

FACULTY NEWSLETTER

ENGINEERING & THE BUILT ENVIRONMENT

MESSAGE FROM THE DEAN



We have come to the end of another challenging, yet rewarding, academic year. I want to thank all staff for their continuous hard work and dedication throughout the year. This year, we have seen a number of leadership changes. We welcomed four new Deputy Deans: Prof Jochen Petersen, A/Prof Malibongwe Manono, and A/Prof Corrinne Shaw, who began their terms this year, while Prof Paul Barendse will begin his tenure on 1 January 2025.

We also welcomed four new Heads of Departments: Prof Azeem Khan, Prof Niyi Isafiade, and A/Prof Alta Steenkamp, who started their terms this year. Prof Tunde Bello-Ochende has also been recently appointed as the new HOD for Mechanical Engineering, with his term running from 1 January 2025 to 31 December 2029.

A big thank you to all the EBE Committees and Working Groups who have worked tirelessly to ensure that the faculty operates efficiently and maintains its focus on core business activities.

Two other major highlights this year were Professor Brandon Collier-Reed winning the UCT Distinguished Teacher Award and the official launch of the faculty's Vision 2050, which focuses on the future goals of EBE. A special thank you goes to the EBE Future Dreamers Group, who conceptualised this vision.

I wish you all a restful and peaceful break over the festive season.

HEAD OF DEPARTMENT UPDATE



Prof Tunde Bello-Ochende has been appointed as the new Head of Department for Mechanical Engineering, effective 1 January 2025 to 31 December 2029. He takes over the headship from Prof Brandon Collier-Reed who has recently been appointed as UCT's Deputy Vice-Chancellor for Teaching and Learning, effective 1 January 2025.

Prof Bello-Ochende has previously served as Undergraduate Programme Convener and Deputy Head of Department (Research) in Mechanical Engineering. The faculty wishes Prof Bello-Ochende all the best in his new role and looks forward to his contributions.

FACULTY RETIREES

This year, we bid farewell to nine staff members who are retiring. They have made significant contributions to the faculty, and we are deeply grateful for all they have done. We wish them the very best in their future endeavours.



Mr Martin Harris
(Chemical Engineering)



Ms Heather Sundström
(Chemical Engineering)



Dr Renee Smit
(Electrical Engineering)



Ms Naomi Gihwala
(Architecture, Planning and Geomatics)

FACULTY RETIREES



Ms Shireen Govender
(Chemical Engineering)



Mr George Du Plessis
(Mechanical Engineering)



Dr Nien-Tsu Tuan
(Construction Economics and Management)



Ms Gita Valodia
(Dean's Office)



Ms Rosalind Maree
(Mechanical Engineering)

STAFF WELCOME

- **Shakeelah Lottering** joins the School of Architecture, Planning and Geomatics as Postgraduate administrative assistant.

STAFF FAREWELLS

- **Ms Lerato Motsepe** will be leaving the Department of Chemical Engineering in December.
- **Dr Thanos Kotsiopoulos** will be leaving the Centre for Bioprocess in Engineering Research (CeBER) in December.

AWARDS AND HONOURS

Prof Alison Lewis elected as a Fellow of The World Academy of Sciences



Congratulations to Prof Alison Lewis for being elected as a Fellow of The World Academy of Sciences (TWAS) for the advancement of science in developing countries, effective 1 January 2025.

Her election to TWAS is a clear recognition of her outstanding contribution to science and its promotion in the developing world.

TWAS, supports sustainable prosperity through research, education, policy and diplomacy. The Academy is based in Trieste, Italy. The organisation was founded in 1983 by a distinguished group of scientists from the developing world, under the leadership of Abdus Salam, the Pakistani physicist and Nobel laureate.

UCT brewing team triumphs at national intervarsity competition



The South African Intersarsity Brewing Challenge is an annual showcase of brewing talent from universities across South Africa. It has grown from six participating universities at its inception to 18 this year.

Established in 2006, the team has its home in the Department of Chemical Engineering but has members from various departments and operates under the guidance of the Centre for Bioprocess Engineering Research (CeBER). UCT was one of the six universities that first competed in the competition, and to date has won the overall “Best of Show” category seven times, with the last three wins happening consecutively. [Read more.](#)

IN THE NEWS



Building an environmentally sustainable campus – together

Building an environmentally sustainable campus with students and staff who are eco-conscious is high on the University of Cape Town's (UCT) list of priorities.

Getting the community to reflect and understand what it takes to build a sustainable campus is a hefty task and research groups are doing their bit – developing unique projects and positioning them in public spaces for all to see and to encourage some out-of-the-box thinking.

[Read more](#)



Innovative teaching celebrated and honoured at UCT

With award-winning teaching styles that attest to the power of innovation, creativity and inclusivity in academia, Professor Brandon Collier-Reed, the head of Mechanical Engineering Department; and Dr Bianca Tame, a lecturer in the Department of Sociology, were named as two of four winners of UCT's Distinguished Teacher Award 2023.

These two exemplary teachers, who transformed their lectures into spaces that nurture critical thinking, practical skills and deep student engagement, may come from two totally different disciplines, but both put their students at the centre. [Read more](#)



UCT Day: Building a spirit of generosity

The University of Cape Town's Cricket Oval, situated on middle campus, was full of activity on Friday, 25 October, as the second iteration of UCT Day was marked off the calendar – in aid of the Unlocking Futures Bursary and the Food Sovereignty Programme.

There were multiple events leading up to the day, including a benefit concert and a phonathon, while on the day, people could take part in archery, bubble football, an amazing race challenge, attend a film festival and so much more. [Read more](#)

FACULTY NEWS

Poor service delivery, aging infrastructure under the spotlight at UCT's first National Infrastructure Hackathon

The Department of Civil Engineering hosted the first National Infrastructure Hackathon under the theme "Constructing Tomorrow: Public Infrastructure Policy Dialogue & Research Excellence". The event attracted executives from infrastructure government departments, academic staff, final-year civil engineering students, postgrad students and industry professionals.

The event was conceptualised as a platform for industry leaders and academics to compare notes and realign the research agenda. In his address, UCT acting Deputy Vice-Chancellor for Research and Internationalisation, Professor Jeff Murugan, stressed the need for evidence-based solutions to public infrastructure challenges facing South Africa, Africa and the world.

The hackathon started with infrastructure executives from state institutions presenting their major challenges. Academics also presented research projects that solve future challenges such as water scarcity. Between the executives and academics, there was an opportunity for professional bodies such as the South African Institute of Civil Engineers (SAICE) and the Institute of Municipal Engineers of South Africa (IMESA) to reflect on the challenges the public sector representatives presented.



Pictured here is Mr. Gundo Maswime, lecturer in Civil Engineering, with final-year students who participated at the event.

To have your news featured in our EBE Newsletter, please send it through to
Justin.Marthinus@uct.ac.za

FACULTY EVENTS

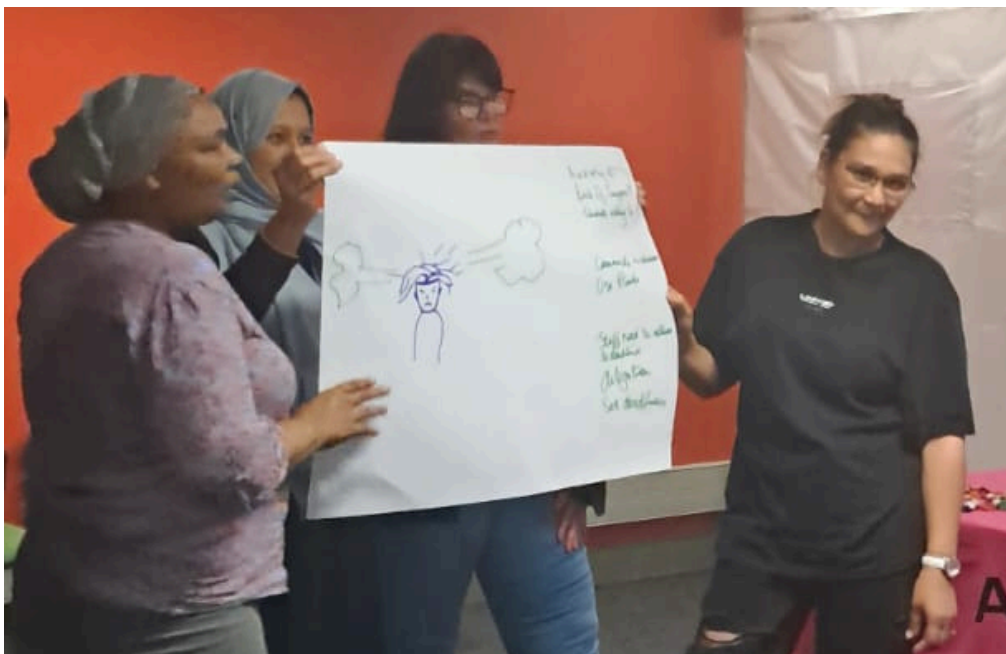
EBE Academic Long Service Awards



The faculty hosted its second annual Academic Long Service Awards event, honouring and acknowledging long-serving academics for their dedication to the faculty over the years. Colleagues who reached 5, 10, 15, 20, 25, 30, 35, or 40 years of service in 2024 were recognised.

EBE Transformation Committee Wellness Day

The EBE Transformation Committee hosted a Wellness Day for all faculty staff at the end of November to unwind with a free neck and shoulder massage. A support coach also conducted a workshop to equip staff with tools and tips for managing year-end stresses.



STUDENT NEWS

Civil Engineering's Chazz Seegers wins the prestigious Barry van Wyk Award



Chazz Seegers, from the Department of Civil Engineering, was awarded the prestigious Barry van Wyk Award for 2023 by the South African Institution of Civil Engineering (SAICE) Geotechnical Division at the Geotechnical Division Annual General Meeting & Awards Function on 6 November 2024. This award is presented annually to the author of the best final-year undergraduate dissertation on a geotechnical topic from a South African university. Chazz Seegers' research project, supervised by Prof Denis Kalumba, was recognised for its exceptional quality. "It's an honour to have supervised Chazz's project and to see his commitment to excellence recognised at such a high level. This award is a testament to his hard work and our commitment to quality education," said Prof Kalumba.

Since completing his BSc in Civil Engineering with First Class Honours last year, Chazz has embarked on his professional journey with Zutari, a leading engineering consultancy.

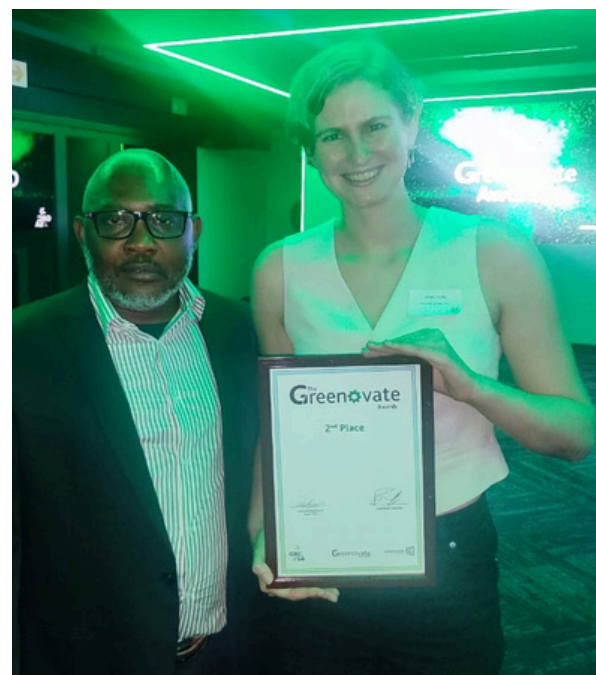
This accolade marks the fourth time an undergraduate dissertation under Prof Kalumba's supervision has won the Barry van Wyk Award in the student's year of graduation.

EBE Students Shine Bright at the 2024 Greenovate Awards

The 2024 Greenovate Awards have once again highlighted the remarkable innovation of South African university students in developing sustainable solutions for the built environment.

At this year's competition, EBE students won several awards in both the engineering and property categories. In the Engineering category, Jacqui Hulley, a 4th-year Mechanical Engineering student, placed 2nd for her project entitled '*Thermal Design and Analysis of Termite-Mound-Inspired Energy-Saving Buildings*'.

In the Property category, Oratile Masia and Mihlali Solombela were awarded joint 3rd place alongside Paige Waberski and Kiah Wallace (all BScHons in Property Studies students).



Jacqui Hulley and Prof Tunde Bello-Ochende at the awards ceremony.

STUDENT NEWS

Electrical Engineering Students Lead the Way at the 2024 CHPC National Conference



Pictured here are some of the winners across the various categories, with Dr Daniel Ramotsoela from the Department of Electrical Engineering.

At the 2024 Centre for High Performance Computing (CHPC) National Conference, the team of Electrical Engineering students beat several other senior university students, including postgraduates, to win multiple prizes at the SANReN Cybersecurity Challenge.

Highlights include:

- 1) Gcinwayinkosi Jula, won a merit scholarship that contributes towards his study fees.
- 2) Shaun Beautelement, won a paid cyber security internship for being the student with the best “hacker mindset”.
- 3) Team UCT won the attack and defend challenge.
- 4) Team UCT placed 2nd overall in the competition.

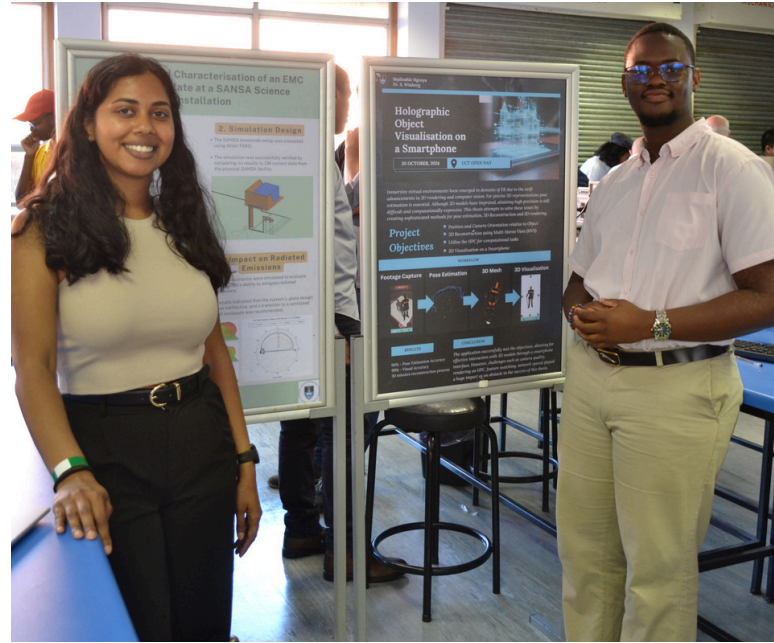
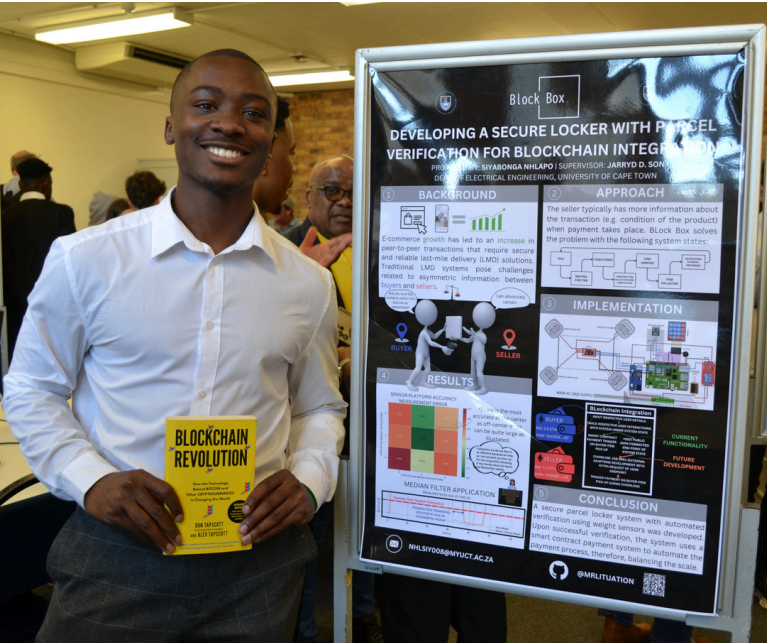
The students participating in the CHPC Student Cluster Competition also won the Judges Honorable Mention Award. This award was presented to them for making a strong impression on all the judges and for being the first-ever all-women’s team in the competition’s history. The team also advocated for women in STEM throughout the competition process.

Anna Lukose was selected as a reserve to represent South Africa in the international round of the competition. She will be traveling to Texas next year for training at the Dell headquarters.

STUDENT NEWS

Electrical Engineering Final Year Presentation Day

At the Electrical Engineering Final Year Presentation Day in October, Aimee Simons, Holly Lewis, and Nicola Watt were selected as the top three oral presenters in the Electrical Engineering, Mechatronic Engineering, and Electrical and Computer Engineering programmes, respectively.



STUDENT NEWS

Mechanical and Mechatronic Engineering students excel in the Lufthansa Technik InnovAero competition



In September, a group of six Mechanical Engineering (MEC) and Mechanical and Mechatronic Engineering (MMT) students entered the Lufthansa Technik InnovAero competition under the supervision of Mr James Hepworth.

The student group consists of:

- **Paurav Vaidya**, MMT final year student
- **Sam Schlesinger**, MMT final year student
- **Rivoo Bagchi**, MMT final year student
- **Liam Goodfellow**, MEC final year student
- **Trent Holm**, MMT final year student
- **Abhinav Iyer**, MMT 3rd year student

The student group's project placed in the Top 10 globally, and they have been invited to attend and compete in the final round of the competition in Hamburg, Germany, from 11-13 December 2024.

The Lufthansa Technik InnovAero international competition is open to engineering students worldwide to submit a 15-page report on a proposed innovative solution to the problem of vapour-trail formation by wide-body aircraft; an established cause of global warming from the aviation industry.

Seasons Greetings

