



CEG NEWSLETTER

2024/25

ENVISION2030

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Curriculum Review Workshop: A Strategic Step Towards Academic Transformation

On 29–30 September 2025, the Department of Civil Engineering and Geomatics held a two-day Curriculum Review Workshop at the Cutty Sark Hotel in Scottburgh, a milestone in its ongoing pursuit of academic transformation and curriculum renewal.

Funded by the Centre for Excellence in Learning and Teaching (CELT), the workshop aligned with DUT ENVISION 2030 and the Philosophy of Education (PHI ED), which emphasises producing graduates who are competent, innovative, and socially responsive. Facilitated by experts from CELT and the Curriculum Planning and Quality Assurance (CPQA) unit, the sessions explored decolonisation, problem-based learning, design thinking,

entrepreneurship, and curriculum quality. Staff participated in breakaway sessions, cross-disciplinary discussions, and working groups examining curriculum coherence, professional body requirements, and industry relevance. Team-building activities promoted collaboration and renewed enthusiasm.

The workshop produced four major outcomes: a Curriculum Gap Analysis Report, an Integrated Action Plan, Frameworks for Signature Pedagogies (emphasising PBL, design thinking and decolonisation), and an Implementation Roadmap. These will guide curriculum renewal over the next two years.

Described by participants as inspiring and forward-looking, the workshop strengthened shared purpose and innovation. The department now advances confidently toward delivering a transformative curriculum aligned with DUT's mission of excellence and societal impact.



DUT Civil Engineering and Geomatics Department Hosts National Forum of Civil Engineering Heads

The Department of Civil Engineering and Geomatics at the Durban University of Technology (DUT) proudly hosted the South African Institution of Civil Engineering (SAICE) Universities of Technology Civil Engineering Heads Forum on 8–9 October 2025. The event united Heads of Department from universities of technology across South Africa to address shared challenges, professional standards, and the evolving landscape of civil engineering education.

Positioning DUT as a leader in academic and professional collaboration, the forum reinforced the department's mission of driving socio-economic development through quality-driven, student-centred education and strategic partnerships. Aligned with SAICE's "Growing Forward" strategy, discussions focused on initiatives such as Assist a University, Grow a Graduate, and Grow an Expert.

These programmes aim to strengthen graduate training, enhance professional registration readiness with ECSA, and align academic outcomes with industry expectations.

A key highlight, the SAICE Ethics Moment, featured the Credo of the African Engineer, emphasising integrity, sustainability and social responsibility as pillars of the profession. Sessions also explored the ECSA Graduate Attribute Model, applied research, and innovations such as AI in teaching and sustainable infrastructure design. By hosting this influential forum, DUT reaffirmed its leadership in fostering collaboration between academia and industry while shaping graduates who are innovative, ethical, and globally competitive. The 2025 Forum stands as a testament to DUT's commitment to excellence, innovation, and the advancement of civil engineering education in South Africa.



Civil Engineering and Geomatics Football Team - 2025 Dean's Cup

The Department of Civil Engineering and Geomatics proudly celebrates its students' outstanding performance at the 2025 Faculty of Engineering Sports Day, held on 12 September 2025 at the Durban University of Technology. Under the dedicated guidance of their head coach, the Civil Engineering boys' soccer team demonstrated exceptional discipline, teamwork and determination throughout the tournament. From the opening match, the players combined individual skills with collective strength, maintaining focus and resilience. Their efforts culminated in a first-place victory, resulting in immense departmental pride and recognition.

Reflecting on the achievement, the head coach remarked: "This victory was about more than just winning a trophy.

It was a celebration of unity and proof that discipline and teamwork always lead to success."

The winning team comprised: Ngema, Zitha, Zulu, Bayanda, Khambule, Nkosi, Sibisi, Buthelezi, Zuma, Nsele, Hlongwane, Bhengu, Adivhaho, Kweyama, Mantshwaka, Xulu, Reping, Ntshangase, Mpanza, Dlamini, Nguenha, and Zenda. Their commitment and sportsmanship inspired fellow students, reinforcing the department's core values of unity, perseverance and excellence.

Congratulations to the Civil Engineering soccer team for their remarkable achievement and for proudly representing the department at DUT's 2025 Sports Day!



HAPPY RETIREMENT!

Honouring the Legacy of Retiring Lecturers in the Department of Civil Engineering and Geomatics

The department of Civil Engineering and Geomatics commemorated the excellency and services of three notable lecturers who retired from the School of Civil Engineering and Geomatics. DUT Magazine contributors Suvir Rampursad and Riaz Suleman conducted a fireside chat with their retiring peers and shared the stories and contributions of their peers achieved over many years of service and excellency at DUT.

The wealth of experience and knowledge of our very own Mr. Saane dates back to as early as 2002, when he joined DUT. This marks over 20 years of excellence in syllabus development, memorable site visits to distant locations with students for their fieldwork projects, and the building of lifelong relationships with staff and former students. Mr Saane smiled during our conversation and shared fond memories of former students who would sometimes visit to thank him for all the years of teaching as well as the value of the many times he would refuse to bend for late submissions of assignments. *He ended our conversation by wishing his peers and students success and fruitful outcomes in the years to come.*



Mr B Saane

Professor Emeritus Dhiren Allopi, who joined the Durban University of Technology (DUT) in 1983, has witnessed the institution's remarkable growth into a hub of learning, teaching, research and collaboration. Over the years, he has seen countless undergraduate, honours, master's, and doctoral students graduate - many of whom are now leaders and captains of industry. For him, their success is a source of immense pride and a testament to DUT's role in advancing the nation.

Reflecting on his early career, Professor Allopi recalls the "chalk and talk" era of teaching, which has since evolved alongside rapid technological advances. Today, tools such as artificial intelligence

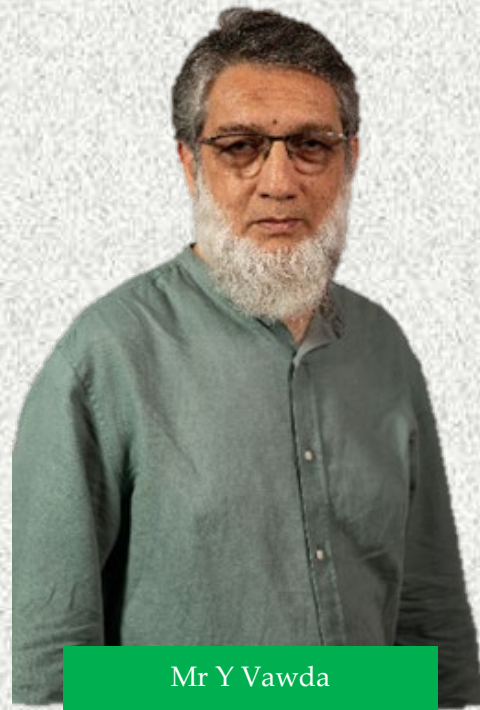


Emeritus Professor Allopi

are transforming both academia and industry. While acknowledging the challenges AI presents, he remains optimistic about its opportunities and confident that DUT's ENVISION 2030 framework equips students and staff to thrive in this changing landscape.

As he looked back, Professor Allopi expressed gratitude for the lifelong bonds forged with colleagues and students, whose passion and determination continue to inspire him. He concluded by affirming the critical role of engineering in shaping communities and building a better society, an enduring mission that DUT continues to advance with pride.

Mr Vawda from the school of Civil Engineering joined in DUT in 1983 following a career path as a consulting structural engineer and continued this avenue in the structures division at DUT, up to the period 2023 before retirement. In speaking to Mr Vawda on his passion for technology and structures, we sipped cold tea as we took a walk down memory lane together reminiscing over nostalgic moments on the first use of computers and the excitement around punch-cards for programming simple commands and lines of codes to floppy disks and then spectra video with tape recorder. Mr Vawda went on to express his great love for facilitating structural engineering education using a combination of hand calculations, qualitative analysis, material design applications and the use of appropriate software with his students, all through the DUT platform and environment at campus.



Mr Y Vawda

Mr Vawda alluded to the fact that the university is a melting pot where the world meets to share ideas and build civilisation.

The school of Civil Engineering wish their peers mentioned above onward forward the very best and thank them for their contributions, commitment and the many years of success at DUT.

PREPARING FOR 2026 ACCREDITATION



Civil Engineering Department Shines in Academic and Operational Performance

The Civil Engineering Department underwent its Programme Review Evaluation (PRE) on 28-29 July 2025, ahead of the upcoming ECSA accreditation visit. Led by Professor Akinola Ikudayisi and a distinguished review panel, the process confirmed the department's strong academic and operational standing.

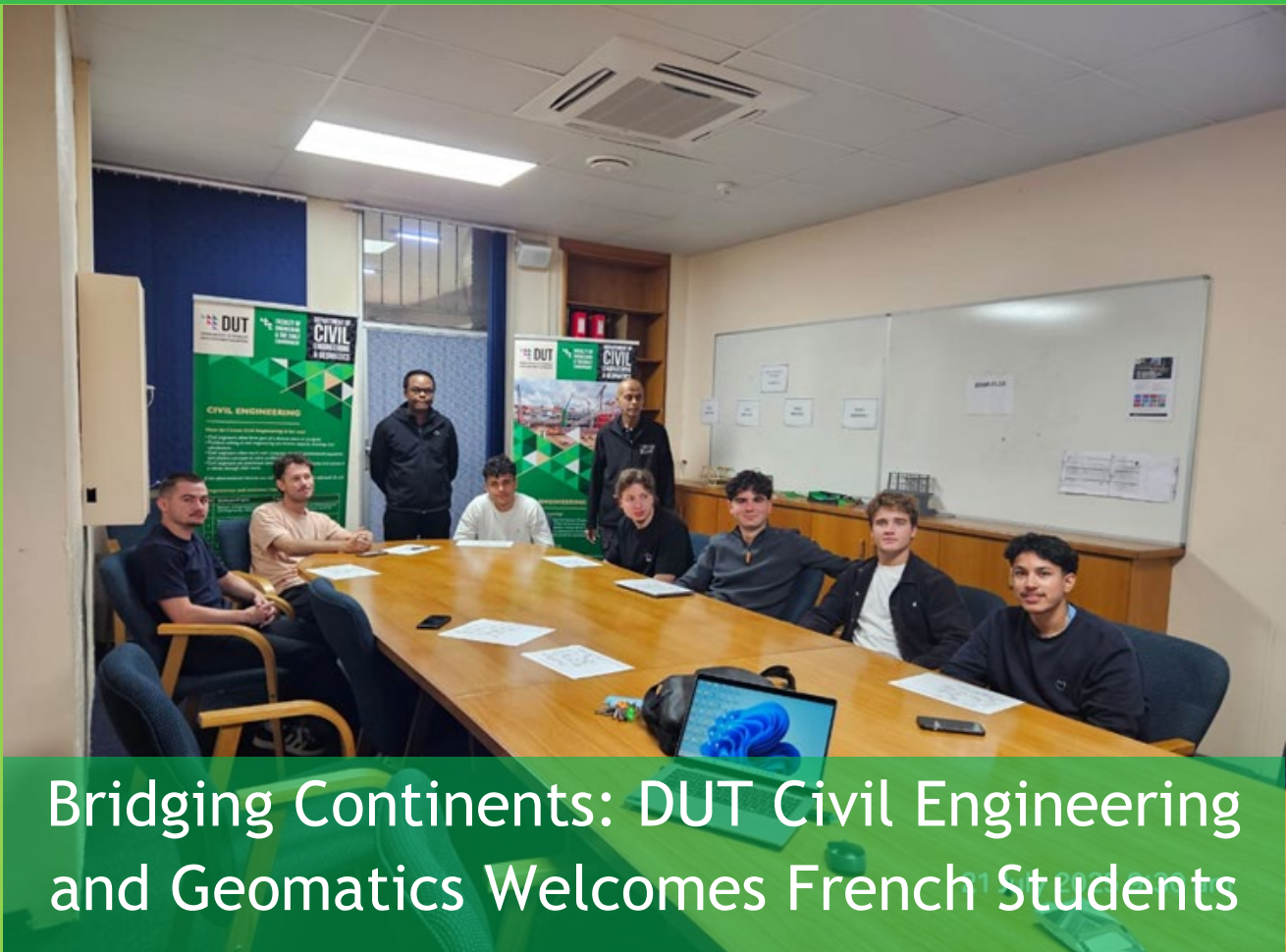
The recent programme review highlighted the strong academic and operational readiness of the Civil Engineering Department. Preparations were guided by the expertise of the Faculty Quality Promotion Officer, Mrs Khumalo, whose coordination ensured seamless organisation. The evaluation confirmed that the programme is well-structured, exceeds ECSA standards, and clearly develops proficient engineering technologists. Credit distribution effectively balances mathematics, sciences, and engineering design, while

site visits showed that laboratories, computer facilities, and the library are well-resourced and maintained. Interviews with staff and students reflected effective teaching, supportive learning materials, and successful use of Moodle for blended learning. Students praised the availability of textbooks, tutors and interactive lecturers, which enhances participation and attendance. Budget allocations were commended for sustaining modern teaching tools, software and equipment. Staff involvement in research and access to professional development further strengthen academic innovation. The PRE indicated that the department has successfully addressed one of the two concerns raised in the previous accreditation cycle, specifically that regarding the enhancement of graduate attribute assessment processes. The identification of coherent core content

aligned with graduate attribute descriptors, along with the logical progression of knowledge areas, was recognised as a commendable aspect. The department has shown preparedness to revise its qualification standards and associated documentation in advance of the primary accreditation, reflecting both adaptability and a robust potential for enhancement. The evaluation team acknowledged the cooperation, transparency, and support offered by staff during the process, highlighting a culture dedicated to quality assurance.

The findings provide a comprehensive overview of a department that demonstrates academic strength, operational readiness, and strategic positioning for success. The integration of a well-structured curriculum, sufficient resources, efficient teaching and learning practices, and a proactive approach to identifying areas for enhancement, demonstrates a programme that is strong in its present state while also being flexible to meet future needs.

ACADEMIC EXCHANGE PROGRAMME



Bridging Continents: DUT Civil Engineering and Geomatics Welcomes French Students

The Civil Engineering and Geomatics Department proudly welcomed a group of French students for Semester 2 of 2025, marking another step in the drive of the university toward global engagement. A formal orientation was hosted on 21 July 2025, led by staff members Goolam Hoosen, Riaz Suleman, and Bonga Khuzwayo, to prepare the students for both academic and cultural integration.

The academic orientation outlined course structures, registration, assessment timelines, grading, and academic integrity, while also introducing resources such as the library and online platforms. On the social side, students were encouraged to participate in departmental and campus activities to foster networks and community connections. The group brings diverse academic interests, with Julien Brault and Schmitz

pursuing modules in engineering mathematics, structural analysis, hydrology, design theory, and transport technology. Similarly, Pierrick Lesieur, Thibaut Ludon, Léo Van Speybroeck, and Alexis Mateus are enrolled in modules spanning structural, hydrological, and geotechnical engineering. First-year student Mohamad Houssen Moufadal is focusing on mathematics, physics, surveying, and foundational civil engineering courses. All modules form part of DUT's Bachelor of Engineering Technology programme, accredited by the Engineering

Council of South Africa and recognised internationally through accords such as the Sydney and Dublin Accords. This ensures the visiting students receive credits toward their home qualifications while experiencing a curriculum aligned with global standards.

This exchange reflects DUT Envision 2030's commitment to inclusivity, innovation, and global collaboration. By equipping students with academic excellence and cultural awareness, the university continues to strengthen its role as a hub for cross-cultural learning and industry-ready graduates.

STUDENT SKILLS AND PROFESSIONAL DEVELOPMENT

Students Bridge the Gap: A Real-World Learning Experience

On 11 October 2024, a group of 2nd and 3rd year Geomatics students from the Department of Civil Engineering and Geomatics embarked on a hands-on community project in Fawsley Park. Their mission: to address the recurring flooding of the Zombe stream, a tributary of the Umvoti River, which frequently isolates part of the community during heavy rains.

Equipped with surveying instruments and determination, the students carried out a detailed survey of the stream and its surroundings. They measured water flow and depth, assessed soil stability, mapped rock outcrops, and identified flood-prone areas. To better understand the struggles of the community, they also engaged with residents, gathering personal accounts of the impact of seasonal floods. The information they collected is now central to designing a bridge that will allow safe passage during

floods, a much-needed lifeline for the community. For the students, the project offered more than just technical training - it provided a holistic professional experience. From meeting with the "client," to planning, data collection, processing, and drafting, they gained a real taste of industry practice. "Experiencing the full job cycle was a real revelation," was shared by the class representative.

In addition to sharpening technical skills, the project built teamwork, communication, and problem-solving abilities. It also fostered empathy and social responsibility through direct interaction with the community.

This initiative not only empowered residents with hope for safer infrastructure but also gave students a transformative experience - preparing them as skilled, compassionate Geomatics professionals ready to make a meaningful impact.





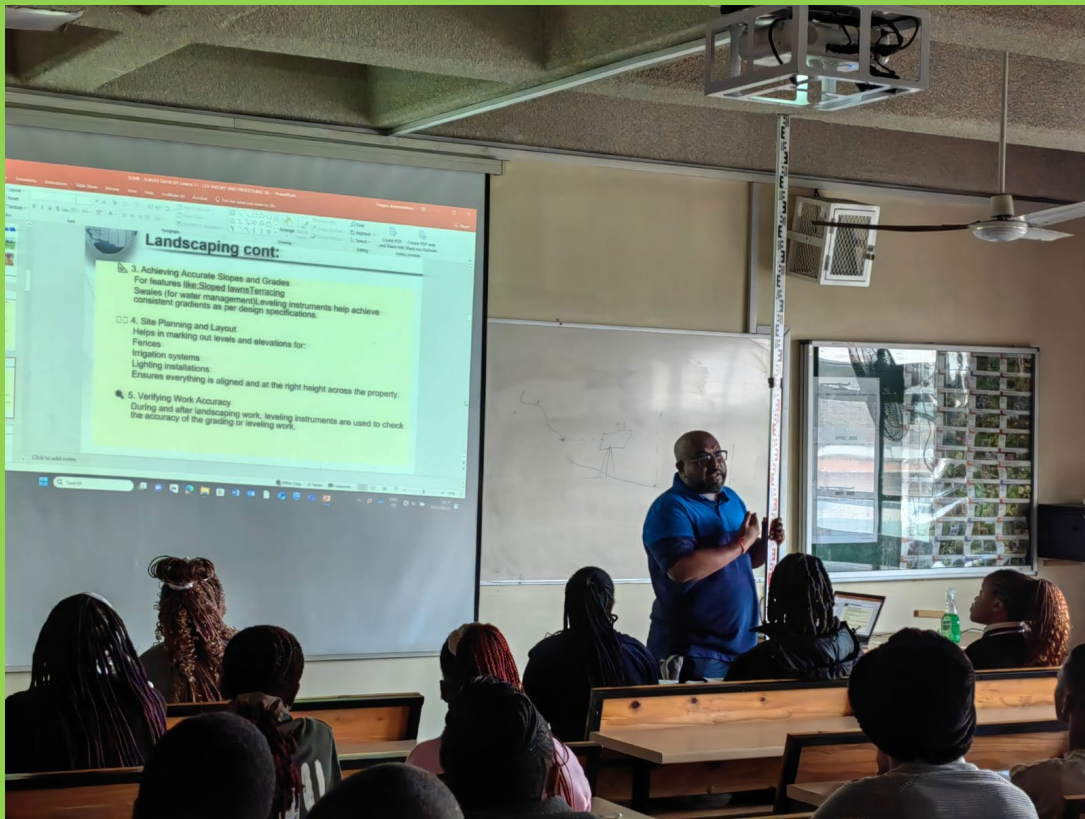
SAICE DUT Student Chapter Recruitment Day

Empowering Future Civil Engineers on March 27, 2025, the SAICE DUT Student Chapter hosted a successful Recruitment Day at the Civil Engineering Drawing lab. The event, which commenced at 13h00, aimed to introduce students to the benefits of joining SAICE and becoming part of a community of dedicated civil engineers. Amanda Khumalo, Chairperson of the SAICE DUT Student Chapter, welcomed attendees and introduced the committee. She also warmly welcomed the guest speaker, Shirvan from the SAICE Durban Branch committee. Sphehile Sithole, Vice Chair of the SAICE DUT Student Chapter, shared insights into the chapter's objectives and introduced SAICE membership benefits. Shirvan then took the stage, sharing his bio, experiences, and wishes for the industry. He emphasised the importance of professionalism making a tangible difference in society and upholding ethical standards.

Shirvan also highlighted the benefits of joining SAICE, including access to events and site visits, industry representation, and continuous professional development. Students were encouraged to take advantage of free student membership, ECSA fee reductions, and networking opportunities.

The event concluded with a question's session, where students won exciting gifts, including diaries, pens, and water bottles. Amanda Khumalo closed the event, thanking attendees for their participation and enthusiasm.

The SAICE DUT Student Chapter Recruitment Day was a resounding success, inspiring future civil engineers to join the SAICE community and embark on a journey of growth, learning, and professional development.



Taking Interdisciplinary Collaboration to the Next “Level”

The Civil Engineering and Geomatics Department recently collaborated with the Horticulture Department to host a practical lecture on the dumpy level, an essential yet often overlooked surveying tool. The session introduced horticulture and landscaping students to the principles and practice of accurate leveling, a skill fundamental to successful land management.

The lecture highlighted the crucial role of leveling in ensuring proper drainage, preparing ground for installations, achieving accurate slopes, site planning, and verifying construction accuracy. Students learned how improper grading can cause water pooling, erosion, or nutrient loss, while effective leveling ensures both structural integrity and healthy landscapes.

This initiative, spearheaded by Mr Thagen Anumanthoo, was praised for strengthening collaboration between departments. Students appreciated gaining practical skills that enhance their ability to plan and execute landscaping projects with

precision. The Civil Engineering and Geomatics Department looks forward to further interdisciplinary engagements that enrich learning and prepare students for professional success. The theoretical component covered the dumpy level’s parts, including the telescope, tripod, spirit level, and leveling staff, along with the principles of backsight and foresight readings. With this foundation, students then moved outdoors for a hands-on session, practicing setup, alignment, and measurement. While challenges such as tripod stability and staff alignment emerged, students quickly grew confident, experiencing “aha” moments as they mastered the instrument.

Beyond technical training, the session reinforced the lasting value of foundational skills. While modern tools like GPS and laser levels are widely used, the dumpy level remains cost-effective and educational, deepening students’ understanding of grading, elevation, and surveying principles.

DUT Innobiz Engagement at the Department of Civil Engineering and Geomatics

On 4 August 2025, the Department of Civil Engineering and Geomatics at the Steve Biko Campus hosted the DUT Innobiz Team, chaired by Khothatso Memela, in collaboration with departmental staff including Riaz Suleman, Bonga Khuzwayo, Salma Vahed, and Sanelisiwe Mdabe. The event attracted students from all levels, reflecting a growing interest in entrepreneurship and innovation within civil engineering and geomatics.

The engagement emphasised that today's engineers must go beyond technical expertise, cultivating creativity, problem-solving, and entrepreneurial thinking to address challenges in water, sanitation, infrastructure, and sustainability. Students were encouraged to see their academic modules as platforms for innovative solutions that advance the Sustainable Development Goals. Examples included projects linked to poverty alleviation, environmental stewardship, and community upliftment, resonating strongly with attendees.

Speakers highlighted the issue of how South Africa's cultural and natural heritage can inspire localised, sustainable development. They introduced the idea of "seeding projects" to stimulate jobs, economies, and tangible community benefits. Interactive discussions and quizzes deepened student understanding of entrepreneurship as not only profit-making but also creating value and lasting societal impact. Real-world cases, such as textile reuse to reduce landfill waste and sustainable sugar cane applications, showcased DUT students' entrepreneurial contributions.

The session concluded with a call for students to engage with the DUT Innobiz Centre, renowned for incubating successful start-ups and fostering innovation. This collaboration supports DUT's Envision 2030 strategy, preparing graduates who are adaptive, ethical, and globally competitive, while reinforcing the department's role in shaping innovators committed to sustainable development.

INDUSTRY ENGAGEMENT



The Future is Now: Geomatics at DUT Aligns with Industry Leaders

The Geomatics section at the Durban University of Technology (DUT) recently welcomed Leica Geosystems, a global leader in measurement and reality capture technology. The visit, led by the Regional Manager and South Africa's 3D scanning expert, marked an important step in aligning DUT's academic offering with industry trends.

The purpose was to review DUT's scanning infrastructure, identify improvements, and explore programme upgrades. Leica showcased their diverse range of cutting-edge solutions, from the compact BLK series for rapid capture to the robust ScanStation series for large-scale projects. These demonstrations highlighted the shift from traditional surveying to integrated, data-driven geomatics.

Discussions emphasised the potential for advanced research using high-density point clouds and visual data - opening opportunities in heritage preservation, archaeology, infrastructure monitoring, and environmental analysis.

The speed, accuracy, and efficiency of new scanners could significantly enhance research outputs and capacity.

A key outcome was the recognition that DUT's degree programme must evolve to produce graduates ready for today's workforce. The focus is on equipping students with hands-on experience in acquisition, processing, analysis, and visualisation - making them immediate assets in the workplace.

Looking ahead, Leica has committed to return for live demonstrations with students, offering practical exposure and direct interaction with industry experts. This collaboration bridges academia and industry, ensuring DUT students gain both knowledge and real-world skills.

The visit reaffirmed DUT's commitment to excellence, innovation, and producing graduates ready to lead in the rapidly advancing field of geomatics.

HOLISTIC STUDENT SUPPORT/ TEACHING AND LEARNING INITIATIVES

CELT Engagement with Civil Engineering and Geomatics - Durban Campus

On 4 August 2025, the Centre for Excellence in Teaching and Learning (CELT), represented by Ms Shubnam Rambharos, partnered with departmental staff to host Power Talks for Civil Engineering and Geomatics students at DUT's Durban Campus. Scheduled each semester, these sessions form part of CELT's commitment to holistic student development.

The talks addressed both academic and personal growth, drawing enthusiastic participation from students across all study levels. Key highlights included practical strategies for memorisation, time management, and access to mentoring programmes that provide continuous support throughout the academic year. Facilitators also connected the discussion to DUT's educational philosophy and the ENVISION 2030 Compass, which emphasises behavioural skills, adaptability, and critical thinking. Students were reminded that engineering and geomatics extend beyond technical expertise - they involve shaping communities

and contributing to sustainable environmental solutions. In addition, Ms Rambharos encouraged learners to take full advantage of university resources such as Moodle, Microsoft Teams, the Writing Centre, and the annual World of Work event, which bridges academic preparation with industry expectations. Upcoming developmental initiatives, including the new Mentor Advisor Programme and structured support lessons, were also announced.

A segment on growth mindset generated strong engagement, with students asking questions and sharing feedback, underscoring the value of fostering curiosity and resilience. The session concluded with gratitude from both staff and students, reaffirming CELT's vital role in student success and its mission to nurture adaptable, future-ready graduates prepared for the challenges and opportunities of the profession.

Bonga Khuzwayo (Interim HoD:
Civil Engineering and Geomatics)

Photo: 2025 UoT HoDs' Forum



Tom McKune (Head of Training,
SAICE)

Photo: 2025 UoT HoDs' Forum



SCHOOL OUTREACH

DUT Inspires Young Women in Engineering at Northlands Girls' High

On 31 July 2025, the Department of Civil Engineering and Geomatics at the Durban University of Technology (DUT) participated in the Northlands Girls' High School Career Expo Day, bringing energy, insight and encouragement to learners exploring their career options. Represented by Jairam Santosh, Xoliswa Feikie, Sanelisiwe Mdabe, Anele Zwane and Bonga Khuzwayo, the team showcased how careers in civil engineering and geomatics shape infrastructure, cities and communities.

The engagement formed part of DUT's mission to broaden access to higher education and inspire young women to enter impactful professions. Learners were introduced to two flagship qualifications: the Bachelor of Engineering Technology in Civil Engineering, preparing students for infrastructure design, structural engineering, and project management, and the Bachelor of the Built Environment in Geomatics, opening pathways

in mapping, spatial data analysis, and land surveying. Far from abstract academic options, these were presented as future-focused careers blending technical skill with creativity to solve real-world challenges. Learners engaged enthusiastically, asking about women's representation, differences between geomatics and geography, and admission requirements. The DUT team stressed the importance of mathematics, physical science, and English, while highlighting the breadth of civil engineering and the technology-driven nature of geomatics, which uses GPS, drones and GIS software.

Aligned with DUT's Envision 2030 framework, the visit strengthened ties with local schools and encouraged young women to see themselves as innovators and leaders. The Career Expo was more than information-sharing - it was a moment of inspiration, planting seeds for a sustainable, forward-looking future.



Civil Engineering Careers Promoted at Grade 9 Subject Selection Expo

On 30 July 2025, the Durban University of Technology's (DUT) Department of Civil Engineering and Geomatics proudly participated in the Grade 9 Subject Selection Expo at the Durban International Convention Centre. This annual event helps learners make informed subject choices that shape their academic and career paths. The department's involvement aligned with DUT's Envision 2030 strategy, which focuses on transformation, innovation, and academic excellence. By reaching schools and communities, DUT not only nurtures its academic legacy but also inspires the next generation to view themselves as agents of change. Reflecting on the event, the representatives highlighted the Expo as a powerful platform to spark curiosity and ignite interest in engineering and related careers. Representing the department, Goolam Hoosen and Keith Paul engaged directly with learners,

showcasing how civil engineering transforms lives and communities. They explained the vital role engineers play in developing infrastructure such as roads, bridges, water supply systems, and urban projects - essential contributions that drive economic growth and build sustainable societies. More than a career, they emphasised, engineering is a calling to improve quality of life.

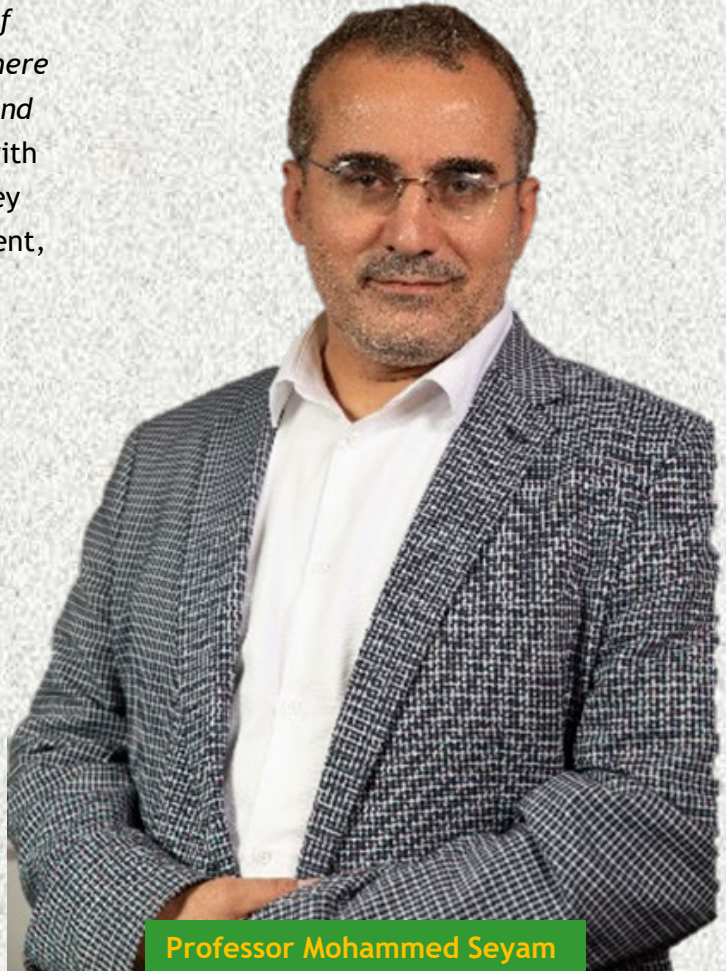
They stressed the point that the subject choices made in Grade 9 lay the foundation for meaningful professions - equipping learners with the skills to tackle real-world challenges in infrastructure, sustainability, and community development. Through initiatives like this, DUT continues to inspire young minds, linking higher education with community engagement to encourage learners to envision and build a brighter future for South Africa.

Looking a Year Back

CONVERSATION WITH PROF SEYAM

Professor Mohammed Seyam was promoted in 2024 from Doctor to Associate Professor. When he was interviewed to reflect on this milestone and his lifelong passion for water, he stated the following: *“Water is life. Promoting sustainable and equitable use of water is essential. I am proud to be part of DUT and the Water and Wastewater Institute, where groundbreaking research is shaping our country and beyond.”* He highlighted collaborative research with postgraduate and honours students, addressing key issues such as micro-plastics, wastewater treatment, and sustainable water management.

Professor Seyam expressed gratitude to DUT’s supportive platform and staff, acknowledging their role in making the University a hub of excellence and innovation.



Professor Mohammed Seyam



Site Visit conducted by TERSUS

The Department of Civil Engineering and Geomatics recently hosted TERSUS GNSS South Africa for an industry visit aimed at strengthening relations and showcasing the company's cutting-edge surveying solutions.

Led by CEO Mr John Kemp, who brings years of surveying and sales expertise, the TERSUS team introduced a suite of technologies designed to improve accuracy and productivity across multiple industries. Their portfolio includes: GNSS Total Stations, Aerial Photogrammetry, Mobile Scanning, GNSS Rovers, Permanent Base Solutions, Mobile Mapping, LiDAR drone payloads, and handheld mapping devices.

A highlight of the visit was the introduction of the NTRIP CORS network and the GEOBEE system, providing users with access to all available GNSS constellations. This innovation offers seamless correction services via UHF, 4G/5G, Wi-Fi, or solar-powered permanent bases.

Mr Kemp demonstrated the Oscar and Luka GNSS receivers and the Ruide RQS total stations, which impressed attendees with their lightweight, robust, and user-friendly design. Particular attention was given to the TERSUS David receiver, a compact, cost-effective GNSS solution suitable for UAVs, agriculture, and real-time RTK applications. With features such as 384-channel support, RTCM/CMR corrections, Bluetooth connectivity, and 20Hz raw measurement output, it provides powerful yet affordable functionality for diverse surveying needs.

The department expressed keen interest in establishing a permanent base station on the S-Block roof, which would create a reliable communication link benefiting not only DUT but the wider Geomatics community in Durban.

We thank Mr Kemp and his team for an insightful engagement and look forward to future collaborations.

Survey Student Society Annual Sports Day

The Survey Student Society hosted its much-anticipated annual Sports Day at Curries Fountain on 8 October 2024. Although the event began with unexpected showers and a delayed start, the enthusiasm of both students and staff never wavered. Songs, laughter, and informal conversations kept spirits high until the sun broke through, allowing the games to proceed.

The day offered a variety of activities. Netball matches saw the ladies display teamwork and agility, while the soccer field came alive with skilful play and passionate competition. For quieter but equally intense action, the chess tournament provided students the chance to test their strategy against none other than Mr Judo Saane,

recently retired Head of the Geomatics programme. True to tradition, he defended his undefeated streak, boldly promising to return in 2025 for “stiffer competition.” Despite many challengers, the “King of Chess” remained unbeaten. On a lighter note, Mr Rampursad and Mr Raghubar ended their matches winless, much to the amusement of students.

While tug-of-war, volleyball, and rugby were cancelled due to safety concerns, the event concluded with a hearty lunch generously supported by staff sponsors. The Sports Day successfully fostered camaraderie, resilience, and shared joy, making it a memorable highlight of the academic calendar.





SAICE DEPARTMENTAL VISIT

On 1 August 2024, the Department of Civil Engineering and Geomatics at DUT Durban Campus welcomed representatives from the South African Institution of Civil Engineering (SAICE), including 2024 President Mr Andrew Clothier. The visit brought together staff, students, and industry leaders to reflect on the critical role of civil engineering in shaping South Africa's future.

Addressing students from the Bachelor of Engineering Technology programme, Mr Clothier emphasised the link between infrastructure, economic growth and social upliftment. He highlighted the importance of social infrastructure in improving mobility, alleviating poverty, and enhancing quality of life. Civil engineers, he stressed, are central to building a prosperous and inclusive society. The President also drew attention to the SAICE Infrastructure Report Card, which assesses the state of South Africa's infrastructure on a five-point scale (A: world-class to E: unfit for purpose).

The country's most recent score of D+ reflects ongoing challenges. By comparison, during the 2010 World Cup period, South Africa achieved a grade of C-, demonstrating a decline linked to insufficient maintenance and budget allocation.

Despite these challenges, Mr Clothier commended progress since 1994 in expanding accessibility and quality of infrastructure, while urging students to play an active role in maintenance, upgrades, and innovation. The visit also included discussions with the HoD and lecturers on teaching and learning challenges such as ageing facilities, regulatory compliance, and limited budgets.

The day concluded with appreciation to Mr Clothier and the SAICE team for their invaluable insights and encouragement of the next generation of civil engineers.

A Real-World Learning Experience: Geomatics Project on Rif Road

In October 2024, Geomatics students at the Durban University of Technology took on a real-world survey project that mirrored professional practice. The scenario, inspired by a slipping bank on Rif Road requiring a retaining wall, gave students hands-on exposure to surveying, data analysis, and project management.

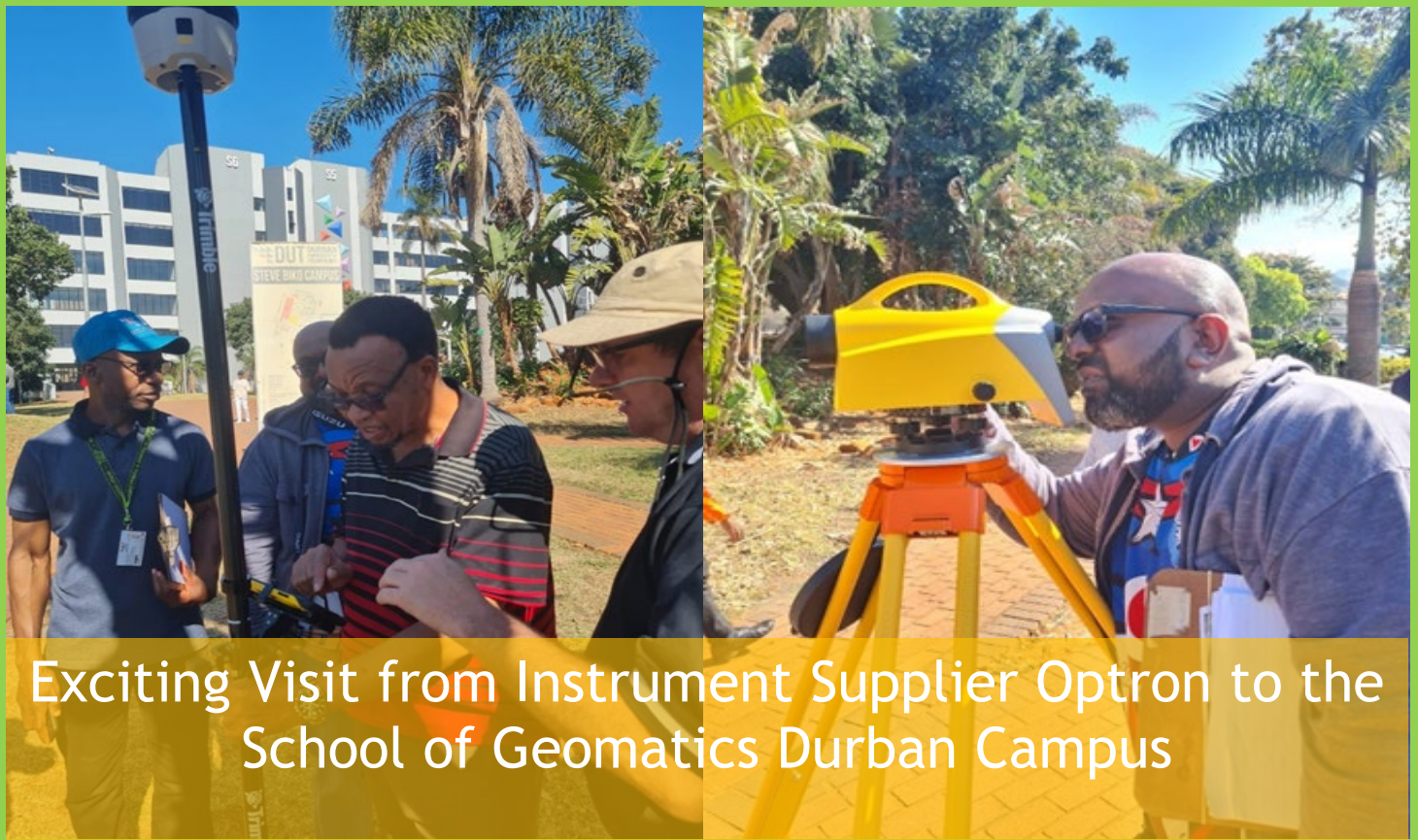
Following heavy rainfall, the steep bank posed a collapse risk. To address this, students conducted a comprehensive survey to guide the retaining wall design, ensure proper drainage, and confirm property boundaries. Under the supervision of Mr Rampursad, the project was structured to encourage independent problem-solving, with students tasked to plan and execute all stages of the survey.

On 4 October 2024, the class was divided into two teams. Team 1 used GPS to establish control points aligned with

the South African Coordinate System and relocated property pegs. Team 2 employed a Total Station to collect detailed topographic data on a local system, streamlining efficiency. Data from both teams was later integrated through coordinate transformation to create a precise, unified topographic plan.

The students overcame challenges, mastered complex techniques, and produced a professional-quality plan. Beyond technical skills, the project strengthened teamwork, ownership and critical thinking.

This initiative showcased the value of experiential learning, preparing students to confidently apply classroom theory to real-world challenges. The Rif Road project not only reinforced core surveying principles but also highlighted the role of Geomatics in addressing infrastructure and safety concerns in communities.



Exciting Visit from Instrument Supplier Optron to the School of Geomatics Durban Campus

On Friday, 16 August 2024, the Department of Civil Engineering and Geomatics at DUT Durban Campus welcomed Optron, a leading supplier of Trimble products. The visit created an excellent platform for staff to engage with the latest technologies shaping the field of Geomatics.

Renowned for their expertise and innovation, Optron offers integrated solutions that combine GPS, laser, optical, and inertial systems with advanced software and wireless communication. Their products are designed to deliver efficiency and adaptability across a range of surveying and engineering applications.

During the showcase, Optron presented a variety of instruments, including a newly acquired electronic level and a comprehensive GNSS solution. Staff gained first-hand insight into product features and applications, sparking valuable discussions on industry trends, sector

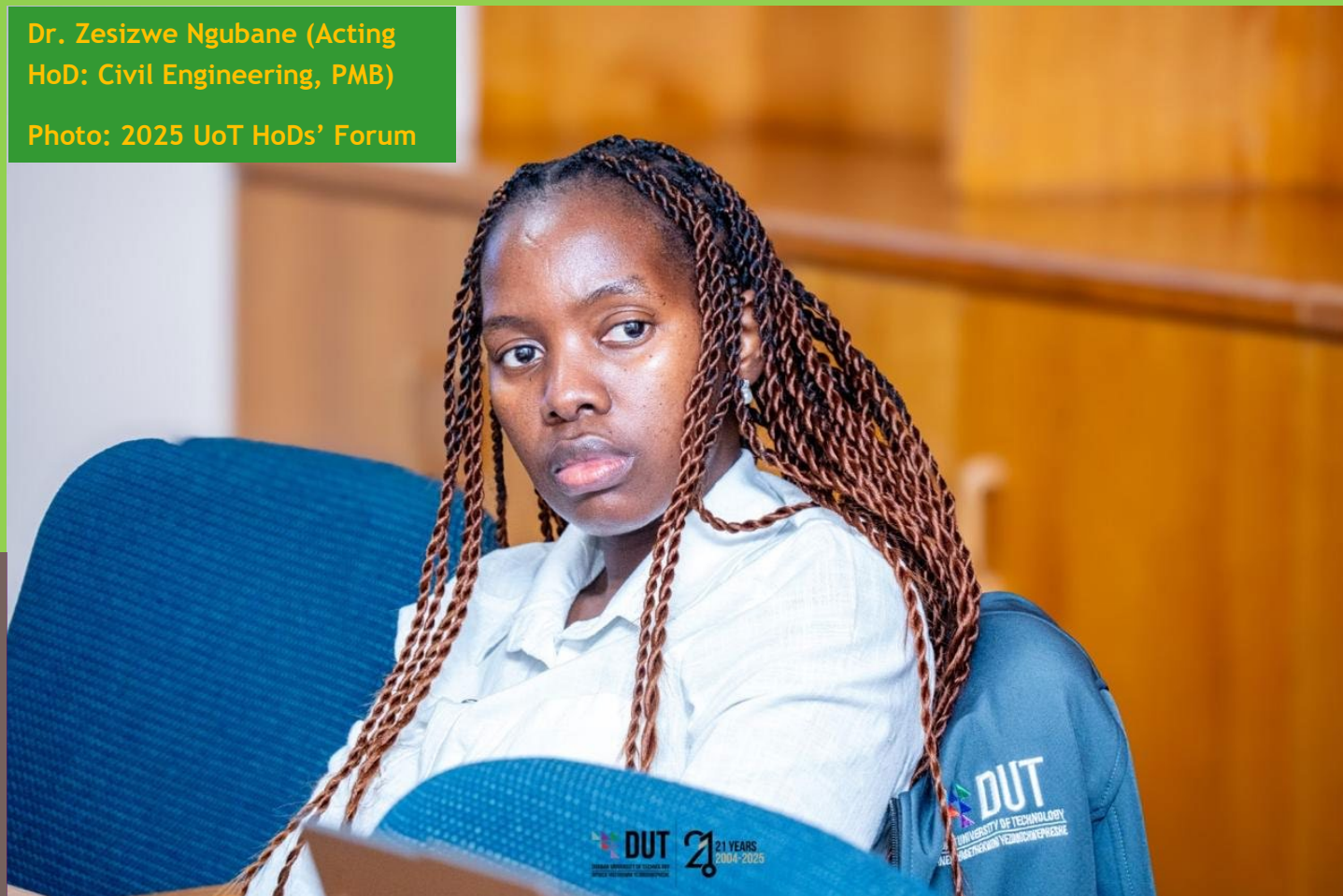
practices, and the tools graduates will encounter in their professional careers.

Beyond the technical exchange, the visit fostered collaboration, with opportunities identified to enhance student learning experiences and enrich course content. Informal interactions among Optron representatives, staff, and students also provided a welcome team-building dimension to the day.

The Department views this visit as a highlight of its 2024 calendar, with the potential to positively influence teaching methods and graduate employability. Incorporating Optron's technologies and expertise into the curriculum will not only strengthen academic offerings but also ensure DUT graduates remain well-prepared for the demands of the modern surveying industry.

Dr. Zesizwe Ngubane (Acting
HoD: Civil Engineering, PMB)

Photo: 2025 UoT HoDs' Forum



Ms Ashaadia Kamalie (HoD: Civil
Engineering and Geomatics, CPUT)

Photo: 2025 UoT HoDs' Forum



"Our creativity and innovation shapes adaptive graduates who transform society."

TRIBUTES: STUDENT



The Department and the wider community mourned the passing of NtandoyenkosimaYenziwe Mathaba, known to many simply as Yenziwe, a bright and dedicated student in the Department of Civil Engineering and Geomatics, Faculty of Engineering and the Built Environment. At the time of her passing, she had completed her Bachelor of Engineering Technology in Civil Engineering and was pursuing her Honours degree, a testament to her determination, discipline, and commitment to excellence.

Yenziwe is remembered as a spirited young woman, full of grace and purpose. Her dreams extended far beyond personal achievement; she aspired to build, contribute, and shape the very world around her. Her academic journey reflected not only intellectual strength but also an unwavering belief in the power of education as a pathway to purpose.

Central to her life was her deep faith. Those who knew her spoke of her steadfast relationship with God, which guided her actions and gave meaning to her ambitions. She lived intentionally, balancing education, discipline, and devotion in alignment with what she believed to be a higher calling. Her life embodied the hope instilled in young people: that with hard work, obedience, and faith, one could reach great heights.

Those who gathered to honour her life acknowledged the sacrifices she made in her pursuit of excellence, the long nights, missed family moments, and personal battles that often remain unseen. She had come far and the road ahead was full of promise.

Her passing left a profound void. The university lost an intelligent mind and a kind soul. Her peers and lecturers lost a shining light in their academic community. Most deeply affected, however, was her family, her parents, siblings, and loved ones, who knew her not just as a student, but as their pride, joy, and beloved daughter.

The Mathaba family's grief was shared by many, and messages of solidarity, love, and prayer poured in. Friends and colleagues committed to honouring her memory not merely through mourning, but by embodying the values she held dear, faith, perseverance, love, and light.

Though her journey ended too soon (2025), Yenziwe's impact will endure. She ran her race with courage and grace, and her spirit will continue to inspire. Her legacy is not built in steel or concrete, but in the hearts of those she touched.

Family notified and consented to the publication of the story.

TRIBUTES: LECTURER



Jenny began her career in Engineering Surveying in the 1980s, a time when it was unusual for women to be in the field. Through hard work, dedication, and skill, she established herself as a respected professional: later bringing that expertise into the classroom as a lecturer at ML Sultan, now known as Durban University of Technology (DUT).

Her passion for learning took her and her family to the United Arab Emirates in 2001, where she spent the ensuing 15 years furthering her studies and engaging in international work projects. During this time, she earned: a CELTA qualification from Cambridge University; a Master's degree in Applied Linguistics from the University of Southern Queensland, and a PGD and MSc in Geographic Information Science from the Manchester Metropolitan University.

By integrating her interests in GIS and linguistics, she worked on groundbreaking projects internationally. When Jenny returned to South Africa in the mid-2010s, she rejoined DUT as a lecturer in the Department of Civil Engineering and Geomatics where she quickly became known not only for her academic expertise but also for her spirit of generosity.

Jenny had a special way of supporting and motivating her students through both their studies and personal challenges, often becoming a motherly figure to them. Her colleagues remember her as hardworking, compassionate, and always willing to share her knowledge.

Jenny leaves (2024) behind a legacy of excellence and care at DUT, and her influence will continue to be felt by all who had the privilege of learning from her and working with her.

Family notified and consented to the publication of the story.

Honoring Excellence: 2024 High Achievers Student Awards



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