

Quarter 1, 2026 **RESEARCH AND INNOVATION NEWS**

The Newsletter of the
DVC: Research, Innovation and Engagement



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DUT SECURES GLOBAL TOP 6% POSITION IN 2026 WEBOMETRICS RANKINGS

BY ALAN KHAN

DUT's Steve Biko Campus in Durban

Durban University of Technology (DUT) has enhanced its global profile by ranking among the top 6% of higher education institutions worldwide in the 2026 Webometrics Ranking of World Universities.

The latest ranking assessed more than 32000 higher education institutions (HEIs) across the globe, positioning DUT within a select group of universities recognised for their digital visibility, research excellence and commitment to open access knowledge.

In South Africa, the ranking featured 124 institutions, including all 26 public universities, highlighting a highly competitive national higher education environment.

DUT was ranked as South Africa's leading University of Technology, highlighting its consistent academic and digital achievements. In the 2025 Webometrics Rankings, DUT was also placed among the top 6% of universities worldwide.

The Webometrics Ranking of World Universities has been published since 2004 by the Consejo Superior de Investigaciones Científicas (CSIC), the largest public research organisation in Spain.

Unlike many global rankings that primarily focus on long-established, globally recognised universities, Webometrics evaluates a broad spectrum of institutions, including those in the Global South that are often overlooked.

The ranking aims to promote open access to knowledge produced by universities and places emphasis on the quantity and quality of higher education web content. Webometrics emphasises that rankings significantly influence academic behaviour and institutional strategy, describing them as "one of the most powerful tools for initiating and consolidating change in academia, increasing scholars' engagement, and establishing long-term strategies."

Commenting on the achievement, Professor Fulufhelo Nemavhola, Deputy Vice-Chancellor: Research, Innovation and Engagement at DUT, said, "The result reflects the university's sustained focus on impactful and accessible scholarship. This recognition affirms DUT's commitment to producing high-quality, socially responsive, impactful research that is visible, accessible and relevant beyond our institutional boundaries."

He added that the Webometrics 2026 ranking highlights the collective efforts of the university's academic community. "Being placed in the top 6% globally, out of more than 32000 institutions, is a significant milestone. In line with our ENVISION2030 strategy, it speaks to our growing research excellence, our digital maturity and our determination to contribute knowledge that makes a meaningful difference to society," he said.



NEW BENCHMARK ACHIEVED IN RESEARCH PERFORMANCE AT DUT

Professor Fulufhelo Nemavhola, Deputy Vice-Chancellor: Research, Innovation and Engagement at DUT.

Durban University of Technology (DUT) has reached a new milestone in its research performance, delivering its strongest Department of Higher Education and Training (DHET)-accredited output to date.

The university recorded 660.98 DHET-accredited research output units in 2024, 14.9% higher from 2023.

The increase of 85.58 units marks the latest in a decade-long upward trend, with awarded units rising from 235.62 in 2015. This growth represents an overall increase of an impressive 180.5% across journals, books, book chapters and conference proceedings.

DUT submitted a total of 702.62 research output units to the DHET for the 2024 cycle. After verification, the final awarded figure was 660.98 units. A small adjustment of 2.41 units will be carried over to the next reporting cycle, reflecting the thorough auditing and verification process applied to all submissions. The university achieved an approval rate of 94.1%, the highest in five years.

Professor Fulufhelo Nemavhola, Deputy Vice-Chancellor: Research, Innovation and Engagement, said the result

was not only about increasing output, but also about strengthening the credibility of that output. "When we grow our research output units and simultaneously improve our approval rate, it tells a bigger story: our systems are maturing, our evidence is stronger, and our research outputs are being validated with greater confidence."

Journal publications remain the primary driver of DUT's research output. The university claimed 553.36 journal units, of which 532.40 were approved, reflecting a 96.2% approval rate. "This is important because journals are where our research is most visible internationally," Prof Nemavhola noted. "It also means our internal processes - including author verification, affiliations, supporting evidence and accurate capture - must be excellent because journals are where small errors get magnified."

Book publications and book chapters showed a significant rebound in 2024. DUT claimed 78.15 units

and was awarded 67.95 units, translating into an 86.9% approval rate. Year-on-year growth in this category demonstrated a recovery after earlier fluctuations.

Published conference proceedings were also strengthened. DUT claimed 71.10 units and was awarded 60.64 units, with an 85.3% approval rate, reflecting steady consolidation in this category. While volume is one measure of success, quality is key for external recognition. DHET feedback showed that errors in author counts, Digital Object Identifiers (DOI), and evidence packaging could lead to unit deductions or rejection. The Department treats incorrect author counts as a serious matter, as they directly affect unit allocation and can be considered fraudulent in extreme cases.

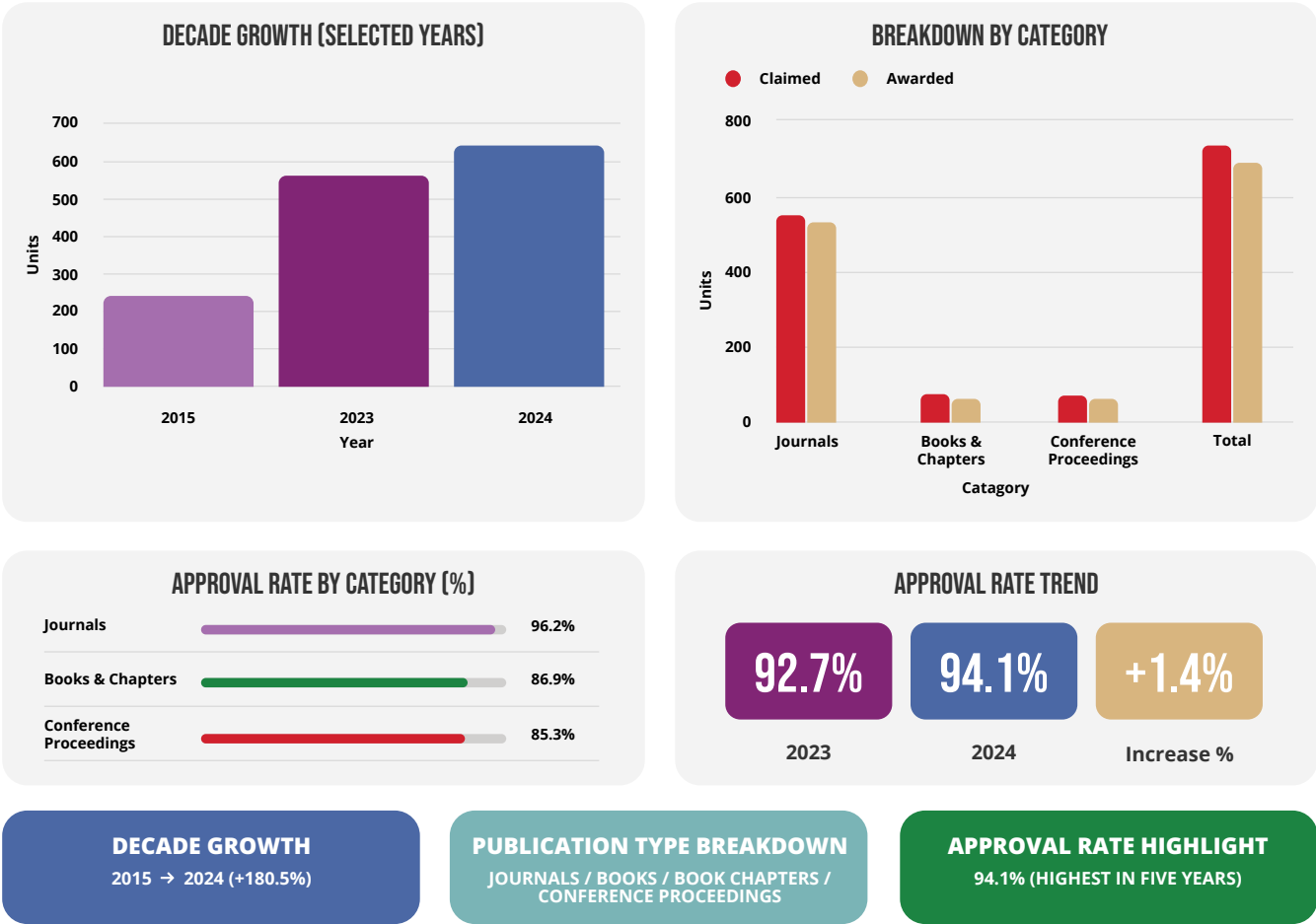
DUT's 94.1% approval rate indicated that submissions were increasingly clean, improving from 92.7% in 2023. "As a university, we must treat every research output unit as a protected asset," Prof Nemavhola said. "A unit

lost to avoidable documentation or capture errors is not just an administrative issue. It is lost recognition for scholarly work already completed."

Looking ahead, DUT aims to turn the 2024 momentum into a sustainable advantage. Strengthening internal controls, particularly around author verification, DOI validation and evidence packaging, is central to ensuring all submissions are audit-ready before they reach the DHET. "Our next step is to institutionalise a culture of submission integrity," Prof Nemavhola added. "Output growth must be matched by process excellence, so our researchers are rewarded fully and fairly for what they produce," he concluded.

The 2024 research output at DUT reflected the combined efforts of researchers, supervisors, postgraduate students and support teams, who ensured submissions were credible and complete.

DHET RESEARCH OUTPUT | AT A GLANCE





DUT's Steve Biko Campus in Durban

The Durban University of Technology (DUT) has taken a decisive step towards advancing high-impact, interdisciplinary research through the establishment of 18 new Research Institutes, effective from 2026. This landmark initiative strengthens the University's commitment to reinforcing its research profile and accelerates the translation of knowledge into innovation, entrepreneurship and meaningful societal impact, aligning with DUT's ENVISION2030 strategy.

The new institutes were approved by the DUT Council, chaired by Mr Wiseman Madinane, with full support from the Senate. They form part of DUT's Disruptive Projects Programme, designed to fast-track high-impact initiatives that position the University at the forefront of technological, social and economic innovation.

DUT already operates two established research institutes, most notably the Institute of Wastewater Technology (IWWT) and the Institute of Systems Science (ISS), which have demonstrated the University's ability to deliver impactful, applied research.

IWWT addresses critical environmental and water sustainability challenges, while ISS tackles complex societal challenges through interdisciplinary approaches. Together, they illustrate DUT's commitment to research excellence, innovation, societal impact, and global competitiveness.

This milestone has been achieved under the strategic and visionary leadership of the Vice-Chancellor and Principal, Professor Thandwa Mthembu, with oversight from the DUT Council.

Deputy Vice-Chancellor: Research, Innovation and

Engagement, Professor Fulufhelo Nemavhola, said: "The establishment of 18 research institutes is a strategic acceleration to strengthen interdisciplinary research, respond to real societal and economic challenges, and enhance DUT's national and global competitiveness."

He highlighted the critical role the new research institutes will play in developing the next generation of researchers. "Through these research institutes, DUT is creating structured platforms for emerging and established researchers, postdoctoral fellows and postgraduate students to thrive, while ensuring that research excellence goes hand in hand with real-world impact."

Prof Nemavhola said the rollout of the institutes will follow a phased implementation approach in line with institutional policy and governance frameworks.

In 2026, DUT will implement five institutes as the first wave: Hydrogen Technology; Innovation and Entrepreneurship; Health Devices Innovation; Data Science and Artificial Intelligence; and Urban Planning and Smart Cities. One existing centre will be converted into a full institute, bringing the total number of institutes implemented in the year to six.

"The first-wave research institutes are anchored in

the defining questions of our time: how we power our economies sustainably, harness digital transformation, advance health innovation, grow inclusive enterprises and build cities that can endure," explained Prof Nemavhola. "They signal a deliberate shift in how universities respond to global change, not as observers but as active partners in shaping solutions."

He added, "What sets these institutes apart is not only the technology they will generate but the way they are designed to work: across disciplines, in partnership with industry and communities, and with a clear line of sight from discovery to implementation. By accelerating the journey from research to real-world impact, they position DUT as a catalyst for innovation that can be adopted, adapted and scaled where it matters most."

The research institute programme is designed to generate tangible societal and economic benefits. The framework prioritises community benefit, economic development, and job creation as core measures of impact.

For KwaZulu-Natal and South Africa, this initiative translates into research that delivers tangible improvements in areas such as health technologies, food security, energy resilience, and smarter, more sustainable cities.

The 18 research institutes span critical areas of science, technology, society and innovation. They include:

- 1 Institute of Hydrogen Technology
- 2 Institute for Innovation and Entrepreneurship
- 3 Advanced Grid Technology Research Institute (conversion)
- 4 Smart Agriculture and Food Security Institute
- 5 Institute for Advanced Manufacturing and Robotics
- 6 Institute for Societal and Technological Advancement and Impact
- 7 Institute of Ocean Engineering and Marine Technology
- 8 Urban Planning and Smart Cities Institute (conversion)
- 9 DUT Health Devices Innovation Institute

- 10 Institute of Micro and Nano Systems (IMiNaS)
- 11 Institute for the Future of Work and Education
- 12 Institute for Environmental and Climate Change Research
- 13 Indigenous Food Research Institute (IFRI)
- 14 Biotechnology and Health Innovation Institute
- 15 Space Engineering and Exploration Institute
- 16 Institute for Data Science and Artificial Intelligence
- 17 BRICS Research Institute
- 18 Biocatalyst Research Institute (conversion)

DUT-LED STUDY IDENTIFIES CRITICAL DRIVERS OF OMNICHANNEL SUCCESS IN FASHION

BY ALAN KHAN

Entrepreneurship is embedded in the DNA of the ENVISION2030 strategy at the Durban University of Technology (DUT). New research is providing timely guidance for fashion entrepreneurs operating in an increasingly digital marketplace.

A recently published international study by researchers from DUT and Baden-Württemberg Cooperative State University (DHBW) in Ravensburg, Germany, provides practical insight into how fashion designers can build stronger consumer connections across digital and physical retail spaces.

The study, *Catwalk to Consumer: Critical Communication Considerations for Fashion Designers to Achieve Omnichannel Success in South Africa and Germany*, was published in the journal, *Studies in Media and Communication* (Vol. 14, No. 3, 2026). It is based on survey responses from over 1000 consumers in Germany and South Africa.

Authored by Dr Boitumelo Pooe, Professor Veena Rawjee, Professor Thomas Dobbelstein and Professor Karen Corbishley, the research examined how consumers interacted with fashion brands across multiple platforms, a model known as “omnichannel” retailing. The study identified the factors that are most likely to influence long-term customer loyalty and business growth.

Three key drivers emerged as central to consumer engagement: easy access to information while shopping, the availability of online shopping alternatives and the ability to move seamlessly between digital and in-store channels.

While these preferences were shared across both markets, the research highlighted important regional differences. South African consumers displayed a stronger emotional connection to brands and a greater willingness to recommend retailers to others, suggesting strong potential for community-driven growth when entrepreneurs deliver consistent and integrated customer experiences.

German consumers, by contrast, prioritised efficiency and real-time product information, underscoring the importance of reliable digital infrastructure and clear communication within physical retail spaces.

The publication also supports DUT’s commitment to internationalisation, postgraduate development and impactful research partnerships. Professor Dobbelstein, Chairperson of the DUT Business School and an esteemed Professor based at DHBW in Germany, said the study spoke directly to DUT’s strategic focus on entrepreneurship and innovation.

“Fashion entrepreneurs form an important part of the creative and economic ecosystem in both South Africa and Germany. This research offers practical insight into how designers can communicate more effectively with consumers across digital and physical platforms, while also highlighting the value of sustained collaboration between DUT and DHBW in developing globally relevant scholarship and supporting emerging entrepreneurial talent.”

Professor Dobbelstein, who also serves on the DUT Innobiz Board of Directors, noted that equipping entrepreneurs with research-informed strategies aligned closely with DUT’s commitment to producing adaptive graduates who transform society.

The published study reinforces DUT’s role as a responsive, globally connected University of Technology - one that supports entrepreneurship, strengthens international collaboration and generates research that speaks directly to real-world economic and social needs.

For South African fashion entrepreneurs in particular, the findings offer practical guidance for building resilient brands, deepening customer engagement and growing sustainably, in a digitally integrated retail environment.

FOR MORE ON THE PUBLISHED JOURNAL, READ MORE HERE

Catwalk to Consumer:

Critical Communication Considerations for
Fashion Designers to Achieve
— Omnichannel Success —
in South Africa and Germany



AI-generated image.



DR ITUMELENG MAOME RECOGNISED AS IREC'S TOP REVIEWER FOR ADVANCING ETHICAL RESEARCH AT DUT

BY WAHEEDA PETERS

Dr Itumeleng Maome

Dr Itumeleng Maome has embraced a pivotal role in strengthening ethical scholarship at the Durban University of Technology (DUT), recently earning recognition as the Institutional Research Ethics Committee's (IREC) Top Reviewer at a university awards ceremony. The accolade highlights her growing contribution to fostering a rigorous, responsible research culture aligned with DUT's ENVISION2030 strategy.

Dr Maome serves as a lecturer in the Department of Entrepreneurial Studies and Management, where she teaches entrepreneurship and business administration modules at undergraduate diploma level.

Her academic journey began with a strong focus on teaching and learning, but over time she developed a deep interest in research after recognising its powerful connection to effective teaching practice.

She now supervises Business Research Proposals and Business Research Reports at postgraduate diploma level, as well as Master's and PhD students. In addition, she contributes to departmental, faculty, and institutional

committees that promote academic governance and excellence.

Beyond her teaching and supervision responsibilities, Dr Maome has taken on the invigorating role of IREC reviewer. Although she had long reviewed proposals at departmental level, she joined IREC in 2024 shortly after completing her PhD.

"This opportunity came after I was nominated by the then Executive Dean of the Faculty of Management Sciences, Professor Netswera, to serve as the FMS representative on the IREC committee. Since then, being involved in IREC reviews has grown to be a significant aspect of my academic contribution," said Dr Maome.

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“Receiving the recognition was unexpected yet greatly rewarding because I honestly did not anticipate it. However, knowing that my efforts are appreciated and noticed felt reassuring. This kind of recognition encourages me to keep making significant contributions to DUT’s ethical research practices,” she said euphorically.

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Dr Maome explains that her work as an IREC reviewer aligns closely with DUT’s ENVISION2030 values. “As an IREC reviewer, my work closely reflects the values of innovation, institutional excellence, and ethical stewardship. I contribute to developing responsible, socially conscious knowledge that helps communities by making sure research proposals adhere to ethical standards,” she emphasised.

She further highlighted the intellectual growth the role offers. “Working with new research approaches and ethical dilemmas is one innovative part of my job. Reviewing proposals broadens my understanding of interdisciplinary research by exposing me to a variety of innovative, cross-disciplinary topics. I contribute to the production of excellent, reputable, and socially conscious research that expands knowledge both inside and outside DUT by upholding the ethical integrity of research,” she explained.

According to Dr Maome, the IREC reviewer role is central to protecting research participants and maintaining public trust. “It ensures that DUT research is ethically

acceptable, reliable, and compliant with both national and international standards...In the end, this increases public confidence in the university’s research outcomes,” she highlighted.

On average, she completes between 15 and 25 reviews annually, prioritising quality to ensure researchers receive thoughtful and constructive guidance.

Despite the demands of balancing reviews with other academic responsibilities, Dr Maome remains committed.

“Working with seasoned IREC reviewers helps to navigate these challenges as I have a sounding board in times of doubt, especially when reviewing proposals outside my discipline. Another challenge is that reviewing proposals can be demanding and requires a lot of sacrifice and sleepless nights. We also have to ensure timely feedback amidst other academic responsibilities, which requires careful time management,” she explained.

Dr Maome aims to deepen her expertise by attending ethics workshops and conferences, including platforms hosted by Southern African Research and Innovation Management Association (SARIMA) and South African National Biennial Research Integrity Symposium (SANBRIS).

“I also want to contribute to capacity building initiatives for new researchers, and contribute to refining ethical review processes, as well as supporting IREC’s efforts to streamline training for researchers. I look forward to continuing this journey and contributing meaningfully to DUT’s research excellence,” she concluded.

RESEARCH ETHICS | AT A GLANCE

15–25

REVIEWS COMPLETED ANNUALLY

ETHICS ROLE

- Institutional Research Ethics Committee (IREC) reviewer
- Joined IREC in 2024

POSTGRADUATE SUPERVISION

- Business Research Proposals
- Business Research Reports (both of the above at postgraduate diploma level)
- Master’s and PhD students

GOALS

Attending ethics workshops, conferences and platforms, including those hosted by:

- Southern African Research and Innovation Management Association (SARIMA)
- South African National Biennial Research Integrity Symposium (SANBRIS)



DR VENTHAN THURAISSINGHAM HONoured WITH IREC BEST REVIEWER AWARD 2025

BY WAHEEDA PETERS

Dr Venthan Thuraisingham

Recognised as one of the Institutional Research Ethics Committee's (IREC) best reviewers, Dr Venthan Thuraisingham says he feels both honoured and humbled to receive the Best Reviewer Award 2025. The accolade affirms his commitment to strengthening ethical research design, mentoring emerging scholars, and advancing responsible innovation at the Durban University of Technology (DUT).

Dr Thuraisingham, an academic in the Faculty of Accounting and Informatics at DUT, is driven by a desire to generate knowledge and mentor future researchers. With experience spanning both industry and academia, he believes sustainable technological advancement must be grounded in strong ethical foundations and rigorous scholarship.

"Academia provides the platform to influence policy, guide postgraduate scholars, and contribute to national and international cybersecurity discourse," he emphasised.

He holds a PhD in Cyber Security Administration and

brings over 18 years of experience in higher education, research, and industry. He previously served as Chairperson of the Faculty Research Ethics Committee (DUT-FREC) and is currently a member of the Institutional Research Ethics Committee (IREC) and the Faculty Research Committee (FRC-FAI-DUT).

"My responsibilities include postgraduate supervision, doctoral examination, curriculum innovation, and research ethics governance. My research focuses on cybersecurity, digital forensics, IoT security, and responsible technology innovation," he said.

Reflecting on his recent recognition, Dr Thuraisingham

underscored the importance of ethical oversight in academia.

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“Research ethics is fundamental to academic credibility. This recognition reflects not only personal dedication but also DUT’s commitment to research integrity and excellence. It motivates me to continue providing constructive, fair, and timely ethical oversight. Receiving the Best Reviewer Award 2025 reaffirms my belief that ethical governance is not an administrative requirement but a pillar of academic excellence. I remain committed to advancing research integrity, mentorship, and responsible innovation at DUT,” he shared.

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He began serving as an IREC reviewer in mid-2023, shortly after joining DUT and assuming leadership of the Faculty Research Ethics Committee. Since then, he has reviewed postgraduate and doctoral proposals, helping to strengthen institutional governance and research integrity.

“The IREC role aligns strongly with DUT’s ENVISION2030 strategy, particularly its emphasis on research excellence, societal impact, innovation, and ethical leadership. By ensuring compliance with ethical standards, we protect research participants, strengthen institutional credibility, and enhance DUT’s global academic reputation,” he explained.

Dr Thuraisingham highlights reviewing research in emerging areas such as Artificial Intelligence, IoT, cybersecurity, and digital identity systems as one of the most innovative aspects of his role.

“These fields evolve rapidly and require forward-thinking ethical governance. By integrating ethical frameworks with advanced technological research, we promote responsible innovation and sustainable knowledge advancement,” he said.

Balancing innovation with ethical compliance can be challenging, particularly in cutting-edge domains.

In a typical year, in addition to his participation in Department Research Committee reviews, he completes approximately 20 to 25 detailed ethics reviews, depending on submission volume and complexity.

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“Researchers often work in cutting-edge domains, and ensuring robust participant protection without limiting creativity requires careful judgement and mentorship,” he commented.

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Looking ahead, he aims to strengthen ethics capacity-building within DUT, mentor emerging researchers on ethical research design, promote responsible AI and cybersecurity governance, and contribute to positioning the University as a national leader in ethical research excellence.

RESEARCH ETHICS | AT A GLANCE

20–25

DETAILED ETHICS REVIEWS

RESEARCH FOCUS

- Cybersecurity
- Digital forensics
- IoT security
- Responsible technology innovation

ETHICS ROLES INCLUDE

- Institutional Research Ethics Committee (IREC)
- Faculty Research Ethics Committee (FRC-AI-DUT)
- Postgraduate supervision
- Doctoral examination

PROF OMOLOLU RECOGNISED AMONG IREC'S BEST REVIEWERS FOR COMMITMENT TO RESEARCH INTEGRITY

BY WAHEEDA PETERS

Professor Omololu Fagbadebo of the Durban University of Technology (DUT) has been recognised as one of the Institutional Research Ethics Committee (IREC)'s best reviewers, highlighting his dedication to research integrity and academic excellence. His recognition reflects years of active involvement in research supervision, scholarly publishing, and peer review within the university and the broader academic community.

Prof Fagbadebo is a Research Associate and Chair of the Departmental Research Committee (DRC) in the Department of Public Management, Law and Economics at DUT's Riverside Campus. In addition to supervising postgraduate students, he participates in various research initiatives, including colloquia, research writing retreats, and academic webinars.

He also serves as the Managing Editor of the Journal of Public Management and International Relations (JPMIR), a publication he initiated together with the Head of Department, Professor Lusanda Juta. The journal is hosted by the department in partnership with Adeyemi University of Education in Nigeria. Beyond this, Prof Fagbadebo played a key role in establishing the Centre for African Governance and Development (CAGD) within the Faculty of Management Sciences.

His passion for knowledge and inquiry began early in life. "As a child, I was so inquisitive. I knew that information was critical to development. Given my background as an indigent child, I decided to study to gain knowledge that could help me contribute meaningfully to societal growth and development, making life better for everyone. Thus, I sought to pursue a career that would give me the opportunity to engage with various ideas from which knowledge could be derived for development," he highlighted.

After completing his university education, Prof Fagbadebo pursued a career in journalism, where he specialised in political reporting. This experience sharpened his information-gathering skills and provided valuable insights into political leadership and governance, which later shaped his academic research interests.

Recognised as one of IREC's best reviewers, Prof Fagbadebo said the acknowledgement was both fulfilling and motivating, as it reflected his contribution to strengthening research at DUT and supporting fellow researchers.

Prof Fagbadebo believes that fairness and constructive engagement are essential to the review process.

In his role as an IREC reviewer, which he began in 2020, he emphasised the importance of ethical research practices aligned with DUT ENVISION2030 values.

"Thus, in my review of proposals, whether for a degree or an individual research project, I sought to understand the central idea the researcher seeks to present and the envisaged context of the study. I will offer an appraisal with a view to improving the content based on my understanding of the context. I want to support the research ideas with suggestions to strengthen the argument," he explained.

Prof Fagbadebo says research is a major cornerstone of higher education and the bedrock of development. "Everything revolves around it. Thus, review, as a pillar of research integrity, is a significant component of overall performance. Quality research, conducted with integrity, will produce thinkers and innovators," he added.

Looking ahead, Prof Fagbadebo plans to deepen his involvement in research and peer review across academic platforms. "I am involved in peer review activities for different journals. As an Editor of an academic journal, I know the importance of peer review in research. I will increase my passion and continue to overlook any inconveniences," he said.



PROFESSOR OMOLOLU FAGBADEBO



PEER REVIEW PROMOTES TRANSPARENCY IN RESEARCH BY SUBJECTING THE RESEARCHER'S IDEAS TO DIFFERENT PERSPECTIVES. THIS OPENNESS IS ANCHORED IN HONESTY BECAUSE THE INDEPENDENT REVIEW WILL SUBJECT THE STUDY TO AN INTEGRITY TEST OF ITS CONTENT AND CONTEXT. THE OUTCOME WILL COMMAND RESPECT FOR THE HONESTY OF THE IDEAS PRESENTED AND THE REVIEWER'S OPENNESS IN EXPRESSING OPINIONS AIMED AT IMPROVING THE QUALITY OF THE STUDY.

- **OMOLOLU FAGBADEBO**



DR THOBILE ZULU'S PATH TO TRANSFORMING LIVES THROUGH EDUCATION AND SERVICE

BY SINAMILE SITHOLE

Dr Thobile Zulu

From a rural village in KwaMaphumulo to earning a doctoral degree, Dr Thobile Zulu's journey is one of determination, resilience and the transformative power of education. As the first person in her family to attend university and complete a PhD, she has proudly broken generational barriers and set a powerful example for her community. Dr Zulu joined the Durban University of Technology (DUT) in 2006 as an HIV/AIDS Coordinator at the Student Counselling and Health Unit.

At 56, Dr Zulu reflects on a life deeply rooted in faith, family and purpose. A devoted wife, mother of four, and grandmother of two, she credits her family for teaching her about service and compassion.

"Being a mother and grandmother has taught me patience, empathy and resilience, qualities that I bring into my work with students," she said.

Coming from an uneducated family, Dr Zulu became the

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"I wanted to show my family and my community that where you come from does not limit what you can achieve," she explained.

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first person in both her immediate and extended family to enrol at a university and earn a doctoral qualification.

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“The mentorship programme was a turning point for me. It gave me the tools to tackle research with confidence and purpose.”

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Her academic journey began in 1992 at the former University of Natal (now known as the University of KwaZulu-Natal), where she pursued an undergraduate degree in Social Sciences. Although her childhood dream was to study towards becoming a Chartered Accountant, she found her calling in social sciences.

She went on to complete postgraduate qualifications in Human Resources Management and Applied Social Sciences, followed by a Master’s Degree in Social Sciences. Her research focused on accessibility to health services for elderly people in her rural community, examining challenges related to accessing pensions and healthcare as well as the impact of HIV.

Her commitment to learning continued as she pursued further qualifications, including a Postgraduate Diploma in Monitoring and Evaluation through the University of Stellenbosch. She also completed a mentorship programme that prepared her for doctoral studies.

In 2022, Dr Zulu registered for her PhD at the University of South Africa (UNISA), completing it in 2025 and fulfilling a lifelong dream.

Her doctoral research examined how peer education programmes can be strengthened within higher education to enhance student development. It found that these programmes have a transformative impact,

boosting confidence, leadership and communication skills, and fostering acceptance of diverse communities. Many participants even credited peer education with shaping their personal and career growth.

Dr Zulu hopes her work will promote the recognition and wider integration of peer education as a vital developmental tool in universities.

“Every challenge I faced reminded me why I started this journey, which was to break the cycle and inspire others,” she said.

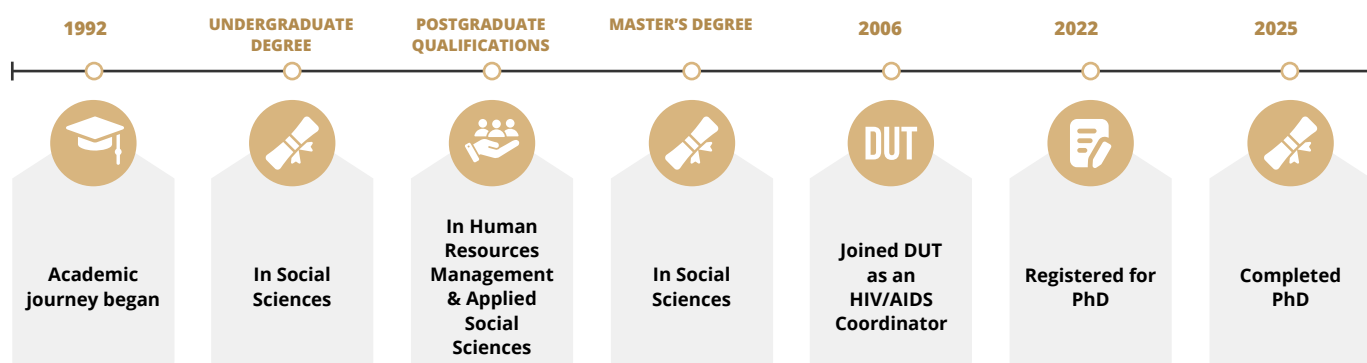
Her journey to a PhD was marked by personal loss, including the passing of close family members. Yet she remained focused, driven by a desire to be a role model for her family and community.

Over nearly 20 years Dr Zulu’s role has expanded to address broader health and social issues affecting students, including HIV, sexually transmitted infections, tuberculosis, gender-based violence and inclusivity initiatives. Her work continues to focus on student wellness, empowerment and behavioural change, making a meaningful impact within the university community.

Since completing her PhD, Dr Zulu has already published research articles and continues to work on further publications based on her study. She hopes to share her findings widely and contribute to policy and programme development within higher education. Looking ahead, she aspires to grow academically and possibly pursue a professorship.

Dr Zulu encourages young people, particularly those from disadvantaged and rural backgrounds, to remain determined and focused on their goals. “If I could achieve a PhD, anyone can. You just need determination, faith and the courage to keep going,” she said.

DR THOBILE ZULU’S MILESTONES | AT A GLANCE





MOONSAMY CREDITS DUT FOR NURTURING HER ACADEMIC AND SCIENTIFIC JOURNEY

BY WAHEEDA PETERS

Shareece Saloshnie Moonsamy

Shareece Saloshnie Moonsamy's academic journey from matric to aspiring scientist is a story of growth, resilience, and discovery shaped by the Durban University of Technology (DUT). She credits the university with providing the resources, guidance, and encouragement that allowed her to tackle challenging subjects confidently.

Moonsamy began her studies in 2020 at DUT, starting with a Higher Certificate in Mathematics before pursuing her Biotechnology degree from 2021 to 2024.

"Becoming a scientist has always been my dream. I am someone who loves experiencing new things and making a difference. I thrive on pushing my capabilities and striving to improve every day," she said.

During her first semester, she achieved distinctions that motivated her to strive for excellence and set even higher goals. "Yet, with these highs came significant challenges. The pressure to maintain such performance was intense. At times, I feared failure. I had to make many sacrifices, dedicating myself fully to learning and giving everything I had, as if my future depended on it," she expressed.

Fortunately, Moonsamy had a mentor, Professor Lortan, who guided and supported her throughout her time at DUT, helping her to navigate difficult moments and encouraging her to keep pushing forward.

"The experience not only prepared me for my degree but also shaped my character and determination. DUT has been instrumental in nurturing my academic journey.

The support from lecturers, mentors, and peers created an environment where I could grow both academically and personally," she added.

Moonsamy shared that the Higher Certificate in Mathematics was a turning point in her life. "It was both challenging and transformative, pushing me to develop discipline, resilience, and confidence."

Looking back, Moonsamy highlighted that she would recommend potential students to follow a similar path. "Although it can be challenging, the rewards are worth every effort. Foundational programmes like the Higher Certificate equip students with the skills, confidence, and mindset needed to succeed. For those willing to work hard and embrace the learning process, this path opens doors to exciting opportunities and lays the groundwork for a meaningful career and future," she concluded.

Her goal is to continue advancing her studies in science and pursue a research career. "I aspire to obtain my PhD, and I aim to complete an MBA to combine my research expertise with leadership skills. Ultimately, I hope to grow as both a scientist and a leader, driving progress, inspiring others, and contributing positively to the world of science."



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THE UNIVERSITY DIDN'T JUST PROVIDE AN EDUCATION, IT OFFERED AN ENVIRONMENT WHERE I COULD THRIVE, EXPERIMENT, AND DEVELOP INTO THE SCIENTIST I ASPIRE TO BECOME.

- SHAREECE SALOSHNI MOONSAMY

FROM DIALYSIS WARDS TO DATA SCIENCE, DR SHAMANIE GOVENDER ADVANCES HOLISTIC KIDNEY CARE AND AI-DRIVEN HEALTH INNOVATION

BY WAHEEDA PETERS

After more than a decade leading private renal facilities, Dr Shamanie Govender is turning frontline clinical insight into research that could transform kidney care in South Africa.

Now a lecturer in the Department of Biomedical and Clinical Technology at the Durban University of Technology (DUT), her work focuses on improving the quality of life for patients with Chronic Kidney Disease (CKD) - not only through better pain management, but by addressing caregiver wellness and integrating indigenous knowledge and artificial intelligence into healthcare solutions.

Her achievements include being featured in the Mail & Guardian Top 200 Young South African Graduates Achieving Academic Excellence (2022), receiving the Recognition Award of Excellence for Milestone Achievement in nGAP (2025), and being honoured as Alumnus of the Month at DUT in November 2025.

"My research focuses on Nephrology, specifically Chronic Kidney Disease (CKD)... I have published in DHET-accredited journals such as the Journal of Multidisciplinary Healthcare and the Journal of Medicinal Plants for Economic Development," she explained.

Dr Govender is currently involved in multidisciplinary projects at DUT, including an AI-integrated research study combining Health and Applied Sciences, and a collaborative study exploring the experiences of multidisciplinary engagement among health science students.

Her research aims to improve the quality of life for CKD patients through better pain management, caregiver education and wellness interventions, and the exploration of South African medicinal plants as complementary therapies.

"My inspiration comes from over 10 years in clinical practice. Witnessing dialysis patients' struggles with chronic pain and high medication costs compelled me to seek solutions that are clinically effective and socio-economically accessible," she shared.

Her work aligns with DUT's ENVISION2030 goals. "By researching affordable, indigenous-based treatments for CKD, I contribute to improving lives and livelihoods. Participation in the Big Rocks Project ensures DUT remains a leading university of technology by developing innovative study areas that respond to the evolving digital and healthcare landscape," she said.

A breakthrough in her doctoral research highlighted the often-overlooked psychological and socio-economic challenges faced by primary caregivers of children with CKD.

"Caregiver wellness is critical in paediatric patient treatment. My research advocates for integrated support systems to prevent caregiver burnout, which directly impacts child health outcomes," she explained.

Dr Govender plans to integrate Artificial Intelligence into Health Sciences education and develop a formal Caregiver Support Framework for families of children with chronic illnesses.

"My goal is to create multidisciplinary academic programmes that break down traditional silos, fostering collaboration across Health, Applied Sciences, and Technology to solve complex societal problems," she concluded.



DR SHAMANIE GOVENDER

HOW JORDACHELIN MOODLEY IS REDEFINING DIGITAL INCLUSION

BY WAHEEDA PETERS

South African technology leader and social innovator Jordachelin Moodley is proving that purpose-driven innovation.

As the founder of Project Simunye and a fintech professional at Old Mutual South Africa, he is using technology to bridge gaps and create opportunities for underserved communities.

Raised in a community with limited access, Moodley transformed personal challenges into purpose by pursuing Information Technology at the Durban University of Technology (DUT). Today, he is a recognised national and international award recipient, working to drive inclusive digital transformation in banking and financial services.

At DUT, Moodley discovered more than technical skills. The institution shaped his ability to think critically, lead with intention, and apply knowledge to real-world challenges. "What started as curiosity turned into purpose, purpose turned into impact, and the rest is history," he added.

A typical day for Moodley begins with prayer, gratitude, and intention, grounding himself in reflection before shifting into a high-impact, solutions-driven workday.

Beyond his corporate role, Moodley leads Project Simunye, a movement mentoring youth through STEMI - Science, Technology, Engineering, Mathematics, and Innovation - while advancing digital and financial literacy. Through this initiative, he empowers young people to become creators and innovators rather than passive consumers of technology.

"In my role at Old Mutual, I focus on ensuring digital fintech systems are secure, scalable, resilient, and inclusive. This involves working closely with technical teams, business stakeholders, and leadership to make systems trustworthy and efficient," he explained.

Moodley credits DUT's holistic approach for shaping his mindset. "DUT taught me to think beyond the textbook. It challenged me to approach problems with innovation, resilience, and strategic intent. The institution helped me bridge theory with real-world impact, see technology as a catalyst for transformation and nurtured my leadership."

He emphasises that DUT instilled a powerful belief: background does not determine destiny. Moodley encourages students to go beyond academics. "DUT is not just a place to earn a qualification; it is a space to discover who you are becoming. Real growth happens in group projects, leadership opportunities, networking events, late-night study sessions, and stepping into rooms that challenge your confidence. Your qualification opens doors, but your character, relationships, and resilience determine how far you walk through them. Embrace discomfort. It is the birthplace of growth," he added.

Looking ahead, Moodley aims to scale digital transformation initiatives across Africa and globally. "Through Project Simunye, I want to scale our impact nationally and eventually globally by bridging the digital divide, expanding financial literacy, and creating sustainable pathways for youth in underserved communities. Personally, I strive for legacy over title. I want to build institutions, mentor future leaders, and invest in solutions that outlive me. My ultimate goal is not just to innovate; it is to institutionalise opportunity so that inclusion becomes the standard, not the exception," he concluded.



JORDACHELIN MOODLEY



FANIE NDLOVU DRIVES DUT'S VISION TO LEAD IN GENERATIVE AI AND 4IR INNOVATION

BY WAHEEDA PETERS

Mr Fanie Ndlovu

What if students didn't just study innovation - but built it? At the Durban University of Technology (DUT), Fanie Ndlovu is helping turn that vision into reality.

Alumnus, social entrepreneur, developer, DUT Technician and founder of VarsityGenie, Ndlovu is driving a bold agenda: positioning DUT as an international leader in Generative AI education and Fourth Industrial Revolution (4IR) readiness.

Based in the Faculty of Accounting and Informatics, Ndlovu's work is anchored in the Engineering Practice Innovation Project (EPIP) model - a hands-on framework that brings DUT's ENVISION2030 strategy to life. For him, EPIP is more than a methodology; it is a mindset. It

challenges students and staff to learn by doing, reflect by creating, and innovate by solving real-world problems. "In my role as a technician under Executive Dean Professor Oludayo Olugbara, I support and co-develop several EPIP-driven research initiatives within our specialised labs and workshop in achieving Prof Oludayo Olugbara's vision of implementing EPIP.

"One of these is Sgila Skeem, which he co-developed with Professor Olive Stumke, a Generative AI-powered learning companion developed through the EPIP

framework. It assists students in engaging with their coursework by asking questions and receiving personalised explanations based on the lecturer's notes," Ndlovu highlighted, adding, "What makes Sgila Skeem even more special is its integration of IsiZulu translation, which promotes decolonised learning and ensures that technology reflects our South African identity and values."

Another pioneering initiative is VR Stock Taking, an immersive simulation where Internal Auditing students step into a virtual warehouse to scan inventory and conduct audits.

"Instead of simply reading about stock-taking, they step into a digital warehouse, walk through aisles, scan inventory, and perform auditing tasks, thus gaining hands-on experience through immersive learning. Both projects showcase the spirit of learning through innovation, a hallmark of EPIP, where students evolve from being consumers of knowledge to becoming creators of practical solutions," he shared.

Ndlovu believes digital fluency is no longer optional.

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"In today's digital age, DUT students must develop digital fluency - the ability to adapt, create, and apply technology meaningfully and responsibly. A key focus area is Generative AI, which is rapidly transforming how we learn, work, and communicate. Through the EPIP model, we encourage students to experiment with tools like AI, but also use them responsibly, understanding ethics, data privacy, and the importance of originality and integrity in their digital creations,"

he explained.

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"Our mission is not just to produce employable graduates, but entrepreneurial graduates, those who can identify opportunities, lead innovation, and create jobs rather than only seek them. This directly supports DUT's ENVISION2030 goal of producing adaptive graduates who can initiate and respond to change," he added. He emphasised that his daily work activates ENVISION2030 in practical ways.

"Rather than sitting in a strategy document, I make it real through projects that equip students with digital and problem-solving skills they can use immediately. Through the EPIP approach, I help students turn what they learn in class into something tangible - a working system,

prototype, or research concept. It's about showing them that innovation is not theory, it's action," he stated. "For example, under innovation and entrepreneurship, I've helped students design and build solutions like Sgila Skeem, our AI tutor that generates questions and explanations from lecturer notes," explained Ndlovu.

Ndlovu works with Prof Olugbara, Ms Ugeshni Moodley, Professor Olive Stumke and Mr Dharmesh Bhagwan to integrate technology into teaching, such as the VR Stock Taking simulation for Internal Auditing. This makes lessons more practical and prepares students for real-world work environments.

"Every AI model trained, every VR headset tested, and every student mentored contributes to ENVISION2030's goal of improving lives and livelihoods," he expressed.

Looking ahead to 2026, Ndlovu aims to expand EPIP across faculties, integrate it into Work-Integrated Learning programmes, strengthen industry partnerships, and scale innovations like Sgila Skeem and VR Stock Taking.

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"This next phase is about turning EPIP from a faculty initiative into a university-wide movement, grounded in ENVISION2030's vision of improving lives and livelihoods. Through shared effort, DUT continues to be a space where reflection leads to innovation, and innovation leads to impact,"

he concluded.

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DUT STUDENTS UNITE ACROSS DISCIPLINES TO DESIGN INANDA SEMINARY DORMITORY

BY PHUMEZA MSONGELWA

Architecture lecturer, Mr Wendle Naidoo, with a DUT student and learners from Inanda Seminary School

Inspired by a legacy of educating generations of African female leaders, students at the Durban University of Technology (DUT) are helping to shape the next chapter of Inanda Seminary's story. Through an interdisciplinary collaboration between the Departments of Architecture, Civil Engineering, and Construction Management and Quantity Surveying, a new girls' dormitory is being designed to meet the school's growing infrastructure needs.

The initiative brings together second-year students from Architecture, Civil Engineering, and Construction Management and Quantity Surveying in a real-world, community-based project.

Architecture students lead the conceptual and spatial design development, Civil Engineering students focus on structural systems and technical feasibility, while Construction Management and Quantity Surveying students manage planning, costing and buildability.

Through site visits, client engagement, and shared critiques, students develop communication, collaboration, and critical thinking skills while gaining early exposure to professional practice.

Architecture lecturer, Mr Wendle Naidoo, said he feels "extremely encouraged and inspired" by the initiative. "Students have shown enthusiasm and a strong sense of responsibility, knowing their work contributes to a real community need." He added that the opportunity to work within a real community context has significantly enhanced their appreciation of socially responsive design.

Architecture lecturer, Ms Temitope Olaniran, highlighted the broader institutional significance of the project. "I am delighted to be part of the Project-Based Learning and Design Thinking initiative supported by the Centre for Excellence in Learning and Teaching at DUT. The

experience has strengthened students' understanding of context-responsive design within a real community environment. It aligns with DUT's ENVISION2030 priorities of improving lives and livelihoods, fostering creativity and innovation, and building meaningful partnerships that contribute to sustainable community development," she said.

The project builds on an earlier Project-Based Learning and Design Thinking programme, moving students beyond classroom theory into meaningful community engagement. Participants are involved in all stages of the development process, including site analysis and concept development, technical documentation and cost planning. This hands-on experience helps them gain practical experience that bridges academic knowledge with industry expectations.

Phase One milestones include conceptual and schematic designs, detailed architectural drawings, 3D digital and physical models, preliminary structural input, and a draft Bill of Quantities. Stakeholder presentations provided Inanda Seminary with tangible proposals for future planning and funding.

Beyond design, the Inanda Seminary Project demonstrates how interdisciplinary collaboration can shape socially responsive built environments while preparing ethically grounded, work-ready graduates. A new community-based project is set to follow in 2026.



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