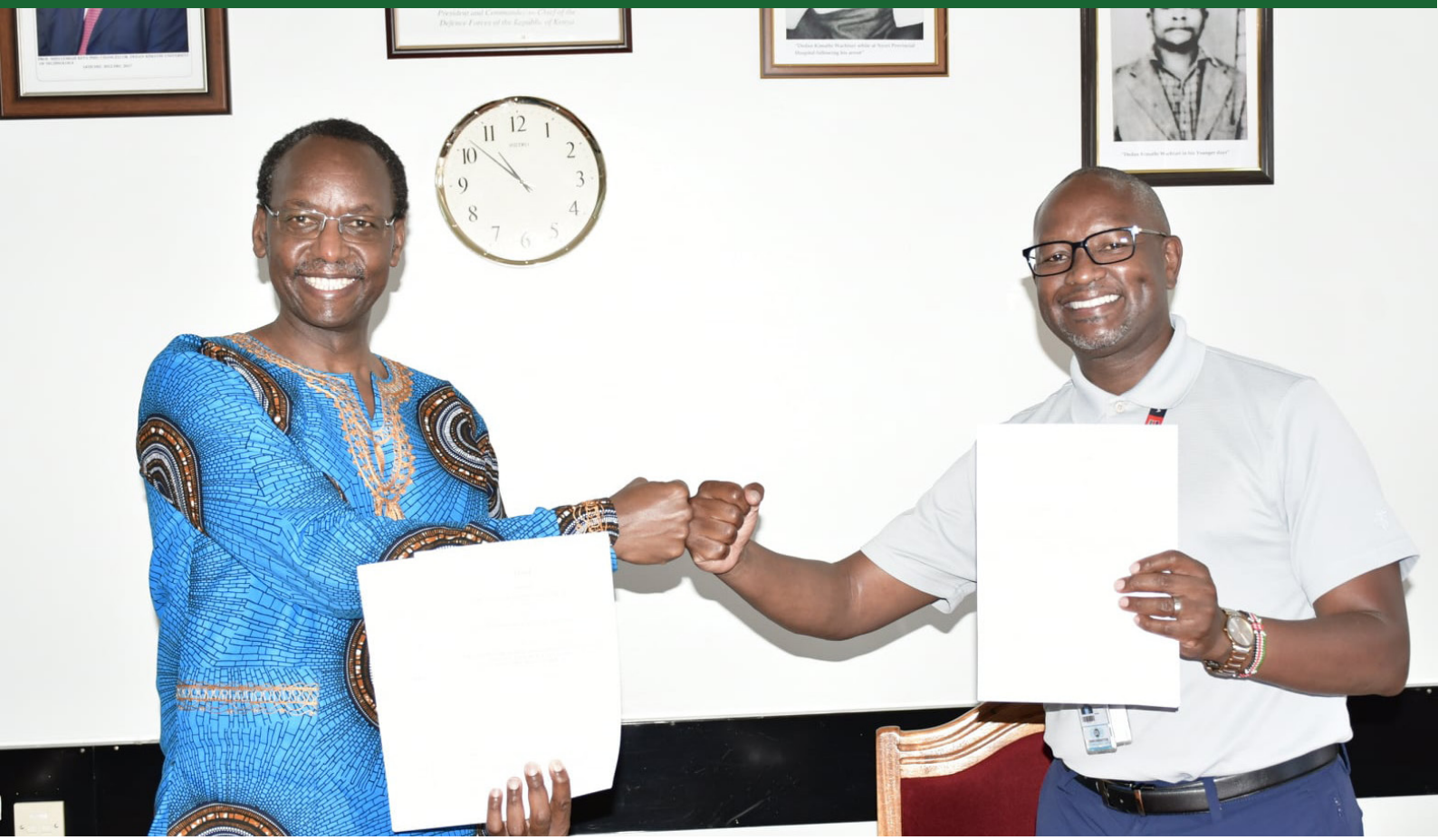
DEDAN KIMATHI UNIVERSITY OF TECHNOLOGY

MONTHLY NEWS BULLETIN

Better Life through Technology; ISSUE NO 36, NOVEMBER 2021



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DeKUT receives a grant of Ksh.500,000 from the Kenya Space Agency for the Development of Small Scale Crop Mapping Satellite



The Kenya Space Agency (KSA) is a State Corporation that promotes, coordinates and regulates space-related activities in Kenya. Since 2020, the KSA has been implementing Research Chair (RC) programs in Kenyan universities to contribute towards Kenya's socio-economic development by promoting capacity building and linkages between academia and the space industry. The Agency has been keen on building this legacy by encouraging and offering support to public universities.

In regard to this, we were privileged to be among the five universities that received a grant of Kshs.500,000 from the Kenya Space Agency to develop a Small Scale Crop Mapping satellite that uses Artificial Intelligence and Machine Learning.

Small-scale crop mapping using Space data is one of the most effective ways of estimating the crop area, crop yields and assessing the food security situation in the country. This can be achieved by processing and analyzing Remote sensing data. This data, however, requires high processing techniques with complex mathematical processes. The field of AI/ML uses data and algorithms to imitate how humans learn, gradually improving the accuracy of the results. The primary focus of AI/ML is to extract information from data by computational and statistical methods. Over the last decade, there has been considerable progress in developing an AI/ML methodology for various Earth Observation applications.

The processes of Small-scale crop mapping can be incorporated to build an application with a Graphical User Interface (GUI) that users can use either with expertise or those with little expertise in the Geographical Information Systems (GIS) and remote sensing fields. This would be important to policymakers with no GIS and remote sensing background to generate products and derive statistics from different application areas. This can be achieved by the use of Google Earth Engine or other platforms with the same capabilities.

The object of this second research on Small-Scale Crop Mapping is to leverage earth observation and remote sensing services to develop an application that maps crops under small-scale farming, which account for approximately 78% of total agricultural production and 70% of commercial production in Kenya," said Col. Hillary Kipkosgey, KSA Acting Director-General.

Housing Scheme members receive title deeds from Kimathi Makao and Company Ltd

In order to ensure staff development, the University established Kimathi Makao and Company Ltd in 2010 as a special purpose vehicle to assist university staff members in acquiring land, developing, and owning homes. Monday 15th November 2021 marked the completion of the first part of the project, where members received their Title Deeds. In attendance were; Chancellor, Masinde Muliro University of Science and Technology, Dr. Peter Wanyaga Muthoka and his wife, the Public Service Commissioner, Mr. Andrew Ndambiri Muriuki, Central Regional Commissioner, Mr. Wilfred Nyagwanga, the Vice Chancellor, Prof. Ndirangu Kioni, among others.





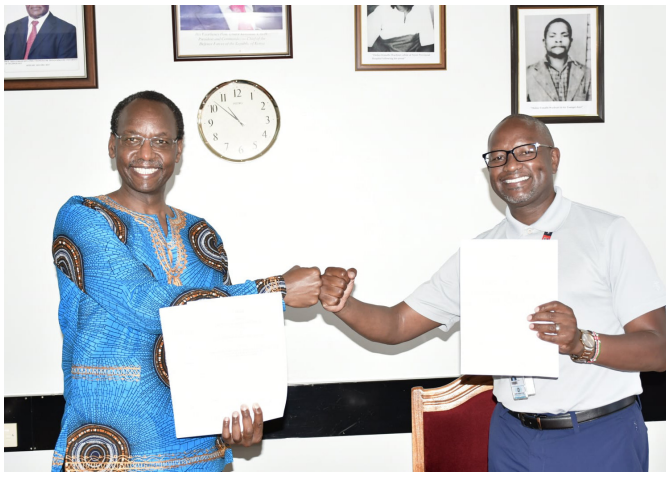
University partners with THE Jitu Company to provide students with career services, work study programs, and attachment opportunities

At DeKUT, we provide an academically stimulating, culturally diverse and quality learning environment that fosters research, innovation and technology development towards producing relevant technical and managerial human resource and leaders to contribute to the attainment of national development goals. This year, the University established a career development office geared towards helping students explore and develop their careers through Industry linkage and mentorship programs. The University also has a robust work-study program that allows students to work while studying within the University to earn an income and learn from various departments and offices.

On 12th November 2021, the University partnered with THE Jitu Company, a staff augmentation firm that offers scalable remote software engineers to businesses to provide students with career services, work study programs, and attachment opportunities. THE Jitu Company's which is majorly located in Nyeri, provides staff augmentation services that allow businesses to increase their IT personnel while avoiding the high costs of onboarding and other issues that offshore IT services frequently entail. Jitu, which means Giant in Swahili, believes that the technology talent in Kenya can compete with the rest of the world. The Jitu believes that technology should first work and then provide value to the business. Jitu's technology team has been trained by some of the world's best software development, business process automation, and digitization resources. Through this partnership, DeKUT students will acquire top talent skills which they can use to compete on the world stage in technology.



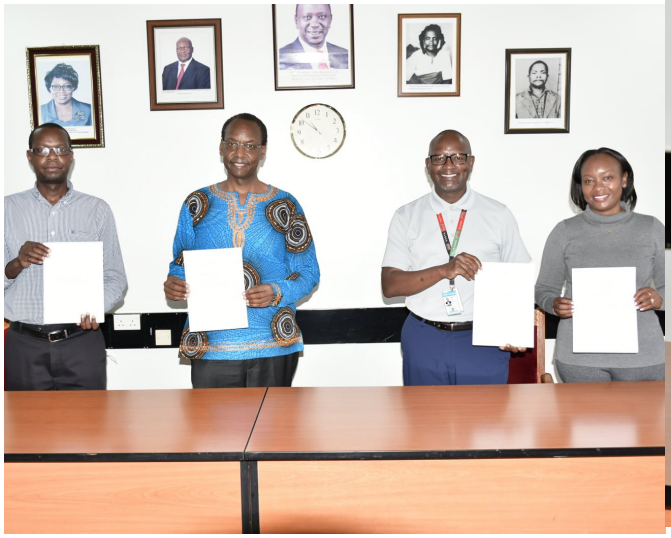
Semiconductor Technologies Limited inks a lease deal with Dedan Kimathi University of Technology for space within the DeKUT Science and Technology Park



On Friday 12th November 2021, Semiconductor Technologies Limited inked a lease deal with Dedan Kimathi University of Technology for space within the DeKUT Science and Technology Park, measuring approximately 4.2 acres. This company which President Uhuru Kenyatta officially launched on the 26th of April, 2020, showcases the importance of public-private partnerships in advancing the government's manufacturing pillar of the Big Four Agenda.

The Semiconductor Technologies Limited, which is part of Dedan Kimathi Science and Technology Park (DeST-Park) anchor clients, is the first of its kind Advanced Nanofabrication and Semiconductor Manufacturing Company in Kenya and Africa with a vision of being the pre-eminent chip maker in Africa. The factory manufactures nanotechnology products such as integrated circuits and sensors used in electronic gadgets for the global market. Its products have a high demand and are used in electronic gadgets such as mobile phones, televisions and laptop computers.

The establishment of the Semiconductor Technologies Limited (STL) in the University is a significant milestone in the development of Dedan Kimathi Science & Technology Park (DeST-Park). Dedan Kimathi, Science and Technology Park, is an important platform that brings together professors, innovators, capital and business expertise to work together to support the development of new innovations and the creation of new commercial enterprises to create employment and increase the wealth of the society hence contributing to improved standards of living. The Semiconductor Technologies Limited (STL) is one of the first two anchor clients at the park that are commercial firms running a global business in cutting edge technological fields. STL will provide the Science and Technology Park and the University with crucial local and international linkages contributing to intellectual property outputs.





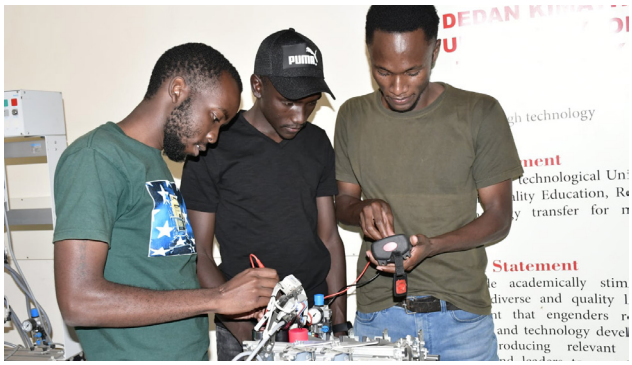
DeKUT Siemens Centre receives various equipment from FESTO, a German multinational industrial control and automation company, in preparation for the WorldSkills Mechatronics Competition



With Kenya preparing to participate in the upcoming competition organized by the WorldSkills International (WSI), the University was selected as one of the TVET institutions approved by the Ministry of Education, Science and Technology and tasked by the Technical and Vocational Educational and Training (TVETA) to organize and champion mechatronics skills both locally and internationally through preparing excellent competitors.



In preparation for WorldSkills Mechatronics Competition to be conducted in Namibia, the DeKUT Siemens Centre received various equipment from FESTO, a German Multinational Industrial Control and Automation Company. This followed shortly after the University held the first of its kind in Kenya Worldskills Mechatronic Pre-competition from Monday 23rd August to Friday 27th August 2021. The competition attracted 17 colleges, both TVET institutions and technical universities. Students studying Mechatronics Engineering and those interested in competing in the WorldSkills Competition will benefit significantly from these devices.

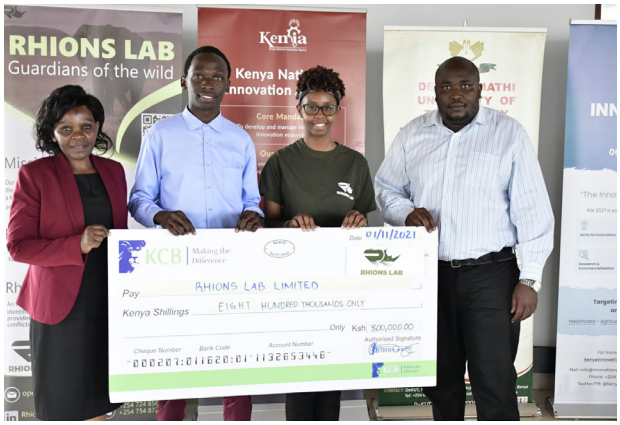


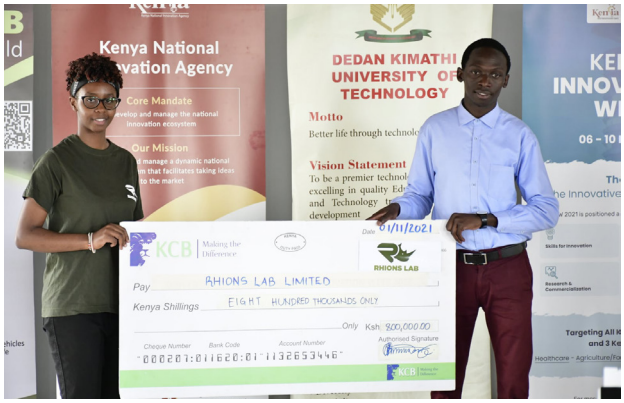
Kenya National Innovation Agency (KENIA) awards Rhions Lab Limited, an innovation from DeHUB, a financial grant of eight hundred thousand shillings (Ksh 800,000) after winning the National Innovation Award 2020/2021

The Kenya National Innovation Agency (KENIA), a State Corporation established under the Ministry of Education managing the National Innovation System, on Monday 1st November 2021, awarded Dedan Kimathi University of Technology Incubation and Innovation Centre (DeHUB), Rhions Lab Limited, a financial grant of eight hundred thousand shillings (Ksh 800,000) after winning the National Innovation Award 2020/2021.



Rhions Lab Limited, an innovation from two of our students, Clinton Odour and Jullia Muiruri, develops innovations that combine Artificial Intelligence, the Internet of Things and Cloud Computing to monitor and track wildlife in their natural habitat to reduce poaching and human-wildlife conflicts.





Mt. Kenya Innovation Week

Mt. Kenya Innovation Week, a collaboration between the United Nations Economic Commission for Africa (UNECA), Dedan Kimathi University of Technology Incubation and Innovation Centre (DeHUB), and Mt. Kenya Hub, aims to highlight Kenyans' innovativeness as a means of advancing the Big 4 Agenda and Vision 2030. Its goal is to promote meaningful policy discussions on innovation within institutions and the practical skills required to generate inventions that positively impact people. Mt. Kenya Innovation Week also improves research and commercialization techniques for more substantial socio-economic implications.



This year, we are privileged to host the bush hackathon and closing ceremony during the Mt. Kenya innovation Week scheduled from 26th November to 3rd December 2021.

Swearing in of 2021/2022 DeKUTSO Leaders

According to the University policy, students should have their leaders elected by the students to represent them for one academic year. At Dedan Kimathi University of Technology (DeKUT), our student leadership board is known as DeKUTSO. DeKUTSO is established to promote and protect students' rights and interests, nurture and develop leadership skills, and encourage and promote worthy traditions of social, cultural, sports, arts, and academic nature at the University.

The duly elected officials are taken through leadership training, after which they are expected to prepare their annual budget and submit it to the management for approval.

Following the successful DeKUTSO elections that were held on Friday, November 19, 2021, the following students were elected as DeKUTSO Council 2021/2022

1. Denniss Kimutai- Chairperson
2. Grace Njoki Muriuki- Vice-Chairperson
3. Newton Mwenda- Secretary-General
4. Lynette Njeri Wanjiku- Gender and Disability Mainstreaming Secretary
5. Dancan Mumo Kyalo- Sports, Entertainment and Security Secretary
6. Phyllis Nyawira Njoki- Treasurer
7. Michael Nyoike- Campuses' Secretary

The induction training program took place from the 23rd to the 26th of November at the Kenya School of Government in Embu.





Launch of the Chaplaincy Policy and Commissioning of the Team of Collaborators

The Chaplaincy is a University provision of pastoral and spiritual support for students and staff of all faiths and none. The University Chaplaincy is a department in the directorate of student welfare with a primary objective of offering pastoral care to all students and staff irrespective of their religion, creed, race, gender or social background. The department provides spiritual guidance and counselling to all students and staff. On Monday, 22nd November 2021, the Vice-Chancellor, Prof. Ndirangu Kioni, presided over the Launch of the Chaplaincy Policy and Commissioning of the Team of Collaborators at the DeKUT Freedom Hall.





DeKUT Celebrates World GIS Day



We virtually joined the rest of the world in marking and celebrating the Annual World's GIS Day on Thursday, November 18, 2021. GIS Day provides an international forum for Geographic Information Systems (GIS) Technology users to demonstrate real-world applications that make a difference in our society.

Mock Wedding

As part of their practical assessment for Events Management, our fourth-year students from the Institute of Tourism and Hospitality Management organized a mock wedding.

The event is a chance for students to utilize the skills and knowledge they have learned in their Events Management class in a practical setting. With the training, students are well equipped to handle any challenges and provide solutions in the tourism sector.





DeKUT, in collaboration with the End Cyberbullying Association of Kenya (ECBA), joins the rest of the world in commemorating International Day Against Bullying and Violence in Institutions

On Friday 5th November 2021, in collaboration with the End Cyberbullying Association of Kenya (ECBA), we joined the rest of the world in commemorating International Day Against Bullying and Violence in Schools, with a particular focus on cyberbullying, to educate the public about the importance of peaceful and harmonious coexistence on online and social networking platforms without undermining, tarnishing, or assassinating other people's personalities. Our primary purpose is to put an end to cyberbullying.



Introducing IAESTE Kenya

IAESTE Kenya is a University Consortium of Four Cooperating Institutions namely: IAESTE Kenya-JKUAT (Jomo Kenyatta University of Agriculture and Technology), IAESTE Kenya- DeKUT (Dedan Kimathi University of Technology), IAESTE Kenya-MUT (Murang'a University of Technology) and IAESTE Kenya-EU (Egerton University). The consortium was admitted as an Associate Member of IAESTE A.s.b.l. on 24th January 2021 during the Annual Conference in Vienna, Austria. Prior to this, the cooperating institutions undertook their exchange processes largely in an independent manner.

Following the elevation of the four cooperating institutions to Associate Member, exchange processes will now be handled jointly through the National Secretariat that is based in IAESTE Kenya-DeKUT. This is an important milestone in Kenya as it will ensure that more students in DeKUT and in other universities in Kenya get an opportunity to go on an exchange programme through their universities.

Benefits of IAESTE Kenya to Students

Since its inception in DeKUT in the year 2013, IAESTE Kenya- DeKUT has been privileged to host and send out over 100 students across different countries worldwide such as Germany, Spain, Sweden, India, Austria, Poland, Switzerland, Malta, United Kingdom, Ireland, Netherlands, Ghana, Tunisia and Costa Rica.

The following are the benefits of taking part in the IAESTE Exchange Programme.

1. Stand out to employers: Having international work experience on your CV helps you stand out to employers and could be the difference between you and other candidates.

2. Live and work in another country: IAESTE gives you the chance to fully immerse yourself in a new country and culture, expanding your horizons and providing both personal and professional development.

3. Practical experience in a real work environment: IAESTE is an internship programme that provides real work experience. This means contributing to your employer's business and gaining experience in a real environment.

4. Make new friends and experience different cultures:cultures: In IAESTE you're never alone. You're part of a global network of students and will make new friends from all over the world. You will experience the culture of your host country together, on weekend trips and fun evenings.

5. Improve language, social and communication skills: Living in a new country often gives you the chance to develop new languages skills, gain confidence in social situations and develop your communication skills across cultures and borders.

6. Make international professional contacts: International work experience doesn't just enhance your CV, it gives you an opportunity to develop international professional contacts. These will be useful in the future and sometimes even lead to job offers.



South Face Organization and Incapto Coffee from Spain pays a courtesy visit to the University to discuss future collaborations and partnerships





South Face Organization and Incapto Coffee from Spain, on the 4th of November 2021, paid a courtesy visit to the University to discuss future collaborations and partnerships on various aspects such as; coffee value addition, coffee agro-tourism and marketing and scholarship opportunities for Diploma Coffee Technology students.



DeKUT Disability Mainstreaming Committee holds a walk with the people living with disability within the institution to sensitize staff and students on how to treat persons living with disabilities

On the 3rd of November 2021, DeKUT Disability Mainstreaming Committee held a walk with the people living with disability within the institution to sensitize staff and students on how to treat persons living with disabilities.

The theme of the 3-day campaign was "empowering persons with disabilities for inclusiveness and equality through education."





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