD) for Educators organised by Microsoft Africa Development Centre (ADC).
- **Infrastructure and Smart Equipment:** We've more than doubled our Internet bandwidth to over 1Gbps in four years, added over 70 campus-wide Wi-Fi access points—including in internal hostels—and introduced innovative teaching tools like a 65-inch interactive board, jointly acquired by the Vice Chancellor's Office and the ICT Directorate.

Looking Ahead

While Kenya's higher education sector has grown rapidly—from a handful of universities to over 30 public and numerous private ones—the learning experience must evolve just as quickly. At DeKUT's ICT Directorate, we are committed to ensuring it does. Our vision is for innovative education to be a daily reality: personalized, flexible, and impactful. We will continue supporting innovation across all academic and administrative areas to redefine education for a digital era.

The future classroom is already here—and we are building it today.

Inside the Software Development Centre at Dedan Kimathi University: Nurturing Kenya's Future Tech Leaders

By Mr. Patrick Theuri, Software Development Centre



At the heart of Dedan Kimathi University of Technology, the Software Development Centre (SDC) is shaping the future of digital innovation. More than just a tech unit, the SDC designs and builds innovative solutions that simplify the University's operations and enhance the learning experience. From streamlining administrative tasks to supporting research and academic programs, its work is helping the University shift smoothly into a wholly digital environment. But the impact doesn't stop there — the centre also partners with businesses and local communities, giving them the tools and support they need to navigate and thrive in a fast-changing digital world.

Beyond building technology, the Software Development Centre is deeply committed to nurturing young talent and shaping future innovators. By offering hands-on training, mentorship, and real-world project experience, the centre gives students and young professionals a strong foundation to launch their careers. It creates an environment where creativity thrives, skills are sharpened, and ideas come to life. Through these opportunities, the SDC prepares young minds for the demands of the tech industry and opens doors to successful futures, empowering them to become leaders in the digital economy.

The Software Development Centre offers a wide range of services designed to meet the unique needs of the University and the wider community, including:

- Software Customization
- Custom Software Development
- System Integration
- Technical Support and Maintenance
- Software Upgrades
- IT Consultancy
- Training and Capacity Building

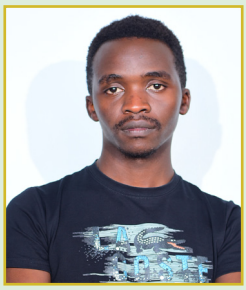


"Leading this Software Development Centre, I see more than just screens and systems — I see a space where creativity meets precision, where every challenge sparks a smarter solution. We are not just developing software but building the backbone of digital progress."

Patrick Theuri

"As a software developer at the SDC, we specialize in building efficient, user-focused solutions that streamline institutional operations and drive digital transformation."

Eliud Kamau





"Here at the Software Development Centre, we don't just write code — we transform ideas into architecture and logic into real-world impact. We are the engine room of innovation, and with every line of code, we help shape the future." **Sally Gitonga**

Contact us: sdc@dkut.ac.ke

Visit our website: https://sdc.dkut.ac.ke/

Empowering Future Innovators: A Hands-on Dive into Security and Surveillance



On November 2nd, 2024, Dedan Kimathi University of Technology hosted a transformative Security and Surveillance Training Session that brought together sixty eager minds from various universities. Spearheaded by Ephraim Mwangi and organized under the *Institute of Electrical and Electronic Engineering (IEEE) Photonics Kenya* and DeKUT, the session was more than a typical training—it was an electrifying leap into the world of modern security systems. Participants, drawn from **Dedan Kimathi University of Technology**, **University of Nairobi**, **Kenyatta University**, **Meru University**, and **Machakos University**, were taken on a journey that blended theory with rigorous practical exercises. From understanding the inner workings of analogue versus IP CCTV systems to physically mounting cameras and terminating cables, students fully understood what it takes to build a real-world surveillance system.

One standout moment was the practical segment, where teams mounted cameras, laid conduits, aligned fields of view, and achieved clear video feeds to a central DVR. It was a proud and satisfying result of a day full of learning, problem-solving, and teamwork. The session's balance between technical know-how and safety awareness made it exceptional. Sessions on lab safety and domestic AC power systems emphasized the importance of responsibility when handling equipment. The guidance offered ensured that participants left with knowledge and confidence.

Backed by the **IEEE Photonics Kenya Section** and graced by experts Mr Verol Ochieng and supportive faculty including Dr Paul Mbote, Dr Njenga Mburu, Dr Edwel Tafara, Mr Stephen Mathenge and Mr Elias Mbuthia, the event underscored the power of collaboration in academic and technical excellence. This wasn't just training but a bold step toward shaping the next generation of engineers and innovators. One participant remarked, "*Now I can confidently contribute to real-world security installations – this session opened my eyes.*" Indeed, the future looks secure—literally and figuratively—with such minds leading the way.

Pioneering the Future of Technical Education: DeKUT and TVETA Lead the Charge in Industry 4.0 Training



Dedan Kimathi University of Technology, in strategic partnership with the Technical and Vocational Education and Training Authority (TVETA), has boldly redefined the landscape of technical education in Kenya through its inaugural Training-of-Trainers (ToT) Capacity Building Programme on Industry 4.0. Held from 14th April to 8th May, 2025, in two rigorous cohorts, this initiative convened 60 master trainers drawn from 24 national polytechnics and six technical training institutes, all united by a singular mission: to catalyze a nationwide transformation of TVET delivery.

Central to the programme's success was the Virtual Mechatronics Lab (VML), a state-of-the-art virtual reality environment that immerses participants in lifelike simulations of complex mechatronic systems, through an interdisciplinary curriculum, spanning electrical systems, mechanical design, industrial automation, hydraulic and pneumatic technologies, trainers engaged in real-world scenarios without the constraints of physical infrastructure. This blend of theoretical rigour and hands-on VR practice sharpened their technical proficiency and fostered innovative pedagogical approaches for their home institutions.

A consortium of world-class partners underpinned the ToT programme's instructional excellence. The DeKUT Siemens Centre and Smart Factory Swiss brought industrial expertise. At the same time, the African Organisation for Standardisation (ARSO) and regulatory bodies TVETA and the TVET CDACC ensured alignment with continental standards. Together, they cultivated a vibrant community of practice primed to embed Industry 4.0 competencies across Kenya's TVET ecosystem.

This transformative journey culminated on 9th May, 2025, during the SIFA AUDA-NEPAD Industry 4.0 Capacity Building Validation Workshop. More than a capstone event, it was a graduation ceremony for the trainers and a forward-looking forum on emerging technologies. Over 60 trainers and institutional leaders explored smart automation, digital twins, virtual commissioning and mechatronics integration, mapping clear pathways for curricular reform. Hon. Julius Ogamba, Cabinet Secretary for Education, honoured the occasion and highlighted youth empowerment and digital transformation as cornerstones of Kenya's industrial future.

DeKUT's initiative aligns seamlessly with UNESCO's vision for TVET's digital transformation, which advocates integrating adaptive digital tools to simulate, gamify and individualize learning, thereby creating inclusive and practical-oriented environments. By equipping trainers as digital-lab champions, the programme addresses infrastructure gaps. It extends access to immersive learning, positioning Kenya's TVET sector as a beacon of innovation and lifelong skill development.

A steadfast commitment to gender inclusivity further distinguishes the ToT programme. By ensuring equitable representation and leadership opportunities for women trainers, DeKUT and TVETA have reinforced the principle that a truly future-ready workforce must reflect the diversity of its society. Armed with cutting-edge VR tools and renewed pedagogical strategies, these trainers will return to their institutions ready to implement and sustain virtual labs, bridging the digital skills gap and empowering the next generation of engineers and technologists.

As DeKUT celebrates this landmark achievement, it reaffirms its role as a national and continental leader in pioneering resilient, inclusive and innovation-driven TVET. Through this partnership with TVETA and its consortium of experts, the University has laid a strong foundation for a future-focused training model; one that will continue to yield dividends for Kenya's educational and industrial sectors for years to come.

DeKUT Innovation and Entrepreneurship Space and Activities

Dr. James Wakiru, Director, DeSIC, desic@dkut.ac.ke

Dedan Kimathi University of Technology (DeKUT) has consistently prioritized cultivating innovation and entrepreneurship within its community, encompassing the students, faculty, alums, and surrounding community. The Dedan Kimathi Startup and Incubation Center (DeSIC) is an integral centre fostering student and faculty creativity and entrepreneurship. Functioning as a catalyst for transformative ideas, DeSIC plays a pivotal role in incubating these concepts until they evolve into viable startup ventures. We feature three key programs for the DeKUT fraternity: **The Incubation Program**, **the i2B innovation event**, and a **Tech Support** for Students group event.

a) DeSIC Incubation Programme

DeSIC's Incubation Programme has promoted innovation and entrepreneurship, fostering the growth of entrepreneurs and the development of groundbreaking ideas. Tailored as a ten-week curriculum, this program is designed to equip participants with the essential skills to nurture their ideas into concepts and ultimately into businesses.

The program was launched in September 2023, with the first cohort comprising 14 incubates. Currently, we have Cohort 3 engaged. The participants received training that enabled them to effectively navigate the complexities of business development, translating their ideas into tangible results.



The comprehensive curriculum explores various aspects of entrepreneurship, including ideation, marketing, business planning, and intellectual property (IP) Protection. During the program, DeSIC follows up on the participants' progress and supports the development of their ideas further to create a business venture. Participants were awarded certificates, recognizing their program completion and readiness to embark on the next phase of their entrepreneurial journey. In addition to the certificate, we review the progress of the innovation or business venture at the end of the program, where some plausible and scalable ideas are incubated as startups in DeSIC.

With each successive cohort, DeSIC's Incubation Programme aims to cultivate a new generation of trailblazers poised to revolutionize industries and drive economic growth through their innovative ventures. As the program continues to evolve and expand, it remains committed to empowering innovators and catalyzing positive societal change.

In conclusion, DeSIC's Incubation Programme exemplifies the University's dedication to fostering a culture of entrepreneurship and innovation. Through its holistic approach to business incubation, the program has emerged as a catalyst for transformative change, empowering aspiring entrepreneurs to realize their dreams and impact the world.

b) The Third i2B Storming Night

The i2BTM (Idea to Business) concept was developed to address this vital need, providing a platform (Innovation Weekend) for students and staff to conceive, ideate, develop, and refine innovative ideas for starting a business. The third i2B Storming Night was held on October 4, 2024, at the Atrium, Satima Block. This event served as a platform where innovators, primarily students, explored the intricacies of innovation.



DeSIC organized the i2B Storming Night with esteemed partners, including DeKUT faculty members, Equity Bank, DeKUT Science Park, DeKUT Alumni, and Startup Companies domiciled at DeSIC and Origin

Research & Innovation Lab. The collective goal is to provide participants with a comprehensive and enriching experience beyond theoretical knowledge.

The DeKUT i2B Storming Night provided a great networking opportunity, as participants met with like-minded individuals, founders, investors, and other influential figures, gaining exposure to local startups. During the overnight event, which drew 125 participants, 43 elevator pitches were presented and voted on. The selected 13 elevator pitches had participants grouped around, who could then develop a product prototype, business model, and ultimately, a pitch deck with the help of mentors and coaches. Eventually, the winners (runners-up and second runners-up) were recognized and awarded. Based on the ideas, innovations, and pitch decks presented during the event, the judges and organizers observed a notable improvement in our students' maturity and knowledge of innovation and entrepreneurship.



With key stakeholders such as *Equity Group Foundation*, *Origin Research and Innovation Labs*, *KEBS*, and *Hamara Energies Africa*, the event highlighted the importance of innovation in addressing societal challenges while fostering entrepreneurial skills and providing valuable insights into marketing, finance, and project management. The event was graced by our Vice Chancellor, Prof. Eng. Peter Muchiri, DVC A&F, Prof. Esther Magiri, Eng. Grace Onyango from the Engineering Board of Kenya, and the former Vice Chancellor and Focal lead of the Origin Research and Innovations Lab- Prof. Eng. Ndirangu Kioni.

The overarching goal of the i2B Storming Night was to instil the startup process in the participants' minds and involve them throughout the entire process. Key aspects included starting with the end in mind, business modelling, mindset shift, and pitching. The DeKUT i2B Storming Night was highly effective in creating a mindset shift towards innovation and entrepreneurship among students, enhancing multidisciplinary collaboration in problem-solving while sharpening entrepreneurial competencies and showcasing the innovative side of our students within the entrepreneurial ecosystem.

Partners:

Origin Research & Innovation Labs

DEDAN KIMATHI Science & Technology Park

EQUITY

Hamara Africa

c) DeKUT HACK



The Dedan Kimathi University of Technology Startup and Incubation Centre (DeSIC) supported the DeKUT Hack, which was organized by the Microsoft Learn Student Ambassador from June 30 to July 10, held at Dedan Kimathi University of Technology. The seven-day virtual hackathon, DeKUT Hack, aimed to drive innovation in the themes of Climate, Healthcare, and Agriculture by utilizing the emerging technologies of the Fourth Industrial Revolution. The event brought together tech-savvy students to create solutions for real-world problems in climate change, education, and healthcare.



We had 150 students participate, forming 37 teams, with 19 successfully submitting their entries. The Challenges were themed around: climate change, education and healthcare.

The hackathon culminated in a pitch deck and award ceremony held in person on the University campus on Saturday, July 13, 2024, from 2 pm to 5 pm. On this day, we intended to gather the participants of the hackathon as well as the judges. The best teams that had undergone a primary selection process between the hackathon's end date and the final pitching date had the opportunity to pitch their ideas. The top three teams from the pitch deck received cash prizes.

Enhancing Scholarly Access: The Digital Library Space at DeKUT

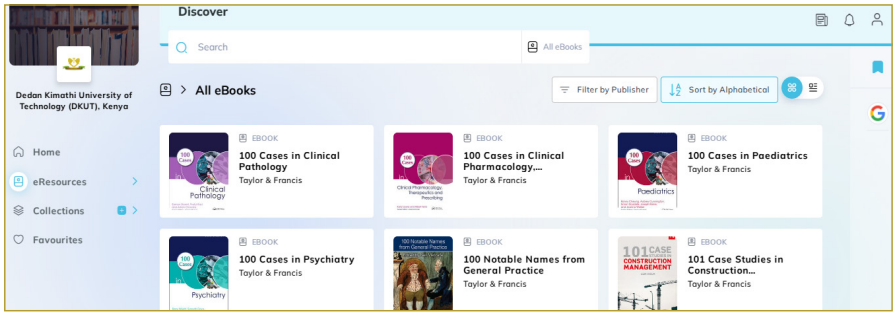
Beatrice Nasimiyu Luvale, Senior Library Assistant

The DeKUT library has adopted digital service delivery to improve the speed of information access, thereby supporting teaching, learning, and research for students, faculty, and researchers across the University. This has been necessitated by technological advancements and evolving educational practices, which have transformed how students access and interact with information. Our ***mission*** and ***vision*** have been geared toward these trajectories to support the rapidly changing learning environment.

Therefore, **DeKUT Digital Library Space** transcends physical boundaries, offering a limitless and timeless library experience through online access to e-resources. Our digital learning spaces include a vast collection of e-books, e-journals and a digital repository supported by relevant software to optimize usage of all the available e-resources.

Platforms that enable the achievement of speedy information provision and access include:

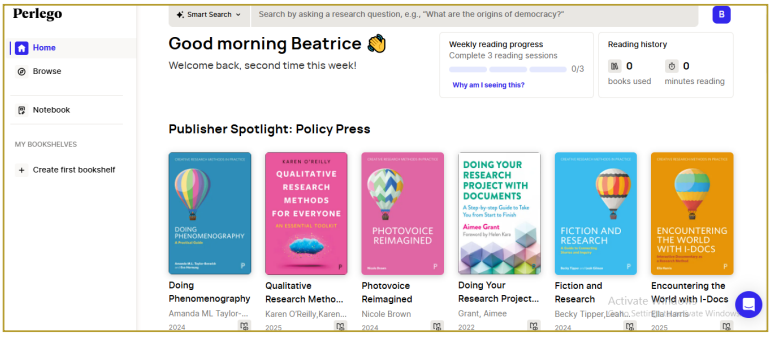
1. MyLoft Personal Library



MyLoft is a digital library application designed to help our users organize, access, and read digital content such as e-books, research papers, journals, and articles subscribed by the library. Features available in MyLoft include:

- **Remote access** of subscribed e-content from anywhere, anytime, whether you are on-campus, at home or your favourite study place.
- **Artificial intelligence** is used to select individual information materials preferences of library users and to federate results from specific institutions.
- **Voice-over reading** allows you to carry out other activities as you listen to information materials; this is an essential feature for persons with visual impairment.
- **Allows sharing of articles,** news, and information to fellow users or to pass them the URL with the built-in share feature.
- **Allows users to save content** to the app and have offline access on smartphones or other handheld gadgets whenever needed.

2. Perlego Digital Library



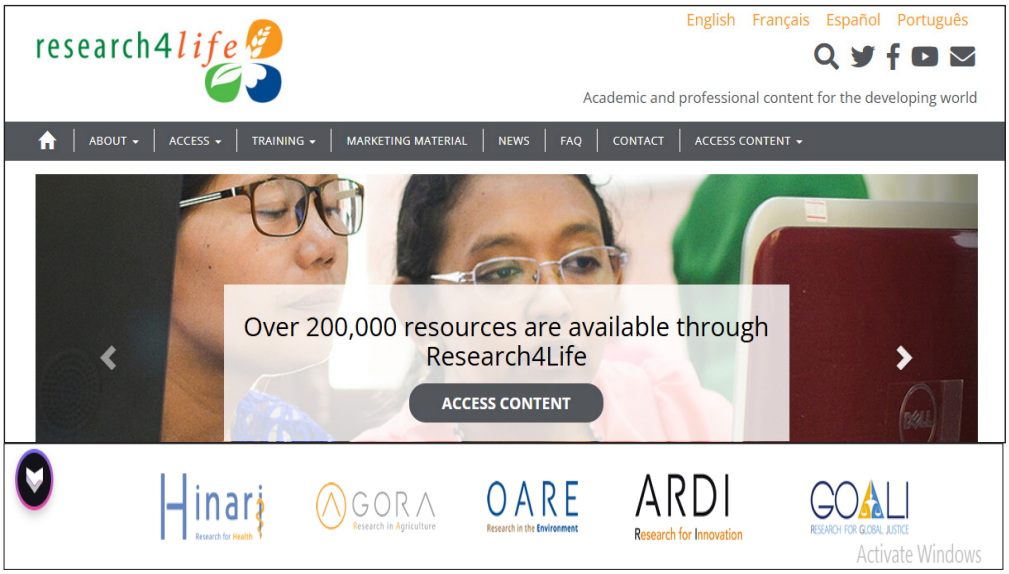
Perlego is an additional new online eBook library that offers access to over 1 million vast academic and educational resources, including textbooks and other academic writing across multiple disciplines. Perlego digital library includes features like:

- **Advanced Search & Filtering** is a powerful search function that helps to quickly find relevant books—filters by category, publisher, language, and more for a refined browsing experience.
- **Flexible Reading Options** include online & offline reading, which allow downloading of books for offline access while multi-device access for use on desktops, tablets, and smartphones with a customizable reading mode function for adjusting font size, background colour, and layout for a comfortable reading experience.
- **Study Tools & Annotations** are used for marking essential sections and adding notes,

citations & references tools used to generate citations in multiple formats like APA, MLA, and Harvard, and bookmark pages for saving key sections for quick reference.

- **Collaboration & Sharing** assists in sharing notes and highlights with peers. This function is helpful for group studies and academic discussions.
- **Multilingual Content & Accessibility Function** means that books are available in multiple languages. Accessibility features like **text-to-speech** and screen reader support are helpful for persons with hearing impairments.

3. Research for Life Digital Space



Research4Life is the collective database of five programs, namely Hinari, AGORA, OARE, ARDI, and GOALI, that provide developing countries with free or low-cost online access to up to 200,000 peer-reviewed academic leading journals and books in the fields of ***health***, ***agriculture***, ***environment***, ***applied sciences*** and ***legal information***. These programs are in five categories, namely:

- **Research for Health (Hinari)**: Under the auspices of the World Health Organization, Hinari provides access to primary biomedical research information essential to improving the developing world's health.
- **Research in Agriculture (AGORA):** led by the Food and Agriculture Organization of the United Nations (FAO), this is a program that provides free or low-cost access to significant subscription-based scientific journals and e-books in the fields of ***food***, ***agriculture***, ***fisheries***, ***nutrition***, ***veterinary science***, ***environmental science*** and related ***social sciences***.
- **Research in the Environment (OARE)** is a program that provides environmental experts, scholars, researchers, and policymakers in lower-income countries with free or low-cost access to peer-reviewed content online.
- **Research for Development and Innovation (ARDI)** is a program coordinated by WIPO with its partners in the publishing industry that provides free online access to major scientific and technical journals.
- **Research for Global Justice (GOALI)** is a program providing free or low-cost online access to ***legal research and training*** in the developing world.

How do you access our digital library spaces?

- **The MyLoft Library App** can be accessed via the Google Play Store by downloading the app and following the registration prompts using a DeKUT student or staff email to create an account.
- **The Perlego Digital Library App** is available exclusively to all students and staff through a shared link. You can install the app on your device and sign up using your student or staff email.
- **Research for Life Digital Space is available** at the DeKUT library website under the e-resources, e-journals section.

Feel free to share your experiences and expectations with us through our ***librarian@dkut.ac.ke*** *or* ***libraryservices@dkut.ac.ke*** *and* ***phone: 0724 245 756.***

Integrating Artificial Intelligence in Hospitality and Tourism Training

A New Era Of Smart Service And Skills Development

Dr. Peninah Chege, Director, Institute of Tourism and Hospitality Management

Though the COVID-19 pandemic did not bring the sweeping ***"new world order"*** that many anticipated—it undoubtedly restructured how our world works. Among its most significant impacts was a global wave of digital transformation. From industry education, digitization accelerated rapidly, paving the way for the rise of Artificial Intelligence (AI) across nearly every sector, including hospitality.

In today's world, AI is both a product and a driver of digital transformation. As businesses shifted from manual operations to digital systems—cloud computing, IoT, and data collection—they laid the foundation for AI integration. The hospitality industry, known for its human-centric service, is now experiencing a high-tech makeover without losing its human touch. Hotels and restaurants worldwide are adopting AI-powered tools to enhance efficiency and elevate guest experiences. The sector is evolving fast from robotic staff and face recognition check-ins to AI-driven booking systems that operate 24/7. Guests now interact with virtual concierges and AI chatbots that manage room service requests, answer queries, and offer personalized recommendations in multiple languages while collecting valuable data to tailor marketing and promotions.

In the dining space, robot waitstaff assists in delivering meals and clearing tables, blending tech with hospitality to create a unique experience. Meanwhile, innovative room technology powered by AI voice assistants like *Alexa* and *Siri* lets guests control the room's ambience with a simple voice command or app.

Equally transformative is how AI is reshaping hospitality training and education. Institutions leverage AI for simulation-based learning, allowing students to role-play real hotel scenarios and receive instant feedback. Powered by AI, personalized learning pathways adapt course material to each learner's strengths and weaknesses.



Robot waitstaff serving a guest – blending innovation with service in modern hospitality

Platforms like *Coursera*, *Moodle*, and *edX* now offer adaptive learning for hospitality students, while AI chatbots act as 24/7 tutors. Language tools like *Duolingo* and *Google AI Translate* help students master global hospitality languages, and AI cultural intelligence platforms prepare them to serve a diverse clientele with respect and awareness. Instructors also benefit from AI automating assessments, tracking progress, and optimizing training schedules across hotel departments like the front office, kitchen, and housekeeping. As AI continues to evolve, hospitality professionals and students must develop. The future of hospitality is not just bright—it's thoughtfully human and technologically enhanced. For faculty and students in hospitality programs, now is the time to embrace AI not as a threat but as a powerful partner in shaping a more responsive, efficient, and inclusive industry.

Use of Computer Vision for Mineral Characterization

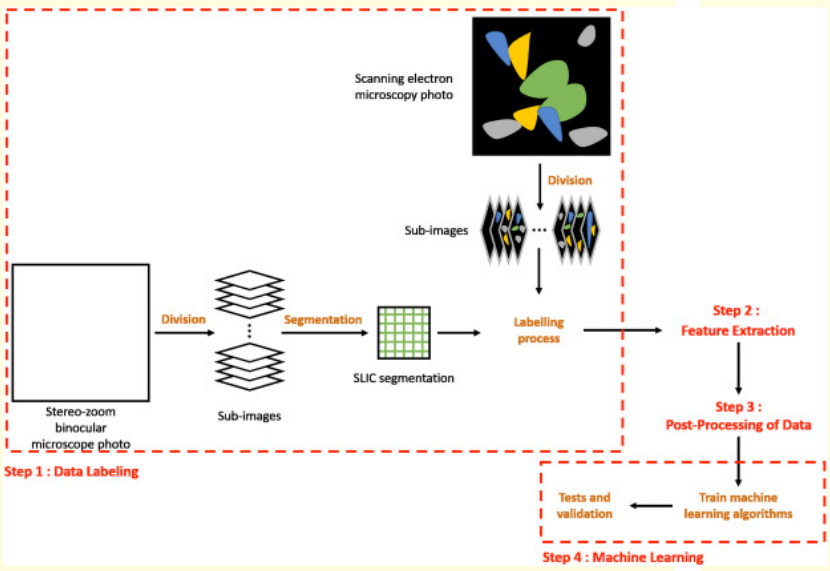
Victor Cedric Nganga, 4th year, BSc Geology student, GeTRI

Minerals build civilizations. That is why it is imperative for any society that wants to thrive to develop efficient, innovative ways to identify, extract, and use them. However, mineral exploration is complex; it is expensive, time-consuming, and labour-intensive. Additionally, human analysis is usually subjective (I remember when I saw a green mineral and other geologists in my party saw the same mineral as black), meaning different experts might classify the same simple differently, leading to inconsistencies. A faster, scalable, and objective approach is needed as the demand for minerals grows in industries like electronics, renewable energy, and the building and construction industries. Using computer vision and AI to characterize minerals provides such a solution: a solution that automates mineral identification with high accuracy, ensuring rapid decision-making, reducing human error, and making mineral exploration and classification more accessible and efficient.

One such use of computer vision and AI is convolutional neural networks (CNN). In this article, I will discuss the results of a CNN model that I developed to differentiate seven common minerals, namely quartz, biotite, muscovite, pyrite, bornite, malachite, and chrysocolla.

First, what is a convolutional neural network? And how is it suited for this task? A convolutional neural network (CNN) is a deep learning model for image recognition and pattern detection. A CNN breaks down images—mineral images in this case—into layers of edges, textures, and patterns, allowing them to recognize subtle differences between minerals. They can learn and generalize, making them effective with diverse image inputs. After training the CNN on a dataset of mineral images, the model achieved a training accuracy of 80% and a validation accuracy of 75%. These results suggest the model can effectively classify minerals, although some refinement could enhance its generalization to unseen data.

The Area Under the Curve metrics were employed to evaluate the model's reliability, which measures how effectively the model differentiates between various mineral classes. The training AUC reached 97%, while the validation AUC settled at 95%, demonstrating strong discriminatory power in recognizing minerals based on visual patterns. The loss function, which tracks the difference between predictions and actual labels, showed a training loss of approximately 0.2 and a validation loss fluctuating around 0.3-0.4. While the downward trend in loss indicates the model's ability to learn, the gap between training and validation loss suggests a slight risk of overfitting. Improvements such as data augmentation, regularization techniques, or hyperparameter tuning could enhance the model's robustness.



Overall, these results highlight the effectiveness of deep learning in mineral characterization, offering a faster and more scalable alternative to traditional methods. With further optimizations, such a system could be deployed in geological research, mining, and even planetary exploration, assisting geologists in making more accurate and efficient mineral identifications.

CEFONA
Safe, Quality, Foods

Centre for FoodSafety and Naturopathy

Dr. Monica Mburu, Director, CeFoNa

The Centre for Food Safety and Naturopathy (CeFoNa), under its founder, Dr Monica Mburu, has been focusing on the consumption of **'Eating food as medicine**.' The Centre has set up a demo farm facility for growing functional foods as innovation remains the heart of DeKUT's identity. CeFoNa gives an experience of how delivering quality foods can nurture people and the planet through regenerative agriculture production and sustainable practices.

Now let's shift focus to naturopathy, an old age practice that has experienced a resurgence in recent years; this is a holistic approach to healthcare that emphasizes the body's natural ability to heal itself.











In a world that is increasingly dependent on synthetic medicines and quick fixes, naturopathy reminds us of the **healing power of nature**.

"*We empower young people to actively contribute to food security and climate action by adopting regenerative farming practices, enhancing their resilience and adaptive capacity, and strengthening their resolve to adopt sustainable agricultural practices*," said Dr Monica Mburu.

Establishment of a therapeutic demo garden of functional foods that promote innate healing power

Centre for Food Safety and Naturopathy (CeFoNa) is mandated to coordinate food safety and naturopathy research that is relevant in Kenya under the Institute of Food Bioresources Technology; it has established an organic therapeutic garden to promote naturopathy. The Centre has also introduced rabbit farming, yacon and mushroom farming. It has developed and



commercialized natural functional foods to the innate healing power of nature. The Centre interacts closely with communities in developing joint action plans and extension work for sustainable agriculture. To learn more about CeFoNa, visit our website: https://cefona.dkut.ac.ke/.

Therapeutic nutrient-dense products have been developed through **Afyalishe Wellness Startup Company**, https://afyalishewellness.co.ke , a startup under CeFoNa. The Centre also harbours the **Green Thumb Movement (GTM)** https://thegtm.or.ke , which comprises students from different faculties within the University who are passionate about smart agriculture for sustainable development. The movement has established functional food crops, including herbs, fruits, and vegetables, which process therapeutic products, nutraceuticals, and cosmetics. Don't just inherit the earth; heal it. Your passion, creativity and determination can cultivate a thriving future for generations. Now is the time to embrace innovation, education and the power of regenerative practices. Let's work together to grow a future where people and the planet thrive.

THE GTM

ALSIGHT
Algae Economic attractiveness through data insights

Project Alsight Unpacked



Faith Gitahi
AlgaeCoin Innovator



Jacinta Njeri
Resource Mobilizer



Joy Nyambura
Podcast Host



Kelvin Ngeno
Research Specialist

Joshua Gichana
Project Coordinator



Mandate: Advancing Algae Intelligence through Data Science and Innovation

Dedan Kimathi University of Technology (DeKUT) continues to lead in innovation with **Project Alsight**, an initiative launched under the Green Thumb Movement (GTM), operating hand in hand with the Center for Food Safety and Naturopathy (CeFoNa: https://cefona.dkut.ac.ke). Registered on 18th December 2024, the project represents DeKUT in the 2025 Data Science Africa Hackathon (June 2nd-6th, 2025) at the University of Ibadan, Nigeria. It aims to revolutionize the algae sector through data-driven technologies. By leveraging predictive analytics, system modelling, and advanced research, Project Alsight unlocks algae's potential across multiple industries, including bioenergy, climate mitigation, and regenerative agriculture.

How the Project is Transforming the Algae Sector

Algae have vast untapped potential, but inefficiencies in cultivation, limited knowledge, and uncoordinated innovation have hindered their growth. Project Alsight seeks to address these challenges by developing scalable, intelligent solutions that optimize algae farming practices, promote environmental conservation, and contribute to ocean farming.

Strategic Focus Areas

- **Predictive Models**: Leveraging data science to optimize algae yields, forecast environmental conditions, and minimize resource wastage.
- **Exploratory Research**: Conducting cutting-edge research to uncover insights into algae growth and its industrial applications.
- **Ocean Farming Systems**: Designing resilient algae farming systems that align with

regenerative agricultural practices through system modelling.

The Alsight Ecosystem

To maximize impact, Project Alsight has created a robust ecosystem of platforms and innovations that support education, engagement, research, and commercialization:

- **Alsight Academy:** A capacity-building platform offering practical training on algae technologies, data science, and sustainable ocean farming practices. (Link: https://alsight-academy.thegtm.or.ke)
- **Alsight Podcast:** A podcast sharing expert interviews, success stories, and updates on algae-related innovations, helping foster awareness and collaboration. (Link: https://alsight-innovations.thegtm.or.ke/podcast)
- **Alsight Forum:** A digital platform for stakeholders to discuss algae technology, sustainability, and market trends. (Link: https://alsight-forum.thegtm.or.ke)
- **Alsight Innovations:** A dedicated R&D hub focusing on key innovations to propel the algae sector forward. Key innovations include:
  - **Algae Intelligence:** AI-powered & Spatial tools for optimizing algae growth, spotting algae blooms, predicting diseases, and improving yields. (Link: https://alsight-innovations.thegtm.or.ke/category/algae-intelligence)
  - **Algaecoin:** A blockchain-based digital asset that supports traceability and incentivizes activities within the algae economy. (Link: https://alsight-innovations.thegtm.or.ke/category/algaecoin)
  - **Alsight Simulator:** A virtual environment for simulating algae farming strategies and system designs to enhance decision-making. (Link: https://alsight-innovations.thegtm.or.ke/category/alsight-simulator)
  - **ALSYS Technologies:** A suite of cultivation technologies, including smart tanks and modular systems, to enhance scalability and automation in algae farming. (Link: https://alsight-innovations.thegtm.or.ke/category/alsys-technologies)

Impact and Broader Significance

Project Alsight aligns with DeKUT's mission to foster sustainable, technology-driven solutions to global challenges. The project contributes to key global goals, including:

- Climate resilience and carbon sequestration
- Sustainable food and energy systems
- Youth empowerment and skills development
- Inclusive participation in the blue economy

As the project expands, it continues to build a knowledge base that serves as a model for similar initiatives across Africa and beyond.

As DeKUT celebrates its 18th graduation, Project Alsight is proof of the University's dedication to addressing complex societal and environmental challenges through innovation. By transforming the algae sector, Project Alsight strengthens DeKUT's reputation as a hub of excellence and paves the way for a more sustainable and intelligent future.

Scan here to visit Project Alsight's platform

Cartography, GIS and Remote Sensing, Evolving Spatial Science of UAV, LiDAR and AI: Revolutionary Mapping and Spatial Analysis tools

Micah Kanyi, Fifth-year student, IGGReS

Introduction

Geospatial technology is revolutionizing multiple industries, offering innovative urban planning, agriculture, disaster management, and environmental monitoring solutions. The integration of Artificial Intelligence (AI), LiDAR (Light Detection and Ranging), Unmanned Aerial Vehicles (UAVs), the Internet of Things (IoT), and cloud-based Geographic Information Systems (GIS) has enhanced accuracy, efficiency, and accessibility in spatial data management. These advancements are reshaping the fields of Surveying, Cartography, GIS, and Remote Sensing, transforming traditional methods and enabling real-time decision-making. While GIS (Geographic Information Systems) and cartography deal with spatial data and maps, GIS is a technology for managing, analyzing, and visualizing geographic data. In contrast, cartography is the art and science of making maps, focusing on visual communication and design.

Spatial Intelligence: Transforming Decision-Making

Spatial intelligence is analyzing and interpreting spatial data for better decision-making. It underpins modern geospatial technologies, allowing professionals to extract valuable insights from geographic information. With advanced tools such as GIS, remote sensing imagery, and AI-driven analytics, spatial intelligence enhances predictive modelling and real-time data interpretation. This capability is critical in urban planning, environmental conservation, disaster response, and efficient resource allocation, driving innovative solutions for global challenges.



Figure1: Spatial technologies

The Backbone of Modern Development

Surveying remains essential in infrastructure development, land management, and engineering by ensuring accuracy in spatial measurements. Cartography translates vast datasets into intuitive visual representations, aiding decision-makers. GIS is the central system for analyzing and managing geographic data, while Remote Sensing (RS) gathers crucial information through satellites, UAVs, and aerial imaging. Together, these fields form an ecosystem that drives modern mapping and spatial intelligence advancements.

UAVs: Enhancing Battlefield and Surveying Precision

Unmanned Aerial Vehicles (UAVs), commonly known as drones, have become indispensable in geospatial applications. Different UAV types serve diverse purposes, including fixed-wing, rotary-



Figure2a.: UAV (drone)



Figure2b: UAV (drone)



Figure 2c UAV (drone)

wing, and hybrid drones. In battlefield operations, UAVs provide reconnaissance, surveillance, and target acquisition, improving military intelligence. In surveying and mapping, drones enhance precision by capturing high-resolution imagery, enabling topographic mapping, land-use planning, and infrastructure assessment. Their ability to access remote and hazardous areas makes them crucial for disaster response and environmental monitoring. Figure2a and Figure 2b show the drones operated by licensed drone pilots.

Celebrating a Decade of Achievements:

Technological Advancements in Surveying, Cartography, GIS, and Remote Sensing

AI-driven GIS automates data processing for environmental analysis and urban planning. LiDAR creates precise 3D models for infrastructure and disaster risk analysis. Hyperspectral imaging aids early crop disease detection, supporting agriculture. Cloud GIS improves researchers, governments, and businesses' access to geospatial data. Surveying now employs RTK for greater accuracy. Cartography has evolved from paper maps to digital platforms. GIS integrates AI and IoT for real-time analysis, while Remote Sensing benefits from high-resolution satellite and UAV imaging.

Opportunities for First-Year Students in Geospatial Sciences

Geospatial technology presents excellent career prospects. Industries are adopting GIS, LIDAR, UAVs, and AI mapping, creating demand in smart cities, precision agriculture, and conservation. Entry-level roles exist in surveying, remote sensing, and geospatial intelligence. Affordable housing projects also need surveyors to map, set out access roads, and plan infrastructure. Skilled professionals are required for land surveys and overseeing road and building development in these areas. Figure 3 shows some of Dekut's staff and students showcasing machines on career day.



Figure3:.Participants pose for a group photo on career day

Conclusion

Geospatial technology is shaping the future of mapping, surveying, and remote sensing by integrating advanced technologies such as AI, UAVs, and IoT. These innovations have transformed classical methods, improving efficiency and accessibility in spatial analysis. With the increasing demand for geospatial solutions, students and professionals must embrace these advancements to drive progress in urban planning, agriculture, and disaster management. The future belongs to those who harness the power of geospatial technology for more innovative and sustainable development.

As a 5th-year student passionate about geospatial sciences, I aspire to contribute to innovative solutions that harness the power of spatial data for real-world impact. By leveraging GIS, UAVs, and AI, I aim to develop solutions addressing critical challenges in water management, smart cities, and climate resilience, ultimately shaping a more sustainable and efficient world.

Catching Them Young: DeKUT & RUB Drive Stem Innovation for Environmental Conservation



International collaboration research partnerships provide a platform to explore various technologies and techniques addressing local community challenges. The continued collaboration between **Dedan Kimathi University of Technology (DeKUT)**, through the Remote Sensing Research Group (RSRG), and **the Ruhr University Bochum (RUB)**, through the Interdisciplinary Geographic Information Sciences (IGIS), continues to technologically empower school teachers and learners within the Muringato Catchment Area guided by the Competency Based Curriculum (CBC) content. Through the current collaborative project titled "Participatory Approach to Climate Change Mitigation and Forest Restoration in the Muringato Catchment Area," digital e-learning content is being developed to demystify some of the technical curriculum content.

From March 4th to 6th 2025, DeKUT and RUB conducted workshops themed "Science and Technology Applications in Environmental Conservation" for Grade 5 and 6 learners in 6 schools, namely **Mwenji**, **Mweiga**, **Kiguru**, **Nyaribo**, **Chania**, and **Muringato** primary schools. The sessions aimed at inspiring learners in STEM through hands-on experiences in space science and satellite technology for environmental conservation. Three activities were undertaken: a memory game for identifying geographic features from satellite images and matching them with their corresponding ground images. The second activity was onscreen identification and classification of objects captured on an image using classification software. The third activity tested the learners' coding and programming skills. The calliope mini used preloaded block codes to differentiate various ground objects using their colours and how satellites capture light reflections from Earth.

The collaboration between DeKUT and RUB showcases how science and interdisciplinary research can tackle global issues like climate change, deforestation, and food security. DeKUT maintains its position as a leader in technology-driven education, preparing students and researchers to develop solutions for environmental sustainability.





Understanding Climate Change Impacts on Agriculture

By Brian Kibet, Dr. Kuria B. Thiong'o, Remote Sensing Research Group (RSRG)

As climate change continues to accelerate, it is reshaping global weather patterns that significantly impact agricultural systems. Understanding how these changes affect food production has become increasingly vital, especially for small-scale farmers who are particularly vulnerable. Ground-based surveys in the Muringato Catchment revealed that these farmers heavily rely on river water for irrigation, placing significant pressure on local water resources that are already under strain.



As a response, the "**Participatory Approach to Climate Change Mitigation and Forest Restoration in the Muringato Catchment (MC2FM)**" Project, funded by the German Federal Ministry of Education and Research (BMBF), is exploring innovative solutions. The project aims to harness the power of remote sensing technologies to monitor and address the effects of climate change on local agriculture.

At the forefront of this initiative is DeKUT's Remote Sensing Research Group (RSRG), which uses advanced modelling techniques to examine how phenological shifts—changes in plant life cycles—are influenced by climate change. This research spans April 2024 to December 2025 and is focused on refining cropping calendars, allowing farmers to adapt more effectively to shifting seasons and improve crop yields. An ensemble of machine learning models is being trained using data over 20 years to analyze planting trends of key food crops (maize, beans, and potatoes) and correlate them with future climatic conditions to optimize planting and harvest timing. The RSRG will provide valuable, data-driven insights to help farmers make informed decisions about the best times for planting and harvesting, ultimately promoting more sustainable farming practices.

Mr Kibet making a presentation on "Climate-Change-Crop-Phenology Interactions" on 3rd March 2025

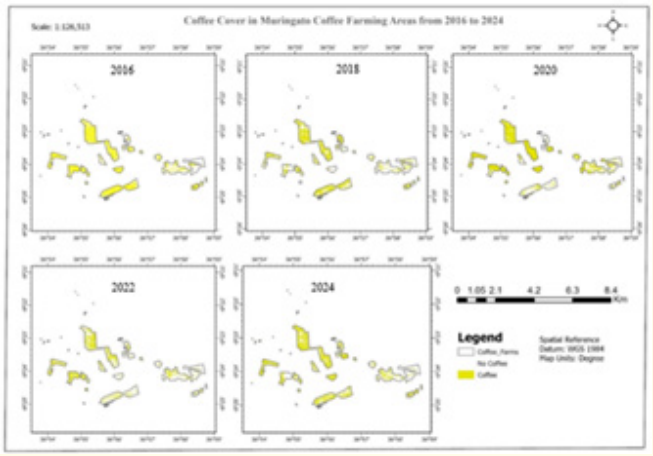
EUDR Compliance: A web GIS Solution for Muringato Coffee Farmers

Peter Ndiritu Thuku, Dr. Kuria B. Thiong'o, Remote Sensing Research Group (RSRG)

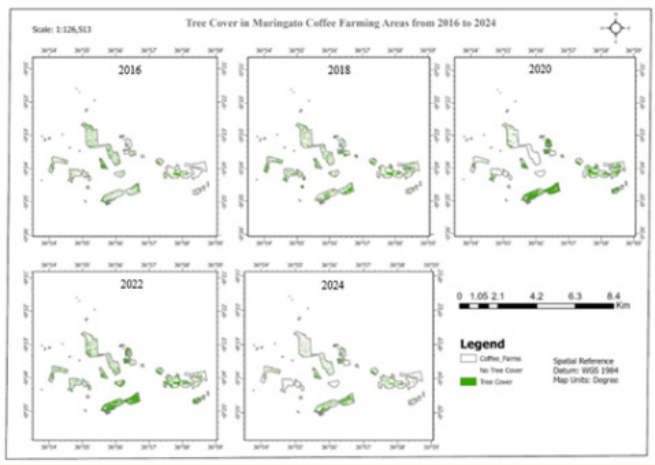
The devastating global effects caused by continued environmental degradation have necessitated the development and ratification of various policies to curtail this destruction. The European Union Deforestation Regulation (EUDR) is a landmark policy that ensures the production of deforestation-free products. Farmers must prove that no forest land was converted to agricultural land to produce their produce. These products include cattle, oil palm, soy, cocoa, coffee, rubber and wood.

Effective 31st December 2025, the regulation mandates precise geographic coordinates about the sourcing location (traceability) to ensure sustainable and environmentally responsible supply chains. For coffee farmers located within the Muringato Catchment in Nyeri County, Kenya, complying with the new global regulations before the deadline provides an excellent opportunity to continue accessing the European and other international markets.

The **MC2FM Project**, funded by the German Federal Ministry of Education and Research (BMBF) - 01DG24001 and titled "**Participatory Approach to Climate Change Mitigation and Forest Restoration in the Muringato Catchment**" sought to explore how geospatial technologies can be used to create a nexus between farmers' coffee production activities and the EUDR stipulated requirements by analyzing deforestation patterns and land use land cover (LULC) changes within target coffee farms. Guided by the existing Muringato catchment administrative zones, satellite imageries were obtained from 2016 to 2024. From the images, the coffee field boundaries and the forest boundaries were identified.



Coffee Cover in Muringato Coffee Farming Areas from 2016 to 2024



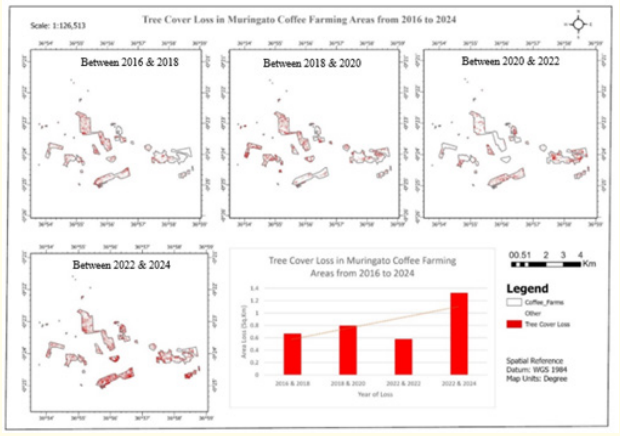
Tree Cover in Muringato Coffee Farming Areas from 2016 to 2024

Fieldwork activities followed this to validate the identified boundaries. These boundaries were then compared against the baseline survey map provided by the EU for monitoring purposes.



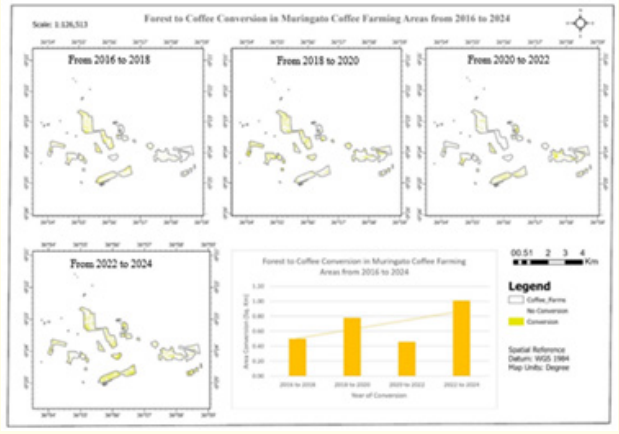
Field data collection of target coffee farms

Following the analysis, a net tree cover loss of approximately 4% from the 2016 baseline and a net trend rate of tree cover to coffee conversion of roughly 1.34% per year was identified, indicating potential concerns regarding EUDR compliance in the region's coffee farming areas.



Tree Cover Loss from 2016 to 2024

A Web-GIS application (EUDR CFCMA) providing real-time, accurate data on land use changes and deforestation within target coffee farms was also developed.

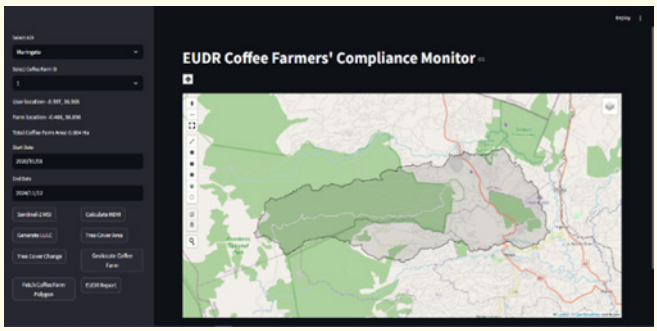


Tree Cover to Coffee Conversion from 2016 to 2024



EUDR CFCMA landing page

This application leverages the Earth Engine API for comprehensive monitoring that assesses farmers' compliance with EUDR in the Muringato Catchment. The application provides a farmers' EUDR Compliance Report that aligns with the EU due diligence aspect.



The developed EUDR CFCMA

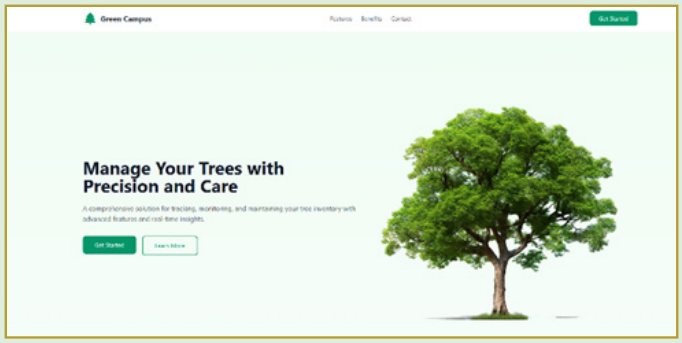
The Web-GIS application provides a platform through which farmers' compliance with the EUDR regulations can be easily verified, safeguarding their earnings from the coffee farms.

Harnessing Geospatial Technology for Urban Forestry Management

Ivan Kipruto, Dr Kuria B. Thiong'o Remote Sensing Research Group (RSRG)

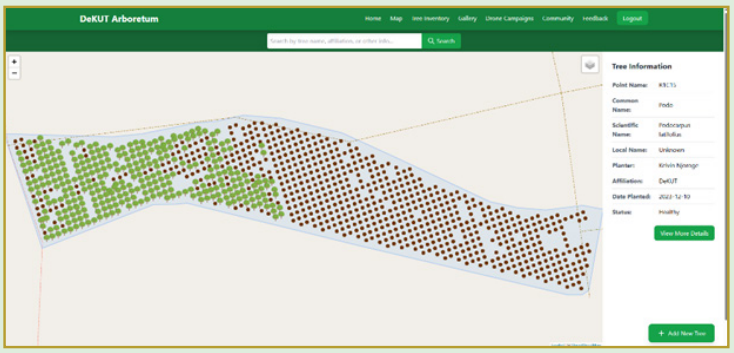
In today's rapidly evolving urban landscape, integrating technology with environmental management has become not just innovative but essential. Urban forests play a crucial role in mitigating climate change, enhancing biodiversity, and improving the quality of life for city dwellers. At Dedan Kimathi University of Technology, the RSRG Arboretum represents an essential green space where restoration efforts are critical. This research seeks to complement the existing manual arboretum management approach and trees' health monitoring approach with a system-based approach. This will increase the efficiency of the arboretum management.

In line with the **MC2FM Project**, funded by the German Federal Ministry of Education and Research (BMBF) - 01DG24001 and titled "**Participatory Approach to Climate Change Mitigation and Forest Restoration in the Muringato Catchment**" an Interactive Web-GIS based Tree Management System for the RSRG Arboretum was developed showcasing how advanced geospatial tools and modern web frameworks can be leveraged to address real-world challenges in urban forestry management.



RSRG Arboretum Interactive Tree Management System (ITMS) Landing Page

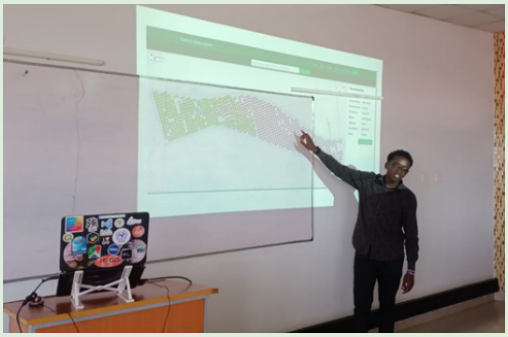
Using the *Django* framework and integrating robust geospatial libraries, the project aimed to develop a dynamic, web-based platform to collect and store essential information about tree species, geographic locations, health statuses, and maintenance records. The platform would also provide an interactive map, allowing users to visualize tree spatial distribution and status easily. This would improve decision-making through real-time monitoring and data-driven insights to support timely tree maintenance and forest restoration interventions.



The Interactive Mapping Page with mapped tree information

The system development process involved setting up a comprehensive database, integrating spatial data handling with PostgreSQL and PostGIS, and creating a user-friendly front end that balances technical functionality with ease of use.

The development process encompasses the creation of a centralized database that efficiently organizes and stores tree data, seamlessly integrates spatial information using PostgreSQL and PostGIS, and provides a user-friendly interface. This holistic system enhances visualization through an interactive map and enables timely, data-informed decisions for better tree maintenance and restoration efforts.



Mr. Ivan Kipruto making a presentation on his developed ITMS during the MC2FM Stakeholders workshop on 3rd March 2025

This project underscores the transformative power of merging geospatial technology with environmental stewardship. By shifting away from manual records and embracing a data-driven approach, urban forestry management can become more proactive, efficient, and inclusive. The platform supports current restoration efforts at the Arboretum and paves the way for future innovations in managing urban green spaces.

Mapping the future: DeKUT'S Geospatial Developers Club

Building Skills through Collaborative Programming, Data Analysis and Web Mapping

Peter Ndiritu Thuku,Research Intern, Remote Sensing Research Group (RSRG), IGGReS



The Geospatial Developers Club (G-DEV) is IGGRES's student-led association, bridging theoretical knowledge with practical spatial technologies and GIS applications. The club fosters innovation, collaboration, and professional skill development among members. The club is supported by the staff members of IGGReS, led by the director and the club patron. Weekly meetings are held every Wednesday at DeKUT Main Campus.

Building Skills Through Collaboration

Throughout 2024/2025, G-DEV has established weekly peer learning sessions where members share expertise in programming, data analysis, and web mapping.

These meetings enhance technical proficiency while developing essential soft skills valued in the geospatial industry.



Figure 1: GDEV Weekly Meeting

DeKUT GDEV Open Street Map Mapathon

G-DEV organized two significant mapping events: an on-campus Mapathon (November 2024), where



Figure 2: DeKUT G-DEV & KarU GIS Club OSM Mapathon

students mapped DeKUT facilities while learning from industry professionals, and a collaborative Mapathon with **Karatina University** (*Figure 2*) in February 2025 that digitized essential features in previously unmapped regions.

Beyond Mapping: Technical Innovation

The club hosted a specialized hackathon alias "G-DEV Hack 2024" in October 2024, focusing on geospatial analysis with High-Performance Computing applications, as shown in *Figure 3*.



Figure 3: Invited Guests during the G-DEV Hack 2024

Figure 4 shows Four G-DEV Club Members also represented DeKUT at a two-week Cubesat Training Course at Luigi Broglio Malindi Space Centre with their "CombatSAT: Combating Banditry and Insecurity," project aimed at addressing security challenges through satellite technology.



Figure 4: CubeSat Design & Development

This prestigious training was facilitated by experts from the Kenya Space Agency, the Italian Space Agency, and professors from the Sapienza University of Rome, who gave insights into satellite development, operation, and data utilization.

Recognition of Excellence

In April 2025, G-DEV was awarded the prestigious YouthMappers Community Outreach Award (*Figure 5*) through collaborative local initiatives.

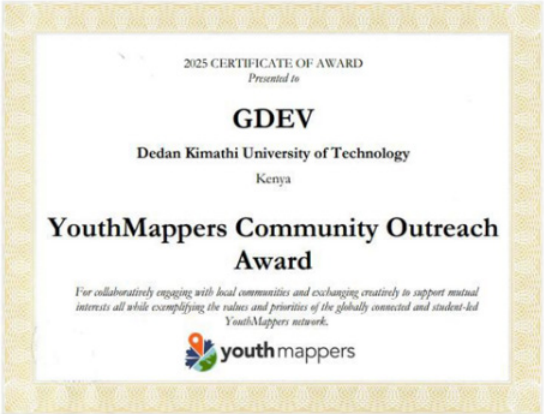


Figure 5: 2024 G-DEV YouthMappers Community Outreach Award

Building Tomorrow's Geospatial Leaders

G-DEV club positions DeKUT as a centre of excellence in geospatial education, demonstrating how students (*Figure 6*) initiatives enhance learning while creating meaningful impact.



Figure 6: G-DEV Club Members

For more details, contact:

Email: gdevdekut@gmail.com

*X (formerly Twitter): GeospatialDev_*

Telephone/WhatsApp: +254 113143372

Okoa Box: Revolutionizing Disaster Communication

Sylvia Maina, Victor Rono and Mercy Runo

At Dedan Kimathi University of Technology, innovation isn't just a buzzword; it's a culture. One prime example is *Okoa Box*, an intelligent disaster response system that bridges emergency communication gaps. Born out of a collaborative effort by final-year students Sheila Otuko, Sylvia Maina, Mercy Runo, and Victor Rono, the *Okoa Box* is a shining example of how student-led innovation can address real-world challenges with a scalable impact.

The device leverages LoRa communication technology to send alerts during disasters such as floods or landslides, especially in areas where conventional communication channels are compromised. With a user-friendly keypad interface, environmental sensors and OLED display, *Okoa Box* empowers individuals to raise alarms that can instantly reach rescue teams, aiding rapid response and potentially saving lives.

What began as a university project has become a nationally and internationally recognized innovation. Sylvia Maina proudly presented the project at the **Presidential Innovation Challenge 2025** under the **University Category**, where it gained attention for its relevance, practicality, and promising potential to support disaster response efforts in Kenya and beyond. The team's journey through the challenge was guided and mentored by Dr Agnes Wangai, whose support and insights played a pivotal role in sharpening the concept and pitching it at a high level.

Internationally, *Okoa Box* was showcased at the **Humanitarian Technology Conference 2024** in Italy, presented by Sheila Otuko under the banner of the **IEEE DeKUT Student Branch**, where it sparked global conversations around sustainable, low-cost, and tech-driven emergency response systems. Locally, the entire team of Sheila Otuko, Sylvia Maina, Mercy Runo, and Victor Rono came together to present Okoa Box during **the IEEE CAS Student Design Competition** and the **Red Cross Innovation Challenge**, where the project stood out for its ingenuity, affordability, and real-world applicability in disaster-prone regions.

None of this would have been possible without the strong innovation ecosystem Dedan Kimathi University of Technology fostered. Through its commitment to nurturing student ideas, providing technical support, mentorship, and access to platforms like IEEE and innovation challenges, the University continues to prove itself as a breeding ground for impactful solutions.

The *Okoa Box* journey is not just a testament to the power of multidisciplinary collaboration but also to the kind of impact that is possible when young minds are given the space and support to innovate. As we graduate, we carry with us the hope that this innovation will not end at prototyping but grow into a life-saving tool adopted by communities across Africa and, eventually, the world.



Okoa Box, presented by Sheila Otuko, was awarded second place at the HTB Competition (Italy)



Sylvia Maina presenting Okoa Box at the Presidential Innovation Challenge 2025



Okoa box presented by Sylvia, Runo & Rono, awarded third place at the IEEE CAS DESIGN Competition

A Pathway to Global Careers: Skilled Workforce Migration to Germany

DEDAN KIMATHI UNIVERSITY OF TECHNOLOGY
OFFICE OF CAREER SERVICES
(DeKUTOCS)

careerservices@dkut.ac.ke, Mobile: 0114-143-876, Freedom Hall, 2nd Floor

Opportunities for qualified individuals in today's fast-paced global economy transcend geographical boundaries. Imagine working in a field that combines innovation and tradition, where top-tier industries are looking for your skills, and where your academic background can lead to a rewarding worldwide career. One such fantastic possibility for Kenyan graduates is Germany, a country known for its thriving economy, innovative industry, and dedication to skilled labour migration, supported by the MoU on comprehensive migration and mobility partnership between Kenya and Germany.

During the 2024 DeKUT Annual Career Fair, we were privileged to hear from Bildungswerk der Bayerischen Wirtschaft (BBW) gGmbH (https://www.bbw-international.com/) a prominent German, Bavaria-based service provider in education, consulting, human resources, and social affairs. The representatives from BBW, led by the Team Lead Migration, Ms. Aurelia Starringer, engaged with DeKUT students on a topic of immense importance: **The pathway to working in Germany**. The session provided an in-depth look at the industries needing skilled professionals, the qualifications required, and the structured migration process that enables foreign talent to join Germany's workforce. The talk highlighted the demand for skilled labour in several key industries, including:

- **Sustainable Tourism and Hospitality Management**: as a global tourism hub, Germany seeks skilled professionals to manage its sustainable tourism initiatives, ensuring eco-friendly and responsible travel experiences.
- **Electrical and Electronics Engineering:** with advancements in robotics, automation, and innovative infrastructure, engineers in this field are highly sought after.
- **Civil, Mechanical and Mechatronics Engineering:** as Europe's manufacturing and infrastructure powerhouse, Germany seeks engineers to contribute to automotive, construction, and advanced manufacturing projects.
- **Information Technology:** IT professionals are in high demand for cybersecurity, software development, and the recent explosion of AI as Germany continues to lead in digital transformation.
- **Nursing:** with an ageing population and a growing healthcare sector, qualified nurses are in critical demand to support the country's medical workforce.

For many graduates, moving to a foreign country may seem daunting. However, Germany has established a well-structured pathway for skilled migration, making the transition seamless for qualified individuals.

So, how do you begin your journey to work and live in Germany?

Inform yourself as much as possible, and if interested, complete the contact form (https://www.bbw-international.com/contact/contact-form/) online, and you will be guided through BBW's application platform.

The Process

BBW enters into contracts with German companies and searches for suitable candidates to fill vacancies. Interested candidates should consider taking online courses on the https://www.hub4africa.bayern/ digital learning platform. The platform offers different learning opportunities free of charge for the user at various levels for everyone.

The topics covered are vocational orientation and qualification, business start-up and training of trainers/educators. Most importantly, you can also test learning German with beginner lessons for A1 and A2 on this platform. **"Living & Working in Germany"** is another online course you should take. This course is perfect for anyone interested in the German lifestyle. From general country information (e.g. politics, climate, culture) to insights into daily life (e.g. housing, transport, shopping) and possible migration pathways.

The candidates undergo an interview, and successful individuals begin the contract-signing process. During the interview, **candidates must demonstrate proficiency in the German language at the B2 level**. Following this, BBW begins the transit process. This includes submitting documents to BBW (e.g., passport and certificate). BBW begins your visa application once your documents have been recognized and accepted. Your qualifications will need to be approved by German authorities. Based on your certificates, you receive either full recognition with no further requirements or partial recognition. BBW proceeds to book your flight, find you housing, and a contact person. Upon arrival in Germany, BBW ensures you are settled before you start your work/traineeship. Additionally, BBW offers the candidate and companies the choice to terminate the contract if they feel the fit is not good. **This immigration process takes about 6-12 months.**

Why BBW International?

First, the company has partnerships with German companies looking for skilled labour. Secondly, the company offers one contact person throughout the entire immigration process. Thirdly, the company has partnerships with language schools, enabling candidates to learn German, take exams and become proficient. Lastly, BBW has partners at the German Embassy. This is important for processing your immigration documents, visa applications and work permits.

BBW strives to find your perfect match within a job or traineeship based on dignity and respect. You always receive detailed and verified information about your contract process. The company sets out precise expectation management, no application fees for you, and communication on equal terms. BBW's long-term goal is to achieve happiness at your workplace and in your new home, working on a future that benefits everyone.



Students at a past training

DeKUT International Office

William Kinyua

Higher education institutions must expand their focus beyond local developments and engage with international trends to remain competitive in today's globalized world. The University aims to incorporate an international and intercultural dimension into its curriculum, research, and services, as these exchanges foster creativity and innovation. The DeKUT Strategic Plan 2023-2028 outlines internationalization initiatives, recognizing the significant changes impacting the University. These include the growing student and staff population, expanding research efforts, evolving learning methods, rising student and community expectations, global industry and education trends, environmental awareness, and the country's financial realities. The plan details key internationalization activities to help DeKUT achieve its international goals.

Exchange Programmes are offered through the DeKUT International Office

DeKUT offers vibrant student exchange programs aligned with its vision of producing globally competitive graduates and building international partnerships to enhance its reputation as a premier global University of technology. These exchange programs provide life-changing experiences crucial to the institution's internationalization strategy. Many DeKUT students have participated in assignments at leading laboratories and manufacturing facilities worldwide, significantly improving their technical skills; these programs have increased the University's diversity and allowed students to gain international work experience. DeKUT hosts international students-pictures below.

1. The International Association for the Exchange of Students for Technical Experience (IAESTE) exchange programme

The International Association for the Exchange of Students for Technical Experience (IAESTE) is an organization that offers paid internships abroad, ranging from 8 weeks to 18 months, providing students with valuable work experience and broadening their global perspective. Founded in 1948 at Imperial College London, IAESTE operates in over 90 countries and exchanges more than 8,000 students annually. DeKUT became a member of IAESTE in 2013, gaining opportunities for students to intern abroad and for international students to intern in DeKUT.

DeKUT Students and International Students- *Fig1. DeKUT Student in Germany, Fig2. International students at DeKUT, Fig3. DeKUT Student in Switzerland*



Fig.1



Fig.2



Fig.3





2. AIESEC Exchange Programme

AIESEC is a global, nonpolitical, independent, not-for-profit organization run by students of higher learning whose members are interested in world issues, management and leadership. It was established in 1948 after World War II when seven youths across seven countries/territories had a dream of building cross-cultural understanding across

nations. They hoped to change the world, one person and one internship at a time. Together with partner organizations, AIESEC facilitates a network of cross-cultural exchanges through volunteering experiences and professional internships. AIESEC opportunities are classified into Global Talent, Global Teacher and Global Volunteer.

DeKUT Student in Rwanda for an AIESEC voluntary project





The University has other student exchange programmes, including **United States Government Exchange Programs**, **Japan Exchange Programmes**, **Erasmus+ Programmes**, **France Exchange Programmes**, **East African Community Scholarships**, **DAAD Scholarships**, and **Taiwan Exchange Programmes**. These programmes are crucial for broadening students' perspectives, enhancing their cultural understanding, and providing valuable global work experience. These programmes allow students to immerse themselves in different cultures, gain technical skills, and develop a deeper appreciation for diversity. By participating in internships and study opportunities abroad, students enrich their academic and professional growth and build a network of international connections, enhancing their global competitiveness and preparing them for success in an interconnected world.

DeKUT International Office webpage: **https://www.dkut.ac.ke/internationaloffice/**

My Internship Experience in Switzerland

By Darius Okello



Switzerland, a land famous for its precision and natural beauty, has become the backdrop of my memorable internship. Throughout this journey, I got into a world of innovation and efficiency. This article reflects on my internship experience in Switzerland, focusing on professional growth, cultural immersion, personal reflections, achievements in research and extracurricular activities.

My internship exposed me to the Swiss dedication to precision. I learned firsthand the value of precision in achieving top quality, collaborating with Swiss professionals and from other countries, and how attention to detail drives efficiency and excellence. It has provided opportunities to engage with cutting-edge technologies and research practices. Whether working on innovative projects or attending workshops, I continue to be challenged to expand my skills. Collaborating with a diverse team from different countries and backgrounds has enriched my understanding and fostered creativity, highlighting the importance of varied perspectives in problem-solving.





Switzerland's commitment to research and innovation is evident in its advancements and development of eco-friendly insulation materials. I had the privilege of contributing to projects exploring insulation materials, aiming for improved efficiency and sustainability. The intersection of chemistry and engineering in developing insulation solutions is enlightening and inspiring. Collaborating with experts in the field, I tried to contribute to experiments and analyses aimed at enhancing thermal efficiency and durability of insulation materials.

Beyond work, Switzerland has offered rich cultural experiences. I was privileged to witness this enchanting cultural celebration, often called The Carnival, which contrasted the country's reputation for orderliness. One of the most memorable aspects of experiencing the Swiss Carnival was witnessing the creativity and ingenuity displayed in the costumes and floats of the Swiss residents. Exploring Swiss nature and hiking in the Alps has provided glimpses into the country's heritage and natural beauty. Interacting with locals and navigating daily life in a multicultural environment has broadened my perspective and continues to enhance my adaptability.

Engaging in extracurricular activities further enriched my internship experience. Participating in sports events and language exchange programs allowed me to connect with people from diverse backgrounds. These experiences complemented my professional growth, personal connections, and cultural understanding. My time in Switzerland has been a transformative journey of self-discovery and growth. Stepping out of my comfort zone and embracing challenges has strengthened my resilience and adaptability. The lessons learned, both professionally and personally, have already undoubtedly shaped my future endeavours and aspirations.

I am grateful for the experiences and lessons I have gained. Each moment has contributed to my development from professional growth to cultural immersion. Switzerland's commitment to precision, its vibrant culture and its spirit of innovation are already leaving an indelible mark on my journey. I carry with me not only cherished memories but also invaluable lessons learned.

The Role of Diversity and Inclusion in University Life

By Dr. Emmah Marigi, Director, Gd&Ea

Institutions of higher learning are not only centres of academic excellence but also spaces where students, faculty, and staff from diverse backgrounds come together to learn, grow, and collaborate. Diversity and inclusion are vital components of a thriving university community. Embracing diversity means recognizing and valuing each individual's unique perspectives, cultures, and experiences. Inclusion ensures that all university members feel respected, supported, and empowered to participate fully in campus life. These principles create a richer educational experience and prepare students to navigate and contribute to a diverse global society.

Diversity encompasses differences in culture, ethnicity, gender, age, sexual orientation, disability, socioeconomic background, and many other characteristics that define individuals. To truly harness the benefits of student and staff diversity, universities must go beyond representation. Intentional efforts are needed to foster inclusive environments where everybody feels valued and supported. This includes diversifying faculty, offering culturally responsive support services, and creating spaces where everybody can connect and thrive regardless of their backgrounds.

DeKUT's student and staff populations are a rich blend of cultural, socioeconomic, and ideological backgrounds. While this diversity greatly enriches the educational experience, it calls for intentional efforts to foster true inclusivity.

When students from diverse backgrounds come together, they bring new perspectives, unique solutions, and fresh ideas. This exposure enhances critical thinking, stimulates creativity, and encourages global awareness. Interacting with peers from different backgrounds fosters empathy, tolerance, and cross-cultural communication skills. Despite being in diverse environments, students often self-segregate into familiar social groups based on shared language, culture, or background. This natural tendency can unintentionally limit opportunities for meaningful cross-cultural interaction, which is essential for proper integration. In addition, minority students may experience micro-aggressions or feel underrepresented in the classroom and campus culture. These experiences can negatively impact their academic performance, sense of belonging, and well-being.

A workplace embracing diversity and inclusion creates a more welcoming environment where employees feel valued and respected. Employees who are comfortable expressing their authentic selves are more engaged, motivated, and productive.

Achieving true diversity comes with challenges, such as unconscious bias, discrimination, and resistance to change. To overcome these barriers, organizations and societies can take proactive steps to promote diversity by ensuring recruitment processes are free from bias and encourage diverse candidates, educating employees on unconscious bias and cultural awareness, establishing strict policies against workplace discrimination and harassment, and promoting individuals from different backgrounds into decision-making positions.

The University should consistently mainstream diversity and inclusion into all aspects of campus life. This means going beyond surface-level inclusion efforts and embedding inclusive practices into curricula, faculty training, student services, and leadership structures. Through these intentional and sustained efforts, we create an environment where every student feels respected, supported, and empowered to thrive.

Diversity is a moral imperative and a crucial factor in driving social and economic progress. We can build a more just, innovative, and harmonious world by embracing diversity and fostering inclusivity. The responsibility to promote diversity lies with individuals, communities, and organizations working together to create a society where everyone is valued and respected. Diversity is a dynamic asset that, when embraced thoughtfully, enriches the entire educational experience with the proper support and institutional commitment. At DeKUT, we endeavour to embrace this and ensure that our difference becomes a source of strength, not division.

Celebrating our Success: Our Graduation Day, our Mental Well-Being

Dr. Waithera, HoD, Counselling Department

DeKUT family is elated to join the graduating Class of 2025. As you all prepare to exit the stage, ushering in the next chapter of life, our message from the DeKUT Counselling Department stays clear: appropriate self-care, including a check on your mental health status. As we update our resumes, inserting new titles and accolades, let us all remember to update some part of our lives that is a million times more crucial — our mental health.

A walk in the park, down DeKUT memory lane, celebrating the journey we've survived, tossing our caps in the air, it's difficult to fight off some sobering facts; not all our comrades who started the journey off with us danced their hearts out during the freshers' bash, walked around *Boma*, are here to celebrate the closing camaraderie-ship. Some of us have exited through death, most painful, died by suicide—a sincere mental health concern among campus comrades. Globally, millions of students are proudly escorted to universities by their parents, family members and friends. They all come along to witness the great attainment of "campus life". The young students enter university full of bright dreams, hope, and ambition. However, for some, the pressure, pain, and isolation become too much weight to even lift over their shoulders. For them, graduation never comes—not because they had no intelligence or strength, but because they were silently fighting battles no one could see. They tightly shut themselves in their hurting worlds.

Common warning symptoms for mental health challenges among university students include:

- **Mental Health Struggles:** A majority of Mental Disorders, including depression, anxiety, Bipolar, as well as other mental conditions, often emerge during early adulthood. Added to the emotional turbulence of young adulthood, the burden takes a toll on the student. Some students never notice their struggles until they're deep in a dark pit, and it isn't easy to pull themselves out.
- **Academic Pressure:** Most of the time, campus life is seen as a time of growth and discovery; however, it could tag along with a high-stakes experience—deadlines build-up, expectations sour, and the fear of failure choke comrades. When one's identity is tied to one's grades, every setback feels like a personal collapse, a "break-up".
- **Alone in a crowd:** A student can be in the company of friends, roommates, classmates, and social media players—and still suffer immense loneliness. Even the busiest campus could feel like a desert whenever a meaningful connection is missing.
- **The Silent Stigma:** Asking for help is regarded as a weakness, "too crazy" or "madness" among diverse cultures and communities. This experience is live among campus comrades. "Man up", Stay strong," "No dramas", or "Toughen up" are phrases that close down channels for help or reach out when in dire need. Students suffer silently, smiling while hurting inside and slowly sinking mentally.

How do I help?

We graduate today. However, we now know that we must talk. We must ask real questions. Let's check in on our comrades, even the ones who seem "fine". If you notice a friend is not their usual self, ask them how they're doing and listen to their response. Struggling is NOT a weakness. We must make space—for vulnerability, for conversation, and imperfection. Today, as we step forward into our following life chapters, let's NOT forget that success is not just about degrees and accolades; NO!

Success is about our survival as comrades, pulling us out of the darkest pit, healing, and helping US ALL. And to experience shared JOY. We started the journey together, have done classes together, done *Boma* for camaraderie, and we endeavour to toss our graduation caps as a whole class "FOR US ALL". Therefore, this graduation is a celebration of everyone who made it—and a tribute to those who didn't—and their stories as comrades also matter.

Graduation may mark the end of a chapter, but it's not the end of the journey. As we enter new spaces and careers, remember that our mental wellness is key. It's not a luxury; it's a necessity. Be proactive; don't wait until burnout beckons. Lay down healthy routines, keep connected with support systems, and remember—***there's no shame in asking for help.*** As we celebrate our achievements, let's carry that spirit of self-care forward. Success isn't just about what you do—it's also about how well you care for yourself. You are essential, and your well-being matters.

Today, you bid farewell to the scenic hills of Nyeri and the close-knit campus of Dedan Kimathi University of Technology (DeKUT), one essential message: ***mental wellness is a lifelong journey***. Graduation marks the end of lectures and CATs, but it could also be a source of anxiety from the pressures of adulthood and the uncertainties of job hunting. Know that mental health challenges don't disappear after earning a degree. "Simply because you're leaving campus does NOT mean you have to walk the journey alone". Stay connected as alums, talk, ask for help when needed, and continue practising the wellness habits. Let's make mental health a regular topic of conversation, not just today, but every day. Tag along that culture of endless mental care. Success isn't just about achievement and innovation— but a blend in of the capacity to thrive, both mentally and emotionally.

Student Counselling Services at DeKUT: A Caring Community

At DeKUT, we are deeply committed to student well-being, offering a unique blend of emotional and psychological support that complements our academic and innovative pursuits. This commitment is brought to life through our **Student Counselling Services**, a vital pillar of our student community. DeKUT recognizes that university life can be both exciting and overwhelming. To support students navigating social pressures, classes, personal challenges, and course projects, the University provides free and confidential counselling services through the **Student Counselling Department l**ocated within the Directorate of Student Welfare. This confidentiality ensures that students can seek help in a secure and safe environment. The department comprises three certified counsellors and three social workers with the primary objective of walking students through their life journeys and struggles — whether it's stress, anxiety, relationship struggles, grief, or academic pressure. Students experience a safe space, a listening ear, and a caring heart.

Services Offered

DeKUT's Student Counselling Department services are broad and tailored towards different student needs. They include:

- Psychological Assessments
- One-on-One Therapy Sessions
- Group Therapy sessions for diverse groups of clients
- Student Peer Support Forums
- Crisis Intervention and Trauma Support
- Personal Development Coaching and Mentorship
- Mental Health Awareness Events and Workshops
- Student Empowerment Training Programs: Peer Counselling, ADA Peer Educators, Sexual Reproductive Health, Gender-Based Equity, and Mental Health Champions
- Referral services are provided internally and outside the University for specialized psychiatry care.

All services are offered through an open-door policy. To access services, students book appointments or walk in during working hours. In cases requiring specialized care, referrals are made for further medical evaluation and care internally or outside the University.

DeKUT is committed to the mental well-being of its students and has taken active steps to reduce the stigma associated with seeking help. The University management supports the Counselling Department through diverse mental health-related programs, including sensitization during **Student Coffee Hour Sessions**, ***Mental Health Awareness Week***, **stress-relief sessions**, and collaborative initiatives with organizations like NACADA, Mathari National Teaching and Referral Hospital, Christ The Good Shepherd Wellness Center, Mathari. These initiatives aim to create an environment where students feel accepted and encouraged to prioritize their mental health.

The clientele caseloads have grown through the years, and students are now more willing to talk about their mental health compared to previous years. The department has built a strong community that cares for each other through training and peer support networks. At DeKUT, counselling services go beyond offering support—students are equipped with tools for life through the diverse mentioned awareness programs. The services are geared towards building resilience beyond graduation, from analysis and self-awareness, personality /psychological assessments, emotional intelligence, stress management and communication skills. At DeKUT, success is attained through posting impressive grades or technical skills, blended with the capacity to cope with life challenges, keep grounded, and develop as a person. All these valuable attributes have been realized through the services offered.

Accessing Counselling Services in DeKUT

- Visit the **Directorate of Student Welfare** at the Main Campus
- Call the **Counselling Department Mobile phone** (available on the DeKUT website)
- Email: **student.counselor@dkut.ac.ke**
- Look out for mental health awareness posters and workshop announcements around campus: notice boards, the University website, and social media sites.

Whether you are thriving, struggling, or at some point in between, this is a REMINDER that you are not alone. DeKUT's Student Counselling Services are here with you—walking the journey with you. At DeKUT, we want every student to know their mental well-being is a top priority. We are committed to providing the support and resources necessary for all our students to thrive.

Curbing Substance Abuse and Enhancing Mental Well Being

Alcohol and substance abuse among university students is not just a local issue but a growing concern on a global scale. The factors influencing drug use are diverse, ranging from environmental to psychological, social, and academic. The university experience, while promising, can also expose students to risky behaviours. Peer pressure, curiosity, stress, and the allure of 'escape' have led some down the path of substance misuse.

Mr Ayub Okoth Adoyo, a DeKUT alumna and a Department of Mechanical Engineering staff member at Dedan Kimathi University of Technology (DeKUT), shares his journey from addiction to advocacy. He recalls, "*Initially, it started as a social thing*," but soon, the negative impact on his health, relationships, and work became evident. He expresses profound gratitude for the immense support from the University Medical Clinic and the University Student Counselling Department. The staff from both departments walked tirelessly with him on the recovery journey, serving as a refuge and a source of strength that he leaned on.

In December 2024, my life reached a breaking point. Consumed by alcohol addiction, I felt my world spiralling out of control. On December 14, I decided to check into Christ the Good Shepherd Wellness Centre, a rehabilitation facility, for a three-month program. Today, I write this not just as a survivor of addiction but as someone rebuilding my life – one day at a time – and striving to create a supportive community for others on similar journeys.

My Rehab Experience: Finding Structure and Purpose

When I entered rehab, I was broken, but the program at Christ the Good Shepherd Wellness Centre became my lifeline. From December 14 to March 14, I immersed myself in a structured routine designed to heal mind, body, and spirit for three months. Each day began with counselling sessions and step work rooted in the 12 Steps of Alcoholics Anonymous (AA), which taught me accountability and the power of surrendering to a higher power. Video therapy and personal reflection sessions helped me confront the roots of my addiction, while occupational therapy – farming, crafting, and knitting – reconnected me with creativity and patience.

Spirituality became a cornerstone of Mr Ayub's recovery. Every Friday, they gathered for spiritual services, and Sundays included mass led by Father Stephen, followed by hikes and nature walks that reminded him of the beauty in simplicity. Saturdays were dedicated to feeding programs for street families, an act of service that reignited his sense of purpose. Outreach sessions on addiction and mental health allowed him to share his story, planting seeds of hope in others. His spiritual journey inspires, showing that faith and determination make recovery possible.

Life After Rehab: Sobriety, Community, and Humility

Leaving rehab was both liberating and daunting for Mr Ayub. He knew that maintaining sobriety required ongoing effort. He joined an AA group in Nyeri Town, attended aftercare therapy, and began collaborating with Nurse Joyce, Dr. Teresa, and other professionals to establish ReCoDe (Recovery Community at DeKUT)—a support group for staff and students seeking sobriety. He understood that addiction thrives in isolation, and he was determined to create a space where people could heal without shame. The emphasis on aftercare and support systems reassures the audience that recovery is a continuous journey, but they are not alone.

"*My recovery has gifted me a peaceful mind, gratitude for life, and a renewed focus. But it hasn't been without challenges. I've learned to lower my expectations, stay prayerful, and trust the process guided by my higher power. Sobriety is not a destination but a daily choice. As I often remind myself: One day at a time.*"

DeKUT Student Counselling Department

Causes of Drug Use and Abuse

Drug use and abuse among University Students could arise from diverse factors, including environmental, social, psychological, and academic. While each person's experience is unique, common reasons why people find themselves in Use and Abuse include:

- **Mental Health Issues:** anxiety, depression as well as other mental health problems are everyday experiences among university students. Lack of appropriate support may lead to the Use of drugs as a coping mechanism.



A triumphant Mr. Ayub Okoth

- **Peer Pressure and Social Influence:** campus life includes newfound freedom and the desire to build and fit in as a university comrade. Students could experience pressure from social circles or friends to experiment with drugs, more so at parties or social gatherings.
- **Curiosity and Experimentation:** Young people may be ordinarily eager and curious, wanting to explore new experiences. There is a high likelihood of experimenting with substances—especially on campus, an environment that promotes independence.
- **Stress and Academic Pressure:** The pressure to perform, exams, academic workloads, and class work deadlines could result in some students using stimulants or other drugs to manage stress, concentrate, and stay awake.
- **Availability of Drugs:** **The** availability of substances within the campus and the community is a risk factor for drug use and misuse among students.
- **Cultural and Societal Influences:** societal norms, culture, social media, music, etc., could normalize or glamorize substance use, influencing students' perceptions.
- **Financial Challenges:** The struggle to manage constricted finances, as well as engaging in part-time hustles, could drive some students into substance use, more so if they relate drugs to coping or an escape.
- **Misinformation or Lack of Awareness:** Some students are likely to hold misconceptions or not fully understand the consequences of drug use: negative impact, resulting in risky indulgence.
- **Lack of Parental Supervision:** Most university students come from far-off distances. This could be their first time away from home and on their own; the absence of parental supervision could result in students' exposure to risky behaviours, including drug use.

Signs of Substance Use among University Students

- **Physical Symptoms:** changes in appearance (hygiene, body weight), slurred speech, bloodshot eyes or constricted/dilated pupils, frequent nosebleeds (probably from snorting drugs), unusual body odours, tremors, or impaired coordination.
- **Behavioural Symptoms:** loss of interest in past times previously enjoyed (sports, hobbies, clubs), declined academic performance (lower grades, missed classes), suspicious or secretive behaviour, financial problems (questionable spending, asking for money frequently), missing or tardiness to classes or work, changes in social circles (risky or new friends).
- **Emotional and Psychological Symptoms:** emotional instability or heightened stress, mood swings (anger, irritability, anxiety, depression), lack of apathy or motivation, difficulty in concentration, memory problems, paranoia or suspiciousness.

- **Social Symptoms:** legal issues (arrests related to Use, possession), risky behaviours (walking /driving aimlessly, recklessly, unsafe sex), isolation or withdrawal from friends, social activities, conflict with family members, peers, roommates/classmates, etc.

DeKUT's Response: Prevention, Awareness and Support

DeKUT has adopted a proactive move in addressing alcohol and drug abuse challenges. Through the **Alcohol and Drug Abuse (ADA) Prevention and Control Program,** the University partners with organizations such as NACADA, Mathari National Teaching and Referral Hospital, and Christ The Good Shepherd Wellness Centre, among other support organizations, for appropriate intervention programs. The support program is anchored in support mechanisms through psycho-education, early intervention, and support.

Key support initiatives at DeKUT include:

- **ADA Policy:** DeKUT maintains a strict zero-tolerance policy on the Use and possession of illegal substances, accompanied by regular sensitization and well-spelt-out disciplinary procedures.
- **ADA Sensitization Campaigns and Workshops:** Regular sensitization forums focus on the dissemination of information on risks associated with drug and alcohol abuse, the promotion of healthy lifestyles, and informed choices.
- **ADA Peer Education Programs:** The University conducts ADA peer educators training annually. The trained student-peer educators support their fellow students in identifying early warning symptoms of substance, peer-to-peer support, referrals, and promoting positive behaviour change.
- **Counselling and Rehabilitation Referrals:** The University's Student Counselling Department provides confidential support to students struggling with addiction, and referrals are arranged for moderate to severe cases to external treatment institutions.

Building ReCoDe: Turning Pain into Purpose: Mr. Ayub's initiative

Launching ReCoDe at DeKUT has been deeply personal. I want to dismantle the stigma around addiction, especially in academic environments. Through mentorship programs and workshops on substance abuse, I share my story to inspire others. Recovery is not a solitary journey – it requires community. At ReCoDe, we will emphasize fellowship, honesty, and the understanding that relapse does not define failure. My work with Nurse Joyce and Dr. Teresa has shown me the power of collaboration. Together, we advocate for institutional support for mental health and addiction recovery, ensuring no one feels alone in their struggle.

Reflections: Lessons from My Recovery Journey

Today, I wake up with the clarity I once thought impossible. But recovery has taught me humility. I am not "cured"; I am responsible for my sobriety every single day. Helping others seeking recovery keeps me grounded. Whether through AA meetings, mentoring, or simply listening, I've realized that my pain has a purpose.

I've also learned to embrace imperfection. Life after rehab isn't a fairy tale – it's messy, unpredictable, and requires constant adaptation. But through prayer, patience, and the support of my higher power, I've found strength I never knew I had.

A Culture of Responsibility

From my experience, the aim is NOT to punish- but to help, says Ayub. *To guide comrades, equip them with adaptive coping skills, to manage life's pressures in healthier ways and bring them back on track. The University's call for all of us is to cultivate a culture of responsibility and accountability, lead by example, and increase open and honest discussions.*

A Message to Those Still Struggling

If you're battling addiction, know this: You are not alone. Ask for help. Surrender is not a weakness – it's the first step toward freedom. Trust the process, even when it feels unbearable. Recovery is possible but requires honesty, community, and the courage to face yourself.

To my colleagues and students at DeKUT: ReCoDe is here for you. Let's walk this path together, one day at a time.

Ayub Okoth Adoyo: Mechanical Engineering Department, Dedan Kimathi University of Technology: **Sober since December 18, 2024**. This article is a personal account of my journey. If my story resonates with you, reach out. Recovery begins with a single step.

Help is available at:

- Student Counselling Department
- DeKUT, University Medical Center
- NACADA helpline: 1192 (free and confidential).

Peer to Peer Efforts in Promoting Ethics and Wellness Among Students

Emmanuel Muthomi Muchui, Accounting Finalist & Peer Counsellor

As caps fly in the air and smiles stretch across the faces of graduates and their families, we pause to celebrate a journey filled with hard work, sacrifice, growth, and unrelenting resilience. To the Class of 2025, congratulations! You've done it- you've made it to this proud moment. Your achievement is not just a personal victory but an inspiration to many. Yet even as we celebrate, it's also a time to reflect on the path we've walked- both the triumphs and the trials. As a finalist and peer counsellor at Dedan Kimathi University of Technology (DeKUT), I've had the privilege of walking closely with fellow students. One of the more painful realities we've observed during our journey is the urgent and growing challenge of substance abuse and its link to academic misconduct.

When Temptations Knock

University life is full of freedom, but with that freedom comes vulnerability. Substances like bhang (*marijuana*) and cheap liquor are unfortunately readily available, often sold by vendors near student residences or entertainment joints. These substances are priced to be affordable for students, and that affordability becomes a trap. What starts as a "one-time thing" to release stress or fit in often spirals into a habit that derails even the most promising students. The consequences are heavy: missed classes, cognitive struggles, poor concentration, and, in some cases, early pregnancies or engagement in crime such as petty theft. The future becomes blurred, and the dreams we came here to chase disappear.

Silent Battles: Mental Health and Pressure

Substance abuse doesn't only affect the body but damages the mind and spirit. Many of our peers, whether in silence or visible distress, have fought mental health battles worsened by drug use: anxiety, depression, low self-worth, and suicidal thoughts. These real struggles often go unnoticed or are dismissed as "normal stress." We must be a community that listens, notices and cares enough to act.

The Shortcut That Costs Everything

When academic performance drops due to substance use or mental strain, some students turn to the wrong solution: exam malpractice. This unethical practice, which can involve copying answers, using unauthorized materials, or even using technology like hidden notes or electronic gadgets during exams, is a desperate attempt to pass. But when caught, the price is steep: suspension, expulsion, shame, and lost time. These are not just disciplinary cases-they are stories of pain, pressure, and lost potential.

What Must We Do?

- **Support Mental Health**: Strengthen peer-led and professional counselling services across campus.
- **Crack Down on Drug Sources**: Collaborate with authorities to shut down access points around the University.
- **Speak Out**: Students must become advocates for each other. Say no to silence and yes to peer support. Your voice matters, and it can make a difference.

A Word to the Graduates

As you leave these gates, carry more than a degree of a sense of responsibility to uplift others. You've seen what's possible. Now go and be a light wherever you land. To those still within the system, let the success of our graduating class be a reminder that your dreams are valid. Don't let shortcuts or substances rob you of your purpose. There is help. There is hope.

Let us not wait for things to get worse before we act. Let us be our brothers' and sisters' keepers. Let us celebrate but also commit to change. For a better University and a better society, break the chain.

DeKUT Human Resource Development

Dr. CHRP Peter Kariuki, HoD, Human Resource Department

The Human Resource Department plays a major strategic role in the University by ensuring human capital is productive and optimally utilized. We have a robust reward and recognition framework that we use to award top performing staff and teams in the University. In line with Kenya vision's 2030 of becoming a middle income economy, the University continue to engage skilled personnel with the focus of PhD holders to support the University mission of providing quality learning, research, innovation and technology development and transfer of the same for the national development.



Fig:1 Members of staff attending one of the training sessions

DeKUT Human Capital

Academic Staff		Technical and Library Staff		Administrative Staff		Total	
M	F	M	F	M	F	M	F
136	81	116	69	89	54	341 (62.57%)	204 (37.43%)
217		185		143		545	

Diversity and Inclusivity

- DeKUT is compliant on gender diversity
- Compliant with the 70:30 staff ratio on academic, technical and library to administrative support as required by the Commission for University Education regulations.

DeKUT Academic Staff Growth

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
PhD	31	38	44	56	65	77	100	105	106	117	122
Masters	84	99	101	119	127	133	111	104	110	100	93
Bachelors	34	37	23	16	14	13	9	7	2	2	2

Staff Training and Development

The University continuously positions itself as an exemplary employer across all cadres of staff by providing training and capacity-building programmes. Once the University attracts qualified staff, the human resource department is tasked with ensuring that the staff are developed in the form of offering regular training and workshops. A total of 367 members of staff has benefited from staff training and development since the year 2012. This represent 67% of the total staff. Below is a summary;

Category	Financial Sponsorship		Study Leave		Conferences Facilitation		Air tickets	
	Local	Overseas	Local	Overseas	Local	Overseas	Local	Overseas
Academic	17	24	26	36	45	16	7	46
Technical	9	2	16	24	26	7	2	12
Admin	12	3	12	4	9	6	2	4
TOTAL	**38**	**29**	**54**	**64**	**80**	**29**	**11**	**62**

Short Courses and in-house seminars are carried out as a form of enhancing staff development. Such workshops are organized in the form of an annual training calendar whereby the departments submit a list of workshops they wish to be carried out arising from the gaps identified by the staff members in the departments in the form of training needs assessments (TNAs). The TNA is approved by the Staff Training and Development Committee and this forms the basis for the trainings and workshops in a particular year.

Some of the Short Courses/Sensitizations Conducted in 2024/2025 FY

S/NO	DATE OF TRAINING	TRAINING AREA	FACILITATORS	NO. TRAINED
1	18th June, 2024	Financial management and retirement planning	HR and Standard chartered bank	70
2	19th June, 2024	Pedagogical skills	HR and Education Technology Department	60
3	17th Sep, 2024	Disability mainstreaming and gender sensitization	HR and Gender Office	24
4	13th June,2024	Enhanced E-learning skills	HR and CoDEL	84
5	3rd July,2024	National Values and Cohesion evaluation	HR and PSC	110
6	26th August,2024	**Pre-Retirement Training:** Empowering Your Future	HR and Standard Chartered Bank	64
7	14th October,2024	Cybersecurity Training	HR and ICT Directorate	34
8	5th and 6th April 2025	AI - Augmented Academia	HR and CS & IT	26
9	Planned for June 2025	Mental health awareness	HR and SoN	Exp. 100
10	Planned for June, 2025	Financial wellness	HR and SBME	Exp. 80



Members of staff attending one of the training sessions







INDUSTRIAL ATTACHMENTS

The University offers opportunities for industrial attachments of three months for continuing students in various degree and diploma programmes. During 2024/2025 FY, the university has offered **102** attachment opportunities.

INTERNSHIP OPPORTUNITIES

Internship opportunities are given to students who have competed various degree and diploma programmes to gain work experience. During 2024/2025 FY, the university has awarded **76** internships opportunities.

PERFORMANCE CONTRACT, APPRAISALS AND PRODUCTIVITY MANAGEMENT

Once a member of staff goes through the staff development process, it is expected they will become more effective and efficient in the performance of their duties. This should come out clearly in how they perform their duties. The University therefore uses the following means to evaluate the efficiency of the staff in successfully going through the development process: -

i) Staff Appraisals
ii) Performance Contracts
iii) Productivity measurement

PRODUCTIVITY MEASUREMENT

The Computation of the University's Productivity Index for Financial Year 2023/2024 was undertaken in October 2024. The process was facilitated by the officers from the National Productivity and Competitiveness Centre (NPCC). DeKUT's baseline productivity index for FY 2023/2024 is **2.249** which is at fair productivity, this calls for concentrated effort to be able to improve the index in the subsequent years on below summarized productivity metrics.

DeKUT Productivity Metrics

S.No	Objective		Metric Name	Metric Description	Formulae
1	To produce quality graduates in line with the University's mandate.	1	Students registered to Students Admitted ratio	This tracks the number of students successfully admitted in relation to students placed by KUCCPS and SSP	No of Students registered / No of Students Admitted
		2	Student Completion rate	The metric tracks the successful number of students in a cohort who completes the course within the stipulated time	No of Students who have completed in a cohort / No of Students registered in a cohort
		3	Integration of ICT in teaching and learning	Number of courses with Content developed on the E-Learning platform	Number of courses uploaded at the e-learning platform/ total number of courses being offered by the university
		4	Students access to the e-learning platform	Students engagement with the E-Learning platform	Total number of students who completed tasks on the e-learning platform : the Total number of students enrolled for the unit.
2	To generate research and innovation outputs with impact on the national development goals	5	Industrial attachment	Track number of students gone for external industrial attachment per academic year	No of students placed/No of students due
		6	Curriculum Review	It is track the number of curriculum reviewed in a year	Curriculum Reviewed/Total Curriculum due for review in a year
2		7	Total number of Publications	Tracks the number of research output i.e. publications	Current year Publications/ last year publications
		8	Research support for staff-students	Tracks the extent to which the university supports staff-students to undertake research	Number of staff-students supported to undertake research/ total number of staff-students who applied for support in an FY

3	Transfer and commercialize technology from the University, other institutions and collaborations to the benefit of students, university, industry and community	9	Number of collaborative research undertaken.	Tracks the level of collaborative research engagement.	Number of collaborative research engaged in an academic year
		10	Commercialization of research outputs, innovations, and patents	Tracks the number of innovations, Research outputs and patents that have been commercialized and transferred	Total number of innovations transferred and commercialized / the number of innovations generated
		11	Customer Satisfaction Index	The metric measures the level of customer satisfaction in relation to total responses received from students, Alumni, suppliers, Government agencies etc	Customer Satisfaction score
		12	Employee Satisfaction Index	The metric measures the level of employee satisfaction	Employee Satisfaction score
4	To mobilize financial resources to support University mandate	13	Growth in appropriation In Aid	Metric tracks growth in revenue from AIA	Current FY AIA / Previous FY AIA

DeKUT Productivity Mainstreaming Committee will be spearheading productivity within the University in line with the institution's Vision and Mission. We have prioritized productivity improvement in the Refocused Strategic Plan Year 2023/28 to be managed through the developed framework with a view of enhancing the efficiency and effectiveness in service delivery.

DEKUT REWARD AND RECOGNITION POLICY

The University recognizes and rewards the staff at the end of the year under various categories. Members of staff are required to nominate staff and teams for recognition and awards based on the agreed categories and parameters drawn from the University's strategic goals and objectives. Further, the nominations are done and supported with clear evidence and justifications. The University also recognizes long service and retirement awards, for which HR provides the names of the staff qualified.

Summary of Previous Beneficiaries for Awards and Recognition

S/no	Award	No. of Beneficiaries
1	Community Engagement	2
2	Team of the year	2
3	Resource mobilization	1
4	Innovation	1
5	Leadership	1
6	Long service	4
	Retirement	5
Total		**16**





DATA PROTECTION

During the period, the University was registered as a data controller and processor as required by the Data Protection Act 2019. Further, the Vice Chancellor appointed Data Protection Officer and a Committee to coordinate the data protection related activities. The Office of Data Protection Commission conducted institutional audit on Tuesday 21st January, 2025 and Wednesday 22nd January, 2025. With this registration, the University is authorized to process personal data.

DeKUT Chaplaincy: Enhancing Pastoral Presence

Rev. Dr. Fr. Vincent Wambugu, HoD, Chaplaincy & Senior Lecturer, IGS

Preamble

Dedan Kimathi University of Technology (DeKUT) is founded on the principle that intellectual development cannot and should not be isolated from the whole person's development. It is, therefore, dedicated to nurturing its students into well-balanced and productive citizens through the transmission of knowledge, refinement of intellect, development of moral character, and promotion of service. The University envisions excellence in moral guidance and undertakes as part of its mission to produce morally upright leaders to contribute to attaining national goals. It, therefore, upholds ***integrity*** as a central core value in the ***holistic formation of its students.***

Chaplaincy within the Mission of the University

DeKUT envisions, at the end of a student's holistic formation, professionals who are well-balanced and productive citizens, embodying morally upright leaders through diligent moral guidance. In this regard, the broad mission of the Chaplaincy Department includes nurturing students into well-balanced and productive citizens. Therefore, the Chaplain coordinates the following services for the DeKUT community: **Spiritual welfare**, **pastoral care**, and **moral guidance**.

Enhancing Pastoral Care and Presence

Rationale

DeKUT Chaplaincy acknowledges that there is so much stress in society in contemporary times. Many institutions, not excluding universities, are bearing the brunt of so many evils and their consequences in the environment and, by extension, society. The ethical levels in society have dropped mainly, giving way to unbridled permissiveness. Such an adverse culture makes the levels of integrity very low. What seems pleasant in the meantime are the human logical choices (temporal comfort), regardless of their adverse consequences. All categories of people, both youth and adults, professionals or otherwise, have a share of space in this web.

Today, more than ever before, people are hurting. There is so much psychological pain. There is an increase in hopelessness, leading to restlessness of mind and soul. As a result, many people, in a spate of discouragement, have abandoned religion, faith, and ultimately God, rendering them more restless. As St Augustine of Hippo says, "*Our heart is restless until it rests in you, God.*" Humankind needs a safe path back to God for true joy, fulfilment, and rest. Jesus invites all burdened people, "*Come to me, all who labour and are heavily laden, and I will give you rest.*" (Mt. 11:28). Chaplaincy brings humanity to God and *vice-versa.*

Contextual Challenges to Young People in the Contemporary Times

Young people, generally and more so those in institutions of higher learning, not excluding universities, face multiple but largely common cross-cutting challenges. Such challenges are prevalent everywhere, albeit with varying intensity. We note, among others:

- Pressure due to *academic demands*
- *Bullying* and *casual* sexual and other forms of relationships
- Family-related issues
- Societies where *religious and spiritual matters* are slowly relegated to secondary levels or abandoned altogether
- Inability to manage *social and economic pressures,* which may result in stress, depression, and other mental health issues
- A deficit in mature *social support systems* such as caring friends, mentors, and holistic formators

- An emphasis on *academic grades and success* at the expense of holistic formation
- Chemical and non-chemical *addictions*
- Irresponsible use of *social media.*

Holistic Pastoral Attention and Care in DeKUT

Humankind is both body and soul. Holistic joy and fulfilment emanate from holistic growth and development encompassing body and soul. In his letter to the Thessalonians, St. Paul highlighted wholeness in pastoral care. In his exhortation, he says, "*May the God of peace himself sanctify you wholly; and may your spirit and soul and body be kept sound and blameless at the coming of our Lord Jesus Christ.*" (1Thes.5:23). DeKUT Chaplaincy policy defines pastoral care as care for the whole person. This definition agrees with the standard definition of Chaplaincy and its roles in an institution. In the wake of numerous spiritual and psycho-social societal problems, the Chaplaincy's role is to bring people love, hope, and healing.

A whole person comprises the body, mind, and soul. Each component calls for proper nurturing. Nurturing a person calls for a holistic approach to cover both physical and spiritual welfare. Pastoral care involves journeying with people or persons within the same faith community. The intention is to deepen or restore their hope, love, and trust in God. Pastoral care helps a person recognize and enjoy the love of God and, consequently, embrace the painful but necessary interior transformation required to sustain it. The spiritual journey, therefore, seeks personal growth in integrity and Christian witness.

Pastoral care becomes more intimate when people face stress, faithlessness, and discouragement. Bereaved people enter into a state of pain and hopelessness. People who die necessitate sorrow and mourning by those who are left behind. Those who die require prayers for their transit into heaven, while those affected, including their immediate and wider family of friends, call for fraternal attention and loving support. Chaplaincy cares for those who consciously search for God regardless of their pace. Chaplaincy lovingly looks for the ignorant who reject the existence of God. It offers them the knowledge of God, the source of ultimate joy and fulfilment. A significant mark of the Christian life is the continuous conversion from ignorance about God to a high level of knowledge of God and obedience to His will, a phase characterized by personal responsibility for one's freedom of choice.

Religious Engagement and Networking

Different times and seasons demand different spiritual and pastoral care management approaches for the required impact. Chaplaincy offers much-needed pro-active pastoral and spiritual guidance, direction, and care. This mission is an invitation to the Chaplain to work together with the relevant structures of the University in a complementary spirit. At the core of such a mission is the ecumenical and inter-religious spirit.

The new focus is, therefore, on making the Chaplaincy more effective and impact-oriented. It is to bring the Chaplaincy closer to the intended beneficiaries, the staff and students of DeKUT. The most tremendous success of a chaplaincy is its effective spiritual presence, touch, and support to the people, which gives them hope and strengthens their faith. To deliver on such a dream, the Chaplaincy, in the spirit of fraternity, must and will reach out to the relevant DeKUT units, departments, and even persons who add value to its mission or complement it. Likewise, the Chaplaincy will reciprocate by supporting others in the same spirit.

Kiswahili: Lugha ya Umoja na Maendeleo Barani Afrika

Selinah Shikuku

Lugha ni chombo muhimu sana katika maisha ya binadamu, hasa katika kuleta uelewano na mshikamano wa kijamii. Miongoni mwa lugha zinazochangia pakubwa katika hili barani Afrika ni Kiswahili; sio tu kama chombo cha mawasiliano, bali pia kama daraja la kijamii, ishara ya utambulisho na chombo cha kuendeleza mshikamano wa Kiafrika. Ikiwa na zaidi ya wasemaji milioni 200 katika zaidi ya nchi 14 kama Kenya, Tanzania, Uganda, Rwanda na DRC, Kiswahili inatumika katika nyanja za elimu, biashara, fasihi, vyombo vya habari na teknolojia.

Nchini Kenya, Kiswahili ni lugha rasmi kulingana na Katiba ya 2010. Inatumika katika shughuli za serikali, Bunge, mahakama na taasisi za elimu. Ni somo la lazima katika shule za msingi na sekondari, na hufundishwa kama taaluma katika vyuo vikuu. Vyombo vya habari kama *Radio Maisha*, *KBC Taifa* na *Citizen TV* vinatangaza kwa Kiswahili, ikiongeza umaarufu wake. Taasisi kama CHAKITA na BAKITA zinahakikisha ukuzaji wa lugha hii, huku Kaunti ya Makueni ikiongoza kwa kuzindua katiba ya kaunti kwa Kiswahili mwaka 2015.

Katika Jumuiya ya Afrika Mashariki (EAC), Kiswahili ilitangazwa rasmi kuwa lugha ya jumuiya mwaka 2010. Inafundishwa shuleni na kutumika katika vyombo vya habari. Taasisi kama TATAKI na CHAKAMA huchangia katika utafiti na maendeleo ya Kiswahili, hasa katika sekta ya elimu na biashara. Katika kiwango cha bara, Umoja wa Afrika (AU) ulitambua Kiswahili kama lugha rasmi ya mawasiliano mwaka 2022. Nchi kama DRC, Malawi na Zambia zimeanzisha Kiswahili shuleni, huku Zimbabwe na Afrika Kusini zikitumia lugha hii katika jamii na vyombo vya habari. Mashirika ya kimataifa kama *VOA*, *DW*, na *BBC* hutoa matangazo ya Kiswahili kwa hadhira ya Kiafrika. UNESCO nayo imetangaza **7 Julai** kuwa **Siku ya Kimataifa ya Kiswahili**.

Teknolojia pia imechangia kukuza Kiswahili. Programu kama *Google*, *WhatsApp*, na *Wikipedia* zina matoleo ya Kiswahili. Vilevile, mafunzo ya Kiswahili hupatikana mtandaoni kupitia *Duolingo*, *Coursera* na *YouTube*. Katika enzi ya maendeleo ya kisasa, hasa ujio wa AI, ni muhimu Kiswahili iwepo kwenye majukwaa ya kidijitali. Watunzi wa kazi za Kiswahili wana wajibu wa kuhakikisha Kiswahili inaendelea kustawi na kuwa na mchango mkubwa katika dunia ya kisasa.



Kwa kutumia Kiswahili kila siku, tutachangia kulinda na kukuza lugha hii adhimu. Kiswahili si tu lugha ya mawasiliano, bali ni nguzo ya mshikamano, maendeleo na uhuru wa kiutamaduni kwa bara la Afrika.

Kiswahili Kitukuzwe!

Marketing Mavericks: Redefining the Known in the Current Digital Age

At DeKUT's Marketing Department, we believe in Philip Kotler's words: *"Satisfied customers do the best advertising."* Our mission is simple yet powerful by showcasing DeKUT as the ultimate destination for academic excellence, innovation, and personal growth. With a focus on leadership, teamwork, and a multidisciplinary approach, we have amplified DeKUT's presence on digital platforms, high school forums, and educational institutions.

Guided by the dynamic Head of Department, our team includes the resourceful administrator, enthusiastic interns, and our invaluable marketing champions; a network of student volunteers from various schools and institutes. Together, we drive DeKUT's vision, ensuring that students, parents, and stakeholders see the University as the perfect choice for their future.

Today's students don't just want information—they want an experience. The DeKUT Free High School Mentorship Program gives high school students a real-life glimpse into what it means to study at DeKUT. This initiative allows students to tour our state-of-the-art facilities and experience cutting-edge technology firsthand, engage with expert faculty members to clarify their academic paths and immerse themselves in DeKUT's vibrant student life, helping them make informed career choices. Additionally, we take DeKUT to the students by visiting high schools, providing interactive career guidance, and helping them see why DeKUT should be their first choice.

The DeKUT Open/Career Day is our flagship and must-attend event for students, parents, industry leaders, and education stakeholders. It is a dynamic platform with exciting program showcases from DeKUT's diverse academic departments, engagement with key education bodies like KUCCPS, KASNEB, and industry leaders, and live demonstrations of cutting-edge technology, reinforcing our commitment to practical, hands-on learning. This isn't just an event; it's an opportunity for students to take charge of their future confidently and clearly.

Our department does more than market the University, whereby we also empower students through the *Marketing Champions Program* in which student volunteers gain valuable industry-level skills, including creative branding and graphic design, data-driven research and analytics, social media strategy management and public and corporate relations. These skills make our students stand out in the competitive job market, transforming them into well-rounded professionals ready to thrive in any industry.

At DeKUT, we don't just educate; we inspire and transform lives. Our Marketing Department is committed to ensuring that every student, parent, and stakeholder sees the immense opportunities that DeKUT offers.

We are grateful for the support, the collaborations, and the success stories we continue to create. The future is bright at DeKUT; come and be part of this transformative journey.



2024 Nyama Choma and End of Year Get Together



2024 Customer Service Week

DeKUT Enterprises Company

DeKUT ENTERPRISES COMPANY
NYERI – MWEIGA ROAD, PRIVATE BAG – DEDAN KIMATHI, NYERI, KENYA
Mobile: 0758 563586 Email: dekutes@dkut.ac.ke, md-dekutes@dkut.ac.ke
OFFICE OF THE MANAGING DIRECTOR

Dr. Paul Sang, Managing Director, DeKUTES

DeKUT Coffee Value Addition: From Farm to Cup

Dedan Kimathi University of Technology (DeKUT) has been at the forefront of innovation and value addition, and one of its flagship ventures is the coffee value addition project under DeKUT Enterprises Company (DeKUTES). Fully owned by the University, DeKUTES is tasked with commercializing University products and providing consultancy services. Among its key revenue divisions, coffee value addition stands out through its comprehensive processing stages that ensure the production of high-quality DeKUT Premium Coffee.

The Coffee Journey: Processing and Quality Control



DeKUT Premium Coffee is sourced from the University's expansive farm, which grows a variety of Arabica coffee, mainly *Batian*, *Ruiru*, and *SL* varieties. The journey of each coffee bean begins with the selective harvesting of red ripe cherries, ensuring only the best quality is used. These cherries undergo wet processing, which includes pulping, fermentation, grading, washing, and sun drying.

Following these initial stages, the coffee undergoes hulling to remove husks before being graded to recover the premium grades. The finest grades, mainly AA and AB, proceed to roast, where different profiles are developed depending on customer preferences; whether medium or dark roast, DeKUT Premium Coffee guarantees a rich and satisfying taste.

Packaging for Freshness



DeKUT Premium Coffee is packaged in specialized PET/VMPET/PE bags equipped with regulating valves to preserve its quality and freshness. These bags come in sizes of 1kg, 500g, 250g, 100g, and 30g, offering customers the flexibility of choosing whole beans or ground coffee as per their needs. With a flavour profile characterized by fruity and juicy notes of currants, DeKUT Premium Coffee provides a complex yet balanced experience, leaving a sweet and pleasant finish in every cup.

A New Era for Coffee Innovation

DeKUTES has pioneered advanced coffee extraction techniques to produce premium coffee liquor, a key ingredient in crafting the exquisite DeKUT coffee yoghurt. This innovation enhances the University's





value-addition initiatives by seamlessly integrating coffee into dairy products. DeKUTES has partnered with Mukurweini Wakulima Dairy to broaden its market reach, supplying them with coffee liquor to enrich their coffee-flavoured yoghurt. This collaboration enhances the yoghurt's flavour profile and sets a new benchmark for coffee-infused dairy products.

Health Benefits and Unique Offerings

Beyond its delightful taste, coffee is a psycho-stimulant beverage known for its numerous health benefits. Rich in antioxidants, DeKUT Premium Coffee helps prevent cell damage, slows ageing, and contains anti-carcinogenic compounds. Additionally, caffeine enhances mental alertness, making it an essential beverage for many.

Enjoy DeKUT Coffee at the following Establishments

For those eager to experience DeKUT Premium Coffee firsthand, it is brewed in select restaurants and clubs. You can enjoy a fresh cup in Nyeri at *Mama Africa*, *Raybells*, and *Nyeri Golf Club*. **In Nanyuki**, it is available at *Nanyuki Sports Club*. **In Nyahururu,** it is served at *Nyahururu Country Club*. For visitors **within Chaka**, *Chaka Resort Hotel* offers a great spot to indulge in this fine brew.

Where to Buy

DeKUT Premium Coffee is available at the *University's main campus* in **Nyeri** and its **Nairobi Campus** at the *Pension Towers*. Additionally, coffee lovers can place orders for delivery at reasonable delivery charges, ensuring they can enjoy the rich flavours of DeKUT coffee from anywhere.

Experience the Best

DeKUT Premium Coffee is more than just a beverage; it is a testament to quality, innovation, and dedication. Whether you prefer black or white, each cup promises a fulfilling taste experience. Drink DeKUT Premium Coffee today and savour a unique flavour profile loved by coffee enthusiasts worldwide!



SERVICES

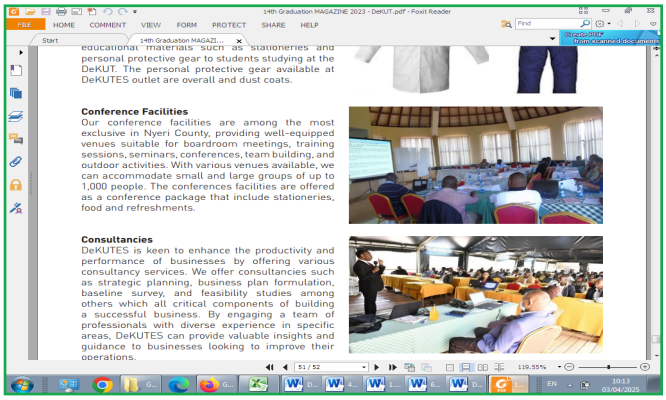
Conference Facilities

Our conference facilities stand out as some of the most exclusive and well-equipped venues in Nyeri County. Designed to accommodate various corporate and academic needs, we offer ideal spaces for boardroom meetings, training sessions, workshops, seminars, conferences, team-building activities, and outdoor corporate events. Our facilities can host small and large gatherings, ranging from intimate meetings of 10 participants to large-scale events of up to 1,000 attendees.



Each conference venue has high-speed internet, audio-visual equipment, ergonomic seating and climate control systems to ensure maximum comfort. Our conference package covers essential services such as stationery, projection and sound systems, breakout session arrangements and dedicated event support. To enhance the experience, we provide customized catering services, offering various meal options, snacks, and refreshments tailored to your

dietary preferences. Whether you need a one-day seminar or a multi-day conference, our team ensures seamless event execution, freeing you to focus on your agenda.



Consultancies

DeKUTES is committed to empowering businesses and institutions by providing expert consultancy services to enhance productivity, efficiency, and overall performance. Our consultancy services cover various business and institutional needs, including strategic planning, business plan development, policy formulation, baseline surveys, feasibility studies, and enterprise risk management. We also offer capacity building to equip organizations with the necessary skills and knowledge to improve operational efficiency and competitiveness.

Our consultancy team comprises industry experts, researchers, and professionals drawn from Dedan Kimathi University of Technology (DeKUT), ensuring that every project benefits from cutting-edge knowledge, data-driven insights, and best practices in the field. We work closely with our clients to tailor solutions that address their unique challenges and help them achieve their strategic goals. Capacity building and consultancy services can be tailored/customized to meet clients' specific needs and delivered at their preferred location and time.

Conclusion

Beyond our conference facilities and consultancy services, we continue to champion technology transfer, training and the commercialization of innovative products that contribute to regional and national economic growth. Our diverse range of products is available at our outlet near the DeKUT Main Campus and our Nairobi Campus for clients within Nairobi and surrounding areas. Additionally, we offer reliable nationwide delivery services, ensuring accessibility to our products and services across Kenya.

PROGRAMMES OFFERED AT DeKUT

Dedan Kimathi University of Technology (**DeKUT**) is a Chartered Public University that has two campuses: the **Main Campus** located within Nyeri County, 160 kilometers North of Nairobi City and **Nairobi CBD Centre** located on the 13th floor of Pension Towers. We invite applications from suitably qualified applicants.

SCHOOL OF ENGINEERING

- PhD In Mechanical Engineering
- PhD In Civil and Environmental Engineering
- PhD In Electrical and Electronic Engineering
- MSc in Telecommunication Engineering
- MSc in Civil Engineering
- MSc in Advanced Manufacturing and Automation Engineering
- MSc in Electrical and Electronic Engineering
- MSc in Industrial Engineering and Management
- MSc in Machine Tools Design and Manufacturing
- MSc in Mechanical Engineering
- MSc in Biomedical Engineering
- Post Graduate Diploma in Technical and Vocational Education
- Bachelor of Science in Electrical and Electronic Engineering
- Bachelor of Science in Civil Engineering
- Bachelor of Science in Mechatronic Engineering
- Bachelor of Science in Mechanical Engineering
- Bachelor of Science in Chemical Engineering
- Bachelor of Science in Telecommunication Information Engineering
- Bachelor of Education in Technology (Civil Engineering)
- Bachelor of Education in Technology (Electrical and Electronic Engineering)
- Bachelor of Education in Technology (Mechanical Engineering)
- Bachelor of Technology in Building Construction

SCHOOL OF BUSINESS MANAGEMENT AND ECONOMICS

- PhD In Business Administration & Management
- Post Graduate Diploma in Project Management
- Master of Business Administration
- Master in Innovation and Entrepreneurship
- Master of Science in Business Analytics
- Master in Supply Chain Management
- Master In Economics
- Master in Project Management
- Bachelor of Purchasing and Supplies Management (BPSM)
- Bachelor of Commerce (BCOM)
- Bachelor of Business Administration (BBA)
- Diploma in Business Administration (DBA)
- Diploma of Purchasing and Supplies Management (DPSM)

SCHOOL OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

- PhD In Computer Science
- MSc in Computer Science
- Msc in Cyber Security
- Post Graduate Diploma in Animation and Visual Effects
- Bachelor of Science in Computer Science
- Bachelor of Business Information Technology (BBIT)

- Bachelor of Science in Information Technology (IT)
- Certificate in Fundamentals of ICT

SCHOOL OF NURSING

- Bachelor of Science in Nursing (Direct Entry)
- Bachelor of Science in Nursing (Upgrading)

SCHOOL OF SCIENCE

- PhD In Chemistry
- MSc in Applied Statistics
- MSc in Leather Technology
- Msc In Chemistry
- Msc in Industrial Biochemistry
- Bachelor of Science in Industrial Chemistry
- Bachelor of Science in Leather Technology
- Bachelor of Science in Actuarial Science
- Bachelor of Science in Mathematics and Modeling Processes
- Bachelor of Science in Polymer Chemistry
- Diploma in Leather Technology

INSTITUTE OF TOURISM HOSPITALITY MANAGEMENT

- PhD in Sustainable Tourism and Hospitality management
- MSc in Sustainable Tourism and Hospitality Management
- Bachelor in Sustainable Tourism and Hospitality Management
- Diploma in Sustainable Tourism and Hospitality Management
- Certificate in Institutional Accommodation and Catering Operations
- Certificate In German Language
- Mountaineering and Outdoor Expeditions Guiding

INSTITUTE OF FOOD BIORESOURCE TECHNOLOGY

- PhD In Food Science and Technology
- MSc In Food Science and Technology
- Bachelor of Science in Food Science and Technology
- Bachelor of Science in Nutrition and Dietetics
- Diploma in Food Science and Technology
- Diploma in Coffee Technology and Cupping
- Certificate in Coffee Technology and Quality Management

GEOTHERMAL ENERGY TRAINING AND RESEARCH INSTITUTE (GETRI)

- MSC in Geothermal Energy Technology
- Post Graduate Diploma in Geothermal Energy Technology
- Bachelor of Science in Geology

INSTITUTE OF GEOMATICS, GIS & REMOTE SENSING (IGGReS)

- PhD In Geomatics and Geospatial Information Science
- MSc in Geospatial Information Systems and Remote Sensing
- Bachelor of Science in Geomatics Engineering and Geospatial Information systems
- Bachelor of Science in Geospatial Information Science and Remote Sensing

INSTITUTE OF CRIMINOLOGY, FORENSICS AND SECURITY STUDIES (ICFoSS)

- Msc in Forensic and Security Management
- Bachelor of Science in Criminology and Security Management
- Diploma in Security Management

INSTITUTE OF TECHNICAL AND PROFESSIONAL STUDIES (ITPS)

- Diploma in Building Technology
- Diploma in Fashion Design & Interior Decoration
- Diploma in Electrical & Electronics Engineering (Power Option)
- Certificate in Building Technology
- Certificate in Fashion Design and Interior Decoration
- Certificate in Electrical and Electronics Engineering (Power Option).
- Certificate in Mastery in ArchiCAD

CERTIFICATIONS

- Siemens Certified Mechatronic Systems Assistants (Level 1-3)
- Cisco Certified Network Associate (CCNA 1-3)

For inquiries:
Admissions Office: 0705 688135 admissionsoffice@dkut.ac.ke
Marketing office: 0713-123 021/0731-123021 marketing@dkut.ac.ke

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WhatApp - 0713123021
Twitter:- @DeKUTKenya, Facebook:- https://www.facebook.com/DeKUTKenya
Instagram:- dekutkenya, Linkedin:- Dedan Kimathi University of Technology (DeKUT)

Better Life through Technology

DEDAN KIMATHI UNIVERSITY OF TECHNOLOGY

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Twitter: @DeKUTKenya
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Instagram: dekutkenya
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DeKUT is ISO 9001: 2015 Certified