



QUARTERLY 1

RESEARCH AND INNOVATION NEWS

The Newsletter of the
DVC: Research, Innovation and Engagement



TABLE OF CONTENTS

03

DUT Climbs In Global Rankings

14

DUT Students Are Keen To Learn About French Culture And Cuisine Through Ensait Programme

04

Dr Rawat's Goal Is To Establish Himself Further As A Researcher Of International Repute

18

DUT Celebrates 21 Years of Academic Excellence, Research and Innovation

06

DUT Academic Wins Top Presenter At Robotics Automation And Artificial Intelligence Conference In Singapore

20

Two Dut Researchers Selected As Finalists For The 'Science Oscars'

08

DUT Researcher Proudly Represents The African Continent In Spain

22

Newly Inducted Champions Vow To Embody Dut Living Values

10

Dut Delegation Visits West Africa To Strengthen Academic Partnerships And Research Innovation

24

DUT Academic Co- Facilitates Global Design Thinking Project In Germany



DUT CLIMBS IN GLOBAL RANKINGS

Alan Khan

The Durban University of Technology (DUT) has climbed an impressive 1039 positions in the latest Webometrics global university rankings. DUT advanced from 2855th place in 2024 to 1816th in 2025. In total, 31360 institutions were rated worldwide. It places DUT in the Top 6% globally. This remarkable improvement underscores DUT's commitment to academic excellence, research impact, creativity and innovation.

The achievement follows closely on the heels of DUT's strong performance in the 2024 Times Higher Education (THE) Sub-Saharan Africa University Rankings, which was announced in November last year. In that ranking, DUT strengthened its position as a leader in academic excellence, securing an impressive 11th place among Sub-Saharan African universities.

Professor Fulufhelo Nemavhola, Deputy Vice-Chancellor: Research, Innovation and Engagement at DUT said: "This tremendous achievement is a reflection of DUT's relentless pursuit of excellence, underpinned by our ENVISION2030 strategy. The visionary leadership of our Vice-Chancellor and Principal, Professor Thandwa Mthembu and the support and dedication of our staff and students, continues to pave the way for DUT's growth and prosperity. This success further reinforces our commitment to research, innovation, engagement, entrepreneurship and making a meaningful impact on a global scale."

Pictured: DUT's Steve Biko campus in Durban.
Photographer: Khulasande Tshayile.

The Webometrics rankings, compiled by the Consejo Superior de Investigaciones Científicas (CSIC) in Spain, are published twice a year and evaluates universities based on their web presence, research output and impact. Originally designed to promote open access initiatives and digital accessibility of academic materials, the ranking has evolved into a valuable indicator of universities' global visibility and influence. Unlike other rankings that focus solely on research citations and publications, Webometrics evaluates institutions using a broader set of indicators:

- **Visibility (50%)** – The number of external networks linking to the institution's webpages.
- **Transparency or Openness (10%)** – The number of citations from the Top 310 authors, excluding the top 30 outliers.
- **Excellence (40%)** – The number of research papers ranked in the top 10% of citations across 27 disciplines over the last five years.

The ranking's methodology allows for the assessment of a vast number of tertiary institutions, including universities, colleges and technical institutions. In 2025, the Webometrics rankings covered 31360 institutions globally, providing a comprehensive view of academic performance and online influence.

A portrait of Dr. Ismail Rawat, a man with a beard and dark hair, wearing a dark suit jacket over a light-colored shirt. He is looking directly at the camera with a slight smile. The background is slightly blurred, showing what appears to be a bookshelf on the left and a window with vertical blinds on the right.

DR RAWAT'S GOAL IS TO ESTABLISH HIMSELF FURTHER AS A RESEARCHER OF INTERNATIONAL REPUTE

Waheeda Peters

Pictured: Dr Ismail Rawat

Dr Ismail Rawat is an esteemed researcher who is based at the Durban University of Technology's (DUT's) Institute for Water and Wastewater Technology. The dynamic academic was recently awarded the prestigious NRF-YI rating, which recognises young researchers with outstanding potential to establish themselves as leading experts within the next five years (2024–2029).

"I am pleased to have received a YI rating. The reviewer feedback from NRF have been overwhelmingly positive," he shared euphorically.

An excerpt from the NRF feedback for Dr Rawat says: "The overriding majority of your reviewers think you capable of establishing yourself as a researcher of considerable international standing on the basis of the quality and impact of your research outputs."

Dr Rawat obtained his PhD in 2021 and has

contributed 55 DHET accredited journal articles in high impact factor journals, seven book chapters and 26 peer reviewed conference proceedings. He has more than 7300 citations with an H-Index of 41 (Google Scholar). Dr Rawat has an extensive supervision record of BTech/Honours and Inservice trainees. He currently supervises two doctoral and four master's students and mentored several NRF interns.

Further to his sterling achievements, Dr Rawat is a recognised reviewer for several Elsevier journals and has acted as reviewer for a national and an international funding agencies including National Research Foundation (SA), Water Research Commission (SA), CIVIS3i (France), Dutch Research Council and NSC (Norway).

Dr Rawat has served as assistant project leader on a TIA funded project utilising wastewater for the

production of algal biofuels in a demonstration scale (300m³) raceway pond. The project was co-funded by the Japan International Cooperation Agency and the Department of Science and Innovation, South Africa and the Technology Innovation Agency. He served as primary researcher on a Water Research Commission funded project using in the beneficiation of wastewater to the production of algal biomass for industrial application in biofuels, feed and biofertiliser. He further played a senior role in KZN EDTEA funded project on Enhancing Aquaculture feed whereby we are developing and testing a feed supplement to increase the size and potentially nutritional content of Tilapia. These roles included research methodology development, proposal writing, progress, technical and financial reporting and engaging with funders on an ongoing basis.

Elaborating on the specific focus of his current research, Dr Rawat emphasised that his research focus is on algal biotechnology integrated with wastewater treatment and beneficiation. His interests draw strongly on the biorefinery concept incorporating principles of renewable and sustainable resources.

“The research looks on the industrial application of algal biomass for the production of energy, other valuable bioproducts and remediation of waste effluents. Current student projects focus on remediation of sugar milling effluent, bioremediation of antibiotics from municipal wastewater, improving the survival rates of fish larvae at Ushaka Seaworld by direct and indirect application of algae as a feed source, production of natural sunscreens, bioplastics for food packaging and production of Omega 3 fatty acids as dietary supplements,” he explained.

He highlighted that his innovative research aligns strongly with the sustainability and society perspectives from DUT’s ENVISION2030 strategy.

“Algae are a sustainable, renewable resource which has been historically under-utilised in biotechnology. My research focus looks at algal systems and products as sustainable alternatives to problems such as environmental protection (Bioremediation), limited resources (Omega 3 fatty acids) and natural alternatives to synthetic materials such as plastics and sunscreens which are persistent within the environment,” he added.

Delving further into his research, Dr Rawat said that a large majority of the projects that he has applied in research contributes to solving real-world problems. “We have aligned with a local sugar producer to remediate wastewater and enhance their existing treatment system. We work with Ushaka Marine world to improve their fish larvae survival rates

by increasing the nutritional value of their green water. Omega 3 fatty acids are an essential dietary supplement, but has and will become limiting due to overfishing and ocean pollution,” he indicated.

Sharing more on his academic research passion, Dr Rawat explained that his earlier research was on the production of biodiesel from algae due to its potential as renewable, sustainable, environmentally friendly alternative to fossil diesel. “We have shown the technical feasibility of the research, however economic considerations limit application currently,” he expressed.

In terms of his research, he believes that it is contributing to the broader academic community and influencing future research directions in his field. Dr Rawat’s research on wastewater utilisation for algal cultivation has been cited extensively with early two review articles being cited over 1400 and 1100 times respectively.

“Publications of high quality research in high impact journals has become a core of our research workflow. These articles are usually well read and are often highly cited,” he relayed.

He is also the charismatic protégé of Professor Faizal Bux who is a well respected researcher globally and has followed Prof’s lead in producing high quality science. Dr Rawat has been listed on Stanford Universities Top 2% of scientists globally from 2019 to current in the subfields of energy, environmental sciences and enabling and strategic technologies.

Dr Rawat has engaged and collaborated with various stakeholders nationally and internationally including the Department of Science and Innovation, Technology Innovation Agency, Japan International Cooperation Agency, Nuffic, World Water Academy (Netherlands), Water Research Commission, Council for Scientific and Industrial Research, eThekweni Municipality, Umgeni Water, Mhlathuze Water, Indian Institute of Technology Delhi and universities from several countries including Japan, India, Oman, Egypt, Algeria, Spain, Brazil and Russia.

“I have recently been awarded a BRICS STI Project on Cascading algal biomass valorization into energy, feed and biofertilizer: a holistic approach to bioremediation and sustainable development in conjunction with partners from the Immanuel Kant Baltic Federal University in Russia and SKN Agricultural University, Rajasthan India. Looking ahead, his goal is to establish himself further as a researcher of international repute, producing research published in high impact journals and adaptive graduate students.



DUT ACADEMIC WINS TOP PRESENTER AT ROBOTICS AUTOMATION AND ARTIFICIAL INTELLIGENCE CONFERENCE IN SINGAPORE

Zandile Mahlobo

Pictured: Dr Thulile Mofokeng receiving her Best Presenter Award from the session chair, Professor Santaru Mitra from the Shiv Nadar Institution of Eminence Delhi NCR, India.

Dr Thulile Mofokeng, a lecturer in the Department of Entrepreneurial Studies and Management under the Faculty of Management Sciences at the Durban University of Technology (DUT) was recently recognised as the Top Presenter at the 4th International Conference on Robotics, Automation, and Artificial Intelligence (RAAI) Conference in Singapore. This prestigious conference brought together accomplished academics and experts from globally renowned universities.

Dr Mofokeng's study, "Utilising UAV Technology for Enhanced Conservation and Ecotourism in KwaZulu-Natal's Public Game Reserves" highlights the transformative role of drone technology in conserving natural resources while bolstering ecotourism as a key economic sector. Her inspiration for this study stems from the immense significance of ecotourism, not only in South Africa but across the African continent.

"Ecotourism plays a crucial role in environmental conservation and serves as a powerful driver of economic growth through entrepreneurship. Its success and growth depend on the natural resources that make it thrive, such as our rich biodiversity and unique landscapes. When ecotourism flourishes, it creates sustainable opportunities, fosters innovation, and uplifts rural communities," said Dr Mofokeng.

"Moreover, ecotourism aligns perfectly with the United Nations' Sustainable Development Goals (SDGs), particularly those focused on poverty alleviation, environmental conservation, and sustainable economic development. My study sought to explore how Unmanned Aerial Vehicles (UAV) technology could enhance these outcomes by improving conservation efforts while simultaneously boosting ecotourism as a key economic sector," added Dr Mofokeng.

She described her participation in the conference as an incredible experience. "The conference was filled with cutting-edge discussions and inspiring collaborations with global leaders in robotics, automation, and artificial intelligence. It provided a unique platform to not only present my research but also to learn from others and explore how innovative technologies can drive impactful solutions. The opportunity to engage with experts from prestigious

institutions around the world was truly invaluable," said Dr Mofokeng.

The award-winning young academic, recipient of the 2023 EDHE Entrepreneurship Teaching & Learning Excellence Award (1st place) and the 2023 DUT Emerging Learning & Teaching Excellence Award, among others, says being announced as Top Presenter at the RAAI gathering made her extremely proud as she had the privilege of hoisting the DUT flag high on an esteemed international stage.

"It was a truly unexpected honour, as the slot for 'Best Presenters' was not even on the programme. The recognition felt entirely organic; I was simply preparing my presentation as I always do, focusing on sharing my research without any expectations of an award. To be acknowledged in this way amidst such seasoned academics and experts was both humbling and deeply gratifying," expressed Dr Mofokeng.

Beyond the conference, Dr Mofokeng describes the country, Singapore as an inspiration.

"Known for its seamless blend of modern innovation and sustainability, the city-state demonstrated first-hand how technology can coexist harmoniously with environmental consciousness. Exploring Singapore's efficient public transport system, sustainable urban design, and vibrant cultural scene added another dimension to the experience, reinforcing the importance of integrating innovation with sustainability which is something that resonates deeply with my research," she explained.

For 2025, Dr Mofokeng has set her eyes on attending more international conferences to further disseminate her research and engage in knowledge exchange.

"While my calendar is still being finalised, I am exploring events that focus on sustainable tourism, artificial intelligence, and technology-driven solutions for environmental conservation. These platforms are excellent opportunities to continue contributing to impactful global conversations. Additionally, I am pleased to share that the paper I presented at RAAI 2024 will be published in one of the DHET-accredited journals, further extending the reach and impact of my work," she said.

DUT RESEARCHER PROUDLY REPRESENTS THE AFRICAN CONTINENT IN SPAIN

Zandile Mahlobo

This year, students of Dr Sasi Gangiah, a lecturer in the Department of Hospitality and Tourism, can look forward to lectures enriched with global insights drawn from her recent experiences representing the Durban University of Technology (DUT) on international platforms. Dr Gangiah's most recent international endeavour was her participation at the ATLAS SIG Business Tourism Conference on Business Tourism, Sustainability, Health and Wellness at the European University of Valencia, in Spain where she was the only presenter from the African continent.

The annual conference is a leading platform for sharing best practices and ideas in business tourism research and education. Dr Gangiah presented her paper, "Advancing Flavours of Africa at Global Events and its Influence on Entrepreneurship", which she says was well received.

"The Event Management students from the European University of Valencia were eager to learn what Africa can offer. They were also curious about the cuisines across the African continent and the impact of colonisation. While discussing, I received a comment that Moroccan food was more popular in Israel," she said.

The delegates also had an opportunity to tour some of the country's highly regarded attractions, such as the City of Arts and Sciences (CAC) in Valencia. This scientific and cultural leisure complex, covering around two kilometres of the former riverbed of the River Turia, is the most important modern tourist destination in the City of Valencia and one of the 12 Treasures of Spain.

"CAC is the most amazing modern architecture. There are several beautiful churches with Baroque-

style architecture. Most of the city streets in Valencia are lined with orange trees. It is clean and all public buses are electric with bicycle lanes on all the roads. We walked safely on the streets at night without fear of ambush," shared Dr Gangiah.

She also had the opportunity to attend a Flamenco dance show in Barcelona, home to nine UNESCO World Heritage landmarks.

"I was fortunate to see La Sagrada Familia, one of Barcelona's most famous landmarks. It is an unexpected sight in its urban setting, with its bold flying buttresses and twisted towers looming over the city. Dr R Maniram had advised me not to miss this iconic structure after she attended a conference in Barcelona (12th to 16th November, IAFOR Barcelona 2024)," she recalled.

The trip left Dr Gangiah who also serves as DUT's annual African Food Festival coordinator and Team Leader for the DUT Catering Management Programme feeling inspired, "The presentations included MICE (Meetings, Incentives, Conferences, and Exhibitions) a billion-dollar industry. This tourism industry involves planning and executing large-scale events for business and professional purposes. This has inspired me to the possibility of a Conferencing and Events course at DUT," she said.

Dr Gangiah who also attended the BRICS Research Institute (RI) Conference in China in late September 2024, said potential partnerships or collaborations with the European University of Valencia, a private university are possible as it boasts five campuses.

Adding to her highlights, Dr Gangiah was delighted to chair the conference's last session, which focused on hospitality-related themes.



Pictured: Dr Sasi Gangiah during her visit in Spain.



DUT DELEGATION VISITS WEST AFRICA TO STRENGTHEN ACADEMIC PARTNERSHIPS AND RESEARCH INNOVATION

Dr N.H. Mthombeni/Alan Khan



Pictured: The signing of a Memorandum of Understanding (MoU) between DUT and UI.

A senior delegation from the Durban University of Technology (DUT) has embarked on a strategic visit to West Africa, engaging with universities in Nigeria and Ghana to establish key partnerships, promote academic programmes and highlight research and postgraduate opportunities. The visit also serves to showcase the DUT Business School as a premier institution for business education and leadership development on the African continent and afford members of the DUT delegation with opportunities, to make several research and academic presentations and deliver guest lectures at host universities.

The DUT delegation commenced their visit at Afe Babalola University, Ado-Ekiti (ABUAD) in Nigeria. As a mark of respect and cultural appreciation, the team first paid a courtesy visit to the palace of His Royal



Majesty, King Alayeluwa Oba (Dr.) Rufus Adeyemo Adejugbe Aladesanmi III. The delegation expressed their gratitude for the warm welcome and the opportunity to engage with institutions within the King's kingdom.

Professor Elisabeta Smaranda Olarinde, Acting Vice-Chancellor and Professor of Law at ABUAD, extended a gracious and kind welcome to the DUT representatives and formally introduced them to His Majesty.

In his address, His Majesty the King reflected on the enduring legacy of South African icons President Nelson Mandela and Archbishop Desmond Tutu, acknowledging their contributions to humanity. He also conveyed his deep appreciation for DUT's recognition of AARE Afe Babalola and the university's role in advancing education and research.

In a symbolic gesture of friendship and goodwill, the delegation was honoured with traditional attire, signifying a warm and respectful welcome from the Royal Palace.

DUT Professor Fulufhelo Nemavhola, Deputy Vice-Chancellor: Research, Innovation and Engagement said, "This visit marks a significant step in strengthening ties between DUT and leading institutions in West Africa, aligning with ENVISION2030's strategic objectives of leveraging innovation, research and collaboration to address local, African and global challenges.

The second leg of the DUT delegation's visit to West Africa commenced with an inspiring tour of the Dr. Kwame Nkrumah Museum in Nkroful, Ghana, an important historical and cultural experience that set a reflective tone for the day.

On Monday, 24 March 2025, the Durban University of Technology (DUT) continued its impactful engagement in Ghana with a visit to Takoradi Technical University (TTU). The day began with a warm reception and courtesy meeting at the office of Prof. Maame Afua Nkrumah. This was followed by a high-level engagement with the Vice-Chancellor of TTU, Rev. Prof. John Frank Eshun, who welcomed the DUT delegation and reaffirmed the strong partnership

between TTU and DUT. He emphasised the immense potential for expanding this collaboration, setting an enthusiastic tone for the day's activities.

The formal programme unfolded at the Nicholas Aidoo-Taylor Auditorium, where guests were officially welcomed. Proceedings began with an opening prayer by Rev. Michael Obeng, followed by introductions and welcoming remarks by the Chairperson. Prof. Solomon Keelson (PhD), Dean and Director of the International Programmes and External Linkages Office (IPELO), delivered a gracious address highlighting the shared vision and aspirations of both institutions. The DUT delegation was then officially introduced, followed by presentations from TTU's management team.

A key highlight was Prof. A. Nkrumah's engaging reflection on the history and evolution of the TTU-DUT partnership, which underscored the strength, progress and future possibilities of this growing relationship.

The programme continued with a series of presentations by the DUT delegation, showcasing the university's academic offerings and strategic focus areas. Speakers included Dr. N.H. Mthombeni, Interim Director of Research and Postgraduate Support; Dr. L. Samuels, Director of International Education and Partnerships; and Executive Deans Prof. S. Rathilal (Engineering and the Built Environment), Prof. G. Mchunu (Health Sciences) and Prof. S. Singh (Applied Sciences). Each presenter outlined opportunities for collaborative research and academic development, while also sharing current research projects and areas of interest.

Prof. A.T. Agbenyegah provided an update on ongoing projects, which was followed by a thought-provoking public lecture delivered by Prof. F. Netswera, Executive Dean of the Faculty of Management Sciences at DUT. The lecture reflected the depth of expertise and the shared commitment to advancing higher education across both institutions.

There was also a vibrant discussion with DUT students, many of whom are TTU staff members, creating a valuable space for dialogue around student experiences, mobility and the future of African higher education.

The DUT-TTU engagement was a remarkable day of connection, vision and shared purpose. It further solidified the foundation for ongoing academic cooperation, research partnerships and student and staff capacity building, demonstrating the power of Pan-African collaboration in shaping the future of higher education.

The Durban University of Technology (DUT) delegation, led by Professor Fulufhelo Netswera, Executive Dean in the Faculty of Management Sciences, continued its strategic visit the University of Ibadan (UI) in Nigeria, where they were welcomed by the institution's senior leadership. The visit marked the beginning of a promising partnership aimed at strengthening research collaborations, academic exchange and strategic alliances between the two universities.

The DUT delegation was received by the Deputy Vice-Chancellor (Administration), Professor P. O. Olapegba FNPA, along with Deputy Vice-Chancellor (Academic), Professor Aderonke M. Baiyeroju, Deputy Vice-Chancellor (Research, Innovation & Strategic Partnerships), Professor Oluyemisi A. Bamgbose, SAN, FCIArb, and Registrar, Mr. G.O. Saliu, MANUPA, MNIM, MAUA, as well as Deans and other senior executives from UI. Their warm reception underscored the spirit of unity and collaboration that both institutions aspire to cultivate.

Speaking during the session, Professor Netswera highlighted the purpose of the visit, emphasising DUT's commitment to international partnerships that drive impactful research and meaningful academic exchange. He spoke about the value of collaboration in addressing global challenges and harnessing the strengths of both institutions to advance higher education on the African continent.

Professor Olapegba expressed his enthusiasm for the partnership, reinforcing UI's dedication to promoting global alliances that enrich the academic experience for students and researchers.

The highlight of the visit was the signing of a Memorandum of Understanding (MoU) between DUT and UI. Signed by Professor Netswera and Professor Olapegba, this agreement cemented the commitment to collaborate on research initiatives, faculty and student exchanges and innovative academic programmes that will benefit communities in South Africa, Nigeria and beyond.

The visit not only signified a formal agreement but also a shared vision of African universities working together to shape a brighter future through education, research and innovation.



Pictured: The DUT-TTU delegation share a remarkable day of connection, vision and shared purpose.



Pictured: DUT delegation meeting with His Royal Majesty, King Alayeluwa Oba (Dr.) Rufus Adeyemo Adejube Aladesanmi III.





Pictured: DUT students at the ENSAIT programme.

Welcome to the International Semester 2025 students!

DUT STUDENTS ARE KEEN TO LEARN ABOUT FRENCH CULTURE AND CUISINE THROUGH ENSAIT PROGRAMME

Waheeda Peters

Two sterling students from the Durban University of Technology (DUT) are currently in one of the most romantic cities in the world, stunning France. The two dynamic students, Buyisiwe Noncedo Kubheka and Nobuhle Jeza were selected for an amazing scholarship opportunity with great assistance from their lecturers, Alan Judd (Faculty of Applied Sciences) and Kiara Gounder (Faculty of Arts and Design).

They are spending a semester in a new environment, to learn about new cultures, to adapt to a different approach to teaching and to learn about

complementary disciplines, through the ENSAIT (École Nationale Supérieure des Arts et Industries Textiles) programme in France.

This programme is an international exchange semester for four months allowing the DUT students to see textile from a different perspective. The DUT students receive a return plane ticket, a train ticket, and 860 euros a month, medical coverage and assistance from the Embassy.

DUT lecturer, Mr Judd indicated that when his department was offered the opportunity of sending

one student for a semester to ENSAIT, they chose Buyisiwe, because she was their top student in the 2024 academic year.

“It was a case of an absolutely stunning growth opportunity for a student which we could run with. So we engaged as best we could in the short time available, and it certainly has been stressful and nail-biting to try and get everything through in time. In addition, this is the first time that we have engaged on this particular programme – and so the process was mostly new to us. Thus I was most grateful for the ongoing assistance from Kiara Gounder in Fashion through this time. I must also add that ENSAIT themselves have been helpful and constantly in touch through this process,” he said.

He indicated that in the past, the students that have had international exposure have always benefited enormously, and so there is no doubts of the personal value that this trip would represent to Ms Kubheka.

“Our intention would be to promote and honour whatever equivalent ground we can, in terms of our Honours degree in the Textile Science qualification. In recent years, we have hosted several rounds of Textile students from ENSAIT previously in our department, and so we have a good first hand basis on which to feel assured of the excellent quality of instruction that they are being exposed to,” he shared.

Kubheka (21), an honours degree student in the Bachelor of Applied Sciences in Textile Science at DUT is ecstatic to have been selected for such an opportunity which is due to her academic excellence.

“I was identified based on my consistent top performance from my first year to the final year of my degree. My achievements, including receiving awards for being the top learner, played a key role in securing this opportunity. DUT facilitated the process, and with the support of Campus France, I was able to embark on this incredible experience. I am truly grateful for this recognition and the chance to expand my knowledge in textile engineering. but to also experience the rich culinary tradition, and even the French way of life,” she said excitedly.

Being her first time traveling overseas, arriving in France was both exciting and overwhelming. “Seeing a new country, experiencing a different culture, and knowing that I am here for an academic purpose made me feel proud and determined to make the most of this opportunity,” she shared.

Kubheka indicated that so far, her classmates have been welcoming and helpful.

“There is a mix of students from different backgrounds, which makes learning even more interesting. The diversity in perspectives has been enriching,” she added.

Through this scholarship, Kubheka aims to gain advanced technical skills, exposure to international textile innovations, and hands-on experience in high-tech textile applications. She further hopes to build professional connections that could benefit her career in the textile industry.

“These opportunities are vital for DUT students as they provide international exposure, allow us to learn from global experts, and enhance our skills in a highly competitive industry. It also helps in bridging the gap between academia and industry, making us more equipped for future career opportunities,” divulged Kubheka.

She happily shared that the food and culture have been a new experience for her. “Some dishes are quite different from what I am used to for example their coffee is super strong, but I am slowly adapting and enjoying and trying out new things. The cultural atmosphere is also very vibrant, with a strong appreciation for art, textile, fashion, and innovation,” she explained.

One of the challenges for Kubheka has been the language barrier. Although many people speak English, daily interactions in French can be challenging. To overcome this, she is trying to learn basic phrases and improve her communication skills.

She has professed that the weather has been colder than what she is used to in South Africa. “Adjusting to the cold has taken some time, but dressing appropriately and staying warm has helped, she relayed.



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Sharing the context of how this journey began between DUT and Capus France was Marie-Pierre DELESPIERRE, Director International Relations at the Ensait School of Engineering in France.

She explained that in September 2024, the French Government through Embassies located in South Africa, Lesotho and Malawi, launched a call for 'Cross-mobility projects' to which ENSAIT responded.

"The aim was to highlight an existing and solid university partnership between France and one of these countries. The partnership between DUT and ENSAIT (Ecole Nationale Supérieure des Rats et Industries Textiles) has existed since 2013. There is already a long history of academic exchanges, research and respective visits. We felt it was important to respond and give two students the chance to spend a semester abroad and our call was successful," she added.

Elaborating on the ENSAIT programme and how beneficial it is to students locally and abroad, Ms DELESPIERRE said that it was an opportunity for the students on both sides to spend a semester in a new environment, to learn about new cultures, to adapt to a different approach to teaching and to learn about complementary disciplines.

"We encourage the world of engineers and creative people to work together on projects throughout the semester; they learn from one another, as they will in the professional world. This greater mutual understanding enriches minds and builds lasting

cooperation. Before their arrival, each international student is assigned an ENSAIT Buddy. This ENSAIT student keeps in touch with the international student, answering questions, reassuring them and helping them with anything that is not academic," she said.

She further elaborated that on arrival, the ENSAIT Buddy picked up the international student at the station and took them to their accommodation. She shared that he or she will also help them throughout their stay to adapt to French life and introduce them to friends.

"In this way, it is a mutual benefit, the international student is welcomed by another student and the ENSAIT student prepares for his or her international departure for the following year (at ENSAIT 100% of our students go abroad for at least one semester). The more you are in contact with different cultures, the more open and tolerant you become. What's different isn't worse or better, it's just different. Each student is also assigned a faculty member as an academic advisor to guide them in their university journey at ENSAIT," she shared.

DELESPIERRE indicated that the students were selected by DUT, certainly based on academic criteria and merit.

"The international students arrived last weekend, and we officially welcomed them on Tuesday morning with a French-style breakfast. It is therefore still very recent. However, the only two pieces of advice I could give them are to savour every moment, as time passes very quickly, and to remain open-minded. With this attitude, you will always make the most of any situation," she said.

She advised them to staying open-minded and non-judgmental which is a key condition for success during a stay in a different culture.

"The international students will also have the opportunity, if they wish, to experience some time with a French family. This is usually a very successful experience amongst international students. Next week with the international students we will bake chocolate mousse and the following day we will have a cheese party (40 to 50 different types of cheese to taste with French bread). This is part of the French culture class: What makes the French so French. We learn and we taste in my class," she shared.

DUT CELEBRATES 21 YEARS OF ACADEMIC EXCELLENCE, RESEARCH AND INNOVATION

Simangele Zuma/Waheeda Peters



DURBAN UNIVERSITY OF TECHNOLOGY
INYUVESI YASETHEKWINI YEZOBUCHWEPHESHE

21
21 YEARS
2004-2025

ENVISION 2030

transparency • honesty • integrity • respect • accountability
fairness • professionalism • commitment • compassion • excellence

CREATIVE. DISTINCTIVE. IMPACTFUL.



This year marks the 21st anniversary since the Durban Institute of Technology was renamed and rebranded as the Durban University of Technology (DUT). It was a memorable moment, reinforcing the commitment to academic excellence, innovation, research and community engagement. The 21-year celebration marks a significant milestone in the university's history, which can trace its roots back to 1907.

DIT was established in 2002 through the merger of Technikon Natal and ML Sultan Technikon. In 2004 DIT changed its name to DUT after its transition from a "Technikon" to a full-fledged university of technology, emphasising both practical and academic excellence. Currently, DUT is proudly guided by the inspirational ENVISION2030 strategy, where "people-centred and engaged" and "innovative and entrepreneurial" is the DNA of the university.

DUT is proud to unveil the DUT 21 logo to highlight the university's 21-year celebration, while looking ahead to unlock the greater potential and opportunities for the future.

To unpack concept and meaning behind the DUT 21 year celebratory logo, Ms Noluthando Mchunu, Manager of the DUT Design Studio said: "It is a bold symbol of the DUT legacy, innovation and future. As DUT celebrates this 21-year milestone, we found it fitting to design a logo identity which symbolises growth, maturity and excellence."

She revealed that the concept was built on the success of the award-winning 2024 graduation campaign, so the Design Studio has decided to continue using the key motif, representing both this achievement and the symbolic 21st birthday key.

"Central to the design is the number 21 where the 1 was creatively integrated to resemble a key. This design choice was deeply symbolic as receiving a key on your 21st birthday was a traditional emblem of coming of age, signifying independence, responsibility and new opportunities. The key element underscores the university's prestige legacy and pursuit of excellence over the past 21 years. The use of the gold colour, often associated with achievement and high standards, reflects DUT's commitment to the creativity and innovation that shapes adaptive graduates who transform," elaborated Ms Mchunu.

The DUT 21 logo is accompanied by its slogan, 'Celebrating 21 Years of Excellence' which highlights the university's remarkable journey since its name change. It serves as a powerful reminder to DUT's contribution to education, innovation and societal development through research that drives real-world solutions.

DUT calls upon its staff and students to join the 21 year celebrations and help unlock the future together.



TWO DUT RESEARCHERS SELECTED AS FINALISTS FOR THE ‘SCIENCE OSCARS’

Waheeda Peters/Simangele Zuma

The Durban University of Technology (DUT) is proud to announce that two of its leading researchers have been selected as finalists for the esteemed 2024/2025 National Science and Technology Forum (NSTF) South32 Awards, often referred to as South Africa’s ‘Science Oscars.’

Professor Faizal Bux, Director of the Institute for Water and Wastewater Technology (IWWT) at DUT and Dr Emmanuel Kweiner Tetteh, Senior Researcher in the Green Engineering Research Group within the Department of Chemical Engineering at DUT, have been recognised for their exceptional contributions to science, engineering and technology (SET) in South Africa.

Professor Bux has been named a finalist in the prestigious NSTF-South32 Lifetime Award category, which acknowledges individuals who have dedicated 15 years or more to impactful research in South Africa. His nomination underscores the national and international stature of DUT’s Institute for Water and Wastewater Technology, as a leader in innovative water research. In addition to heading the institute, Professor Bux holds the DSTI/NRF South African Research Chair (SARChI) in Wastewater Treatment. He is celebrated globally for reimagining wastewater as a valuable resource, with sustainable solutions that protect the environment and generate economic potential.

Dr Tetteh is a finalist in the TW Kambule-NSTF Emerging Researcher category, which recognises exceptional researchers within the first six years of their research careers. Passionate about promoting green engineering solutions for environmental sustainability, Dr Tetteh’s work in the water-energy nexus continues to elevate DUT’s global research footprint.

Reflecting on his nomination, Dr Tetteh said, “I am honoured to accept the nomination as a finalist for the 2024/2025 NSTF-South32 Awards. I am truly humbled by this recognition and grateful to

the NSTF Adjudication Panel for this prestigious acknowledgement of my work.”

Acting Executive Dean of the Faculty of Engineering and the Built Environment, Prof Sudesh Rathilal shared that this was really an easy nomination for such an accomplished researcher. “He has been a great student, mentee, colleague and collaborator of mine and I am proud to be associated with Dr Tetteh. He has achieved much success in the past and I have no doubt that he will continue to reach greater heights in the future. Congrats to Dr Tetteh again for being a finalist and all the best on the day. We are surely proud of you being within Green Engineering at DUT,” he said.

Expressing his pride in the finalists, Professor Fulufhelo Nemavhola, Deputy Vice-Chancellor, Research, Innovation and Engagement at DUT said, “We are immensely proud of Professor Bux and Dr Tetteh for being named as finalists in the NSTF-South32 Awards. Their dedication to impactful, high-quality research exemplifies DUT’s commitment to excellence, innovation and transformation in science and technology. This recognition not only honours their achievements but also inspires a new generation of researchers at our university and across South Africa.”

The NSTF-South32 Awards are South Africa’s most prestigious accolades in the fields of science and technology, celebrating outstanding contributions by professionals, teams and organisations. Established in 1998, the Awards span multiple categories, including lifetime achievement, emerging researchers, innovation and science communication.

Winners will be announced at the NSTF Awards Gala Event, scheduled as a hybrid celebration on Thursday, 31 July 2025, simultaneously hosted at the Sandton Convention Centre and the Cape Town International Convention Centre (CTICC).



Pictured: Professor Faizal Bux and Dr Emmanuel Kweiyor Tetteh.

NEWLY INDUCTED CHAMPIONS VOW TO EMBODY DUT LIVING VALUES

Thubelihle Dumakude



Pictured: Deputy Vice-Chancellor: People and Operations, Dr Vuyo Mthethwa, speaking at the event.

Photographer: S'bonelo Dlamini

The Durban University of Technology (DUT) Student Governance and Development unit, successfully hosted an Induction ceremony to welcome Champions of the DUT Living Values. The event took place on Saturday, 12 April 2025, at the DUT Hotel School conference room.

The concept of “Champions of the DUT Living Values” focuses on empowering students at DUT to actively embrace, advocate for, and lead initiatives that reflect the university’s core values. As part of this initiative, the Champions of the DUT Living Values programme aims at engaging more students in actively embracing and internalising these values that serve as essential life tools both within and beyond the university environment.

The newly inducted students will be empowered by knowledge, skills and confidence to act as ambassadors of the DUT Living Values. Through their leadership and influence, they will inspire their peers to embody and uphold these values, fostering a university that thrives on integrity, respect and excellence.

Mr Masiza Ngculu, Manager of Student Governance and Development Unit, warmly welcomed the attendees and expressed his heartfelt gratitude to the students who are driving DUT’s progress to new heights, setting a positive tone for the programme.

“The step that you have taken is extremely important, because it means you have agreed to be the change and actively engage with your peers, ensuring that their actions consistently promote these values. This is an important step for you to develop your own characters,” he said.

After a warm welcome to everyone in attendance, Student Development Officer, Ms Thokozani Sibiya briefly outlined the purpose of the day. She described the living values as a way to shape lives and character. “The core business is to give you the tools of how to be the best and how to conduct yourselves as the DUT Champions of Living Values, and again thank you for putting your hands up by joining this great initiative,” she said.

In her keynote address, Deputy Vice-Chancellor: People and Operations, Dr Vuyo Mthethwa, explored

the pivotal role of Living Values Champions in inspiring others to embody DUT's values. She passionately encouraged the champions to stay authentic and drive meaningful changes in their communities.

"This is a start of a process, you are still going to be clustered into different values and what they represent, and those that lead with transparency will help others get to understand and know how to embody transparency," shared Dr Mthethwa.

Dr Mthethwa then led the pledging ceremony, where the champions committed to upholding DUT's Living Values and Principles. By taking the pledge, the champions affirmed their ethical and moral responsibility to cultivate a culture that embodies and promotes these values among students.

The event proceeded with the Director of Alumni Relations and Advancement at DUT, Mr Zwakele Ngubane, who presented on DUT's ENVISION2030 strategic plan, outlining the university's vision for the future, particularly emphasising the importance of living values and their impact on staff and students. He further highlighted the university's commitment to innovation, creativity, and positive change.



Pictured: (Left to right) Facilitation team, Rosita Röntynen (JAMK University of Applied Sciences – Finland), Dr Yâchal du Plessis (DUT), Fabian Girod (Fontys International Business School – Netherlands) and Prof Dr. Thomas Dobbels (DHBW – Germany).

DUT ACADEMIC CO- FACILITATES GLOBAL DESIGN THINKING PROJECT IN GERMANY

Alan Khan

Yâchal du Plessis from the Faculty of Management Sciences at the Durban University of Technology (DUT) recently returned from an insightful academic exchange in Germany, where she served as a facilitator for the Erasmus+ Blended Intensive Programme hosted by Duale Hochschule Baden-Württemberg (DHBW) Ravensburg. The international initiative united over 30 students and lecturers from Germany, Finland, the Netherlands and South Africa, to co-develop innovative solutions for a local animal sanctuary.

The five-day programme was rooted in Design Thinking methodology and aimed to support Birkenweilerhof, a sanctuary that provides lifelong care for rescued animals and promotes responsible animal interaction among youth. Students, working in multidisciplinary teams across fields such as Tourism Management, Automation and Robotics, Informatics and International Business, were tasked with developing creative yet practical strategies to enhance the sanctuary's fundraising and sponsorship efforts.

Guiding students through this journey was Du Plessis, who played a pivotal role in facilitating intercultural collaboration and steering participants through the various phases of the Design Thinking process. From linking the sanctuary to online donation platforms to crafting volunteer recruitment plans and social media engagement strategies, students created valuable solutions with real-world potential and purpose.

"The project offered students a meaningful opportunity to contribute to a non-profit cause while gaining hands-on experience in innovation, teamwork and social impact," Du Plessis said. "It also underscored the incredible value of intercultural exchange, interdisciplinary collaboration and community engagement. These are all elements that are aligned with the DUT ENVISION2030 strategy."

The success of the programme has already sparked exciting developments. Du Plessis and her international counterparts from JAMK University of Applied Sciences (Finland) and Fontys International Business School (Netherlands) are now collaborating on student-led, grassroots-level community development projects. These initiatives aim to extend the impact of Erasmus+ beyond the classroom and into global communities.

Additionally, the facilitation team is co-authoring an academic paper titled "Teaching Without Borders: A Critical Enquiry into Cross-Continent Co-Facilitation," which will reflect on their shared experiences of teaching and learning across diverse cultural and geographical landscapes.

Fabian Girod, Senior Lecturer at Fontys and Director of the Betterideas Company, praised Du Plessis' contribution, saying: "Yâchal's strengths are facilitation skills and the talent to manage diverse and intercultural teams. It was a pleasure to work with her."

This unique collaboration not only elevated DUT's presence on a global academic stage but also inspired new approaches to teaching and facilitation that Du Plessis is excited to bring back to DUT and share with local students and colleagues. "This experience strengthened my skills and completely shifted my mindset," she reflected. "It challenged what I thought I knew and showed me powerful new ways to bring out the best in diverse teams. I'm excited to take these insights back to the South African academic landscape and my work at DUT."

Du Plessis also added, "my deepest gratitude goes to Professor Dr. Thomas Dobbelsstein, for not only making this academic exchange possible but for being a very rare kind of academic and professional, whose vast knowledge is matched by his warmth, his zest for life and his sense of humour. His support was the catalyst that expanded my horizons, transformed my thinking and ultimately, changed the direction of my career. I will carry the lessons I've learned from him for a lifetime."