### Dazzling citizens celebrated for selfless acts in Nelson Mandela Bay



After selflessly showing up to support Nelson Mandela Bay's residents, some of the metro's unsung heroes finally received a fitting tribute for their service and were celebrated during a glitzy gala event on Friday night.

Dressed in dazzling evening gowns and dapper suits, The Herald NMU Citizens of the Year winners took centrestage at the Sun Boardwalk Hotel conference centre to receive their awards and recognition for their unwavering commitment to the communities they serve.

Speaking at the event SPAR senior purchasing manager for the Eastern Cape, Alan Stapleton, said the winners across nine different categories were angels that shone their light for others.

"Those that we recognise make folk, less fortunate than us, smile for even a little while.

"They make a difference in our communities and we celebrate these homegrown heroes," Stapleton said.

Now in its 32nd year, The Herald NMU Citizens of the Year pays homage to people who selflessly give the time, resources and energy to serve others.

Co-sponsored by Nelson Mandela University (NMU), along with support sponsors SPAR, Continental Tyres, Vodacom and Three Peaks wines, the annual event is a highlight on The Herald's social calendar and exemplifies what it means to be a local hero.

"An event like this gives us reason to believe that there is good out there [and] that we are stronger together," Stapleton said.

NMU deputy vice-chancellor of engagement and transformation, professor Andre Keet, said it was an immense honour to be part of the

"This is a moment not only to recognise the award winners but what constitutes a hero and the work they do.

"It is a demonstration of how individuals tackle societal challenges

[and] what we can achieve if we work together.

"It has really inspired us as an institution of higher learning," Keet said.

The Herald and Weekend Post editor, Rochelle De Kock, said the winners of the awards showed profound commitment to their communities and society at large.

"This is not a passive role but an ongoing commitment for a brighter and more inclusive society for everyone.

"It takes a good citizen to make a change in their communities," De

From 50 nominations submitted by the general public, judges had the tough task of whittling down the worthy competitors and select the nine award recipients.

The judging panel included Andrew Muir, CEO of the Wilderness Foundation and former president of the NMB Business Chamber, Chantal Janneker, senior director: marketing at NMU, Roseann Shadrach, advertising manager at SPAR Eastern Cape, Rochelle de Kock, editor of The Herald and Weekend Post, Zodwa Dube, PE Mental Health board member and Michael Barry, former head arts and culture, Nelson Mandela University.

The nine winners included: Kirsten Neuschafer (Sport), ISUZU Motors SA (Business), Madoda Ndlakuse (Education), Prof Albert Troskie (Arts, culture and heritage), Motherwell Community and Enviro Hub (Sustainability in environment), Asonele Melapi (Gender-based violence), Mzukisi Toba (Community), Portia Marinana (Health and safety), Khazimla Adam (Civil society)

For the second year, the prestigious Sister Ethel Award was presented. This time, the award went to Jenny Rump of the Zwartkops Conservancy for her exemplary work in environmental conservation in the Bay.

The award is in honour of Sister Ethel Normoyle who was the first Citizen of the Year winner in 1989.

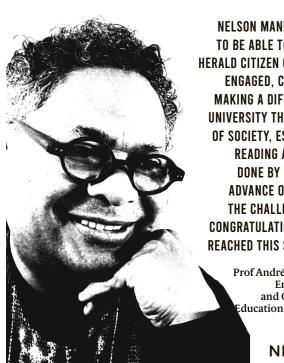












NELSON MANDELA UNIVERSITY IS PLEASED TO BE ABLE TO CONTINUE SUPPORTING THE HERALD CITIZEN OF THE YEAR IN RECOGNISING **ENGAGED, COMMUNITY-MINDED CITIZENS** MAKING A DIFFERENCE IN THE METRO. AS A UNIVERSITY THAT STRIVES TO BE IN SERVICE OF SOCIETY, ESPECIALLY AT A LOCAL LEVEL, READING ABOUT THE INNOVATIVE WORK DONE BY THE FINALISTS PUSHES US TO ADVANCE OUR OWN RESPONSIVENESS TO THE CHALLENGES OF OUR COMMUNITIES. CONGRATULATIONS TO ALL THOSE WHO HAVE REACHED THIS STAGE! IT IS WELL DESERVED.

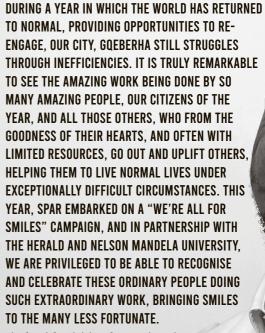
> Prof André Keet, Deputy Vice-Chancellor: **Engagement and Transformation** and Chair: Critical Studies in Higher ducation Transformation (pictured left).

> > NELS●N M▲NDELA

CONGRATULATIONS TO ALL THE CITIZEN OF THE YEAR AWARD WINNERS FROM THE HERALD AND GREATER ARENA HOLDING FAMILY! YOUR ACHIEVEMENTS ARE REMARKABLE, AND WE THANK YOU FOR YOUR CONTRIBUTION TO MAKING OUR COMMUNITY STRONGER. WHILE YOU HAVE NOT SOUGHT THE SPOTLIGHT FOR WHAT YOU HAVE DONE, WE HOPE THAT THE PLATFORM THIS INITIATIVE GIVES TO YOUR ACHIEVEMENTS WILL BE AN ENABLER PROPELLING YOU TO EVEN GREATER HEIGHTS - AND THAT IT WILL INSPIRE OTHERS TO MAKE A DIFFERENCE IN THE SAME WAY THAT YOU HAVE.

Ryan Megaw, Regional General Manager, The Herald and Weekend Post (pictured

#### The Herald



Siyolo Dick, Divisional Managing Director: SPAR Eastern Cape (pictured right).



#### **Teaching students learn** how to grow their own food

Nelson Mandela University Foundation Phase Education students are getting their hands dirty by tackling hunger in an innovative food gardening project. In the process, the 180 students are learning that education is far more than textbooks and classrooms. Nelson Mandela University BEd Foundation Phase specialist Koketso

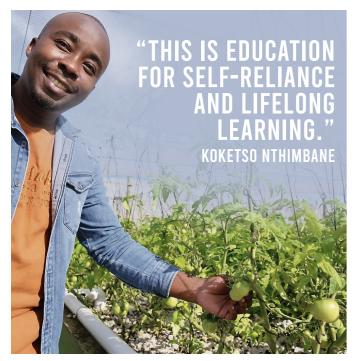
Nthimbane is spearheading the new project. Through it, the Faculty of Education aims to equip its students with the basic skills of creating small food gardens using recyclable

Working in groups, the students explore food security in South Africa and how this affects educational provisioning in primary schools, universities, and society in the Nelson Mandela Bay community at large. "This is agriculture on a shoestring," says Nthimbane. "The main aim for this year [2023] is not to donate, but to harvest.

"In our second year, there will be a bigger plot of land, and if there is a surplus, we will donate to others in the community.'

"The project will be longitudinal as, every year, we will add different aspects," says Nthimbane.

"They are now learning the first aspects. For example, they've learnt that crops grow at a certain time, and need certain resources. "One day when they are in a school, they will be able to start food



 $Koketso\ Nthimbane\ is\ introducing\ students\ to\ aquaponics\ on$ Missionvale Campus

Nthimbane says although the students did not have land to start the project on Missionvale Campus this year, where the Foundation Phase is based, they used the existing aquaponics infrastructure on this campus. They have now secured a fallow plot on the University's North Campus.

He said the water-based aquaponics system was ideal for growing leafy vegetables that include to matoes, peppers and spinach, while  $\,$ the newly secured land on North Campus in Summerstrand will be better suited for root vegetables such as carrots and potatoes. In the meantime the students have actively been planting seedlings in soil in old tin cans, black plastic bags and other items seen as

Although food insecurity is the primary problem tackled by the project, he says its overall scope was a combination of agriculture and business, promoting holistic development.

"Under the overarching theme of 'education for self-reliance', we envisage that at the end of the project our students will be agents of

"Ultimately they will use this knowledge and skills when they begin teaching in schools across the country.'



eNtsa engineering director Andrew Young, left, and eNtsa group specialist Hubert van der Merwe test the glider in the pool

## Marine glider can help tackle pollution

"PLASTIC AND MARINE POLLUTION DONNIE ERASMUS

A team from eNtsa in the Faculty of Engineering, the Built Environment and Technology has designed and built a remote-controlled marine glider to provide a research platform that can gather data to a depth of 200m below the surface. The glider will gather information that can be used in the longer term to fight against ocean pollution.

Project leader Donnie Erasmus and team members Akshav Lakhani, Elbert Liebenberg, Hubert van der Merwe and Keegan Kroutz have been funded by merSETA in the project initiated by the University's Advanced Mechatronic Technology Centre (AMTC). The result of their work is a remote-controlled marine glider capable of carrying a sensor payload that can gather data on the state of the ocean. They hope the glider will collect information to help researchers monitor ocean activities and influence legislation with scientific evidence.

The glider is a buoyancy-controlled autonomous underwater vehicle capable of carrying a payload of sensors. These sensors measure parameters such as conductivity (salinity), temperature and pressure (depth), all of which assist in monitoring the state of the ocean. Erasmus explains the rationale behind the research. "South Africa has a coastline of approximately 3 000km long,

flanked by the warm Mozambique current on the eastern seaboard and the cold Benguela current on the west," he says. It is one of the major trade lanes in the world, with many vessels travelling around the southern tip of Africa.

"South Africa has an exceptionally rich marine environment which supports a large fishing industry and this, coupled with the trade lane, means there is a heightened risk of marine pollution. "Plastic and marine pollution in turn lead to increasing acidification of the ocean, and this needs to be measured."

It is therefore vital that parameters such as ocean temperature, pressure and salinity are monitored. This will enable scientists to track changes and put corrective legislation in place.

The project supports the work of the South African International Maritime Institute (SAIMI) and the South African Institute for Aquatic Biodiversity (SAIAB). It also contributes to United Nations Sustainable Development Goal 14: Life below water, which aims to conserve and sustainably use ocean, sea and marine resources. This aligns with Nelson Mandela University's strategic trajectory of ocean sciences, as outlined in Vision 2030.

#### Marketing ancient grains to fight hunger

The sad sight of his fellow Zimbabweans in long queues for bags of mielie meal over the COVID-19 pandemic inspired the PhD research of Nelson Mandela University marketing student Arnold Moyo. There and then he started to ponder why, when there were traditional African grains available, people were hungry for the less nutritious bags of mielie meal.

His doctoral thesis is looking at factors affecting consumer purchase intentions towards traditional grains in Zimbabwe, specifically the small grain foods of sorghum, millet and finger millet, also known as rapoko. "Things were bad, there was a drought in Zimbabwe and a shortage of mielie meal," he recollects.

"That gave me the idea to look at how we could leverage traditional small grain foods to provide food security for the people of sub-Saharan Africa - and that gave birth to my PhD.

Working under the supervision of professors Felix Amoah and Marlé van Eyk of the Department of Marketing Management, Moyo then expanded his research to the entire continent. Prof Amoah says the scoping review for the study, published in the highly regarded international academic journal, "Cogent Business and Management" in May 2023, enhanced Nelson Mandela University's reputation on the global stage. It also attested to the quality of the work and its relevance. The review showed there had been little research on increasing consumer demand for small grains.

"The anticipated outcome of the research is the creation of a model - comprehensive and relevant to Africa - that explains and predicts consumer intentions to purchase traditional small grain foods," says Prof Amoah. "Furthermore, the broader field of consumer behaviour literature will benefit from the development of a new model and measurement tools for food preference research.

"The model will be relevant to farmers, consumers and marketing practitioners, to improve production, purchase and consumption of traditional small grain foods not only in Zimbabwe but in sub-Saharan African countries.'

More than a third of Africa's population is under nourished, and one in five faced hunger in 2020. Moyo found that current researchers often had focused on grain availability, or qualities such as taste, texture and

"However, science has proven that it's not just about the product. You can make the product available but, is it acceptable to the person who is going to consume it?

"Instead of looking at the supply side, let's start from the side of the consumer so that we stimulate demand." Moyo sees this as a more sustainable approach.

'Once we understand what happens in the mind of the consumer, then as marketers we can come up with interventions.

"There is a scarcity of studies on consumer behaviour towards traditional foods in Africa, which creates an opportunity for us to promote research in this area and, better still, to provide leadership." There are also environmental sustainability issues, as these traditional grains do not require irrigation. They are considered climate smart foods because of their resilience to hostile environments, making them a suitable crop for an arid region. "Maize is very susceptible to pests and these are not, and yet they are healthier and more nutritious than mielie-meal," says Moyo.







**Prof Felix Amoah** 

"THERE IS A SCARCITY OF STUDIES ON CONSUMER **BEHAVIOUR TOWARDS** TRADITIONAL FOODS IN AFRICA, WHICH CREATES AN OPPORTUNITY FOR US TO PROMOTE RESEARCH IN THIS AREA AND, BETTER STILL, TO PROVIDE LEADERSHIP."

Arnold Moyo

## Multi-purpose octocopter shows the power of drone technology

The MandelaUni Autonomous Operations (MAO) group is developing a multi-purpose octocopter drone that can be used as an agricultural crop-sprayer.

In 2022, Nelson Mandela University was the first South African university to be awarded a drone licence. Students can learn specialised skills in a technical environment that supports the niche market of autonomous vehicle operations.

Mechanical Engineering Master's graduate Kabelo Mpurwana has been working on the heavy-lift research platform and says that, literally, the sky is the limit.

"There's still so much more we can do with drones and aerial robotics."

"This octocopter will essentially be the lab workhorse, a platform that we can adapt for various projects.

"We needed a stable and versatile drone platform to support our research and testing with various payloads and sensory equipment."

"After careful consideration, we opted to develop our own octocopter configuration with eight motors for its redundancy [if one motor fails, the octocopter will still fly] and high payload capacity."

Developing their own airframe has helped MAO to keep the development cost down. It also means that the team can more easily make future configuration changes and modifications.

"The drone's first research project involves determining the

feasibility of creating a drone that can match the functionality and performance of leading crop spraying drones at a significantly lower cost," says Mpurwana.

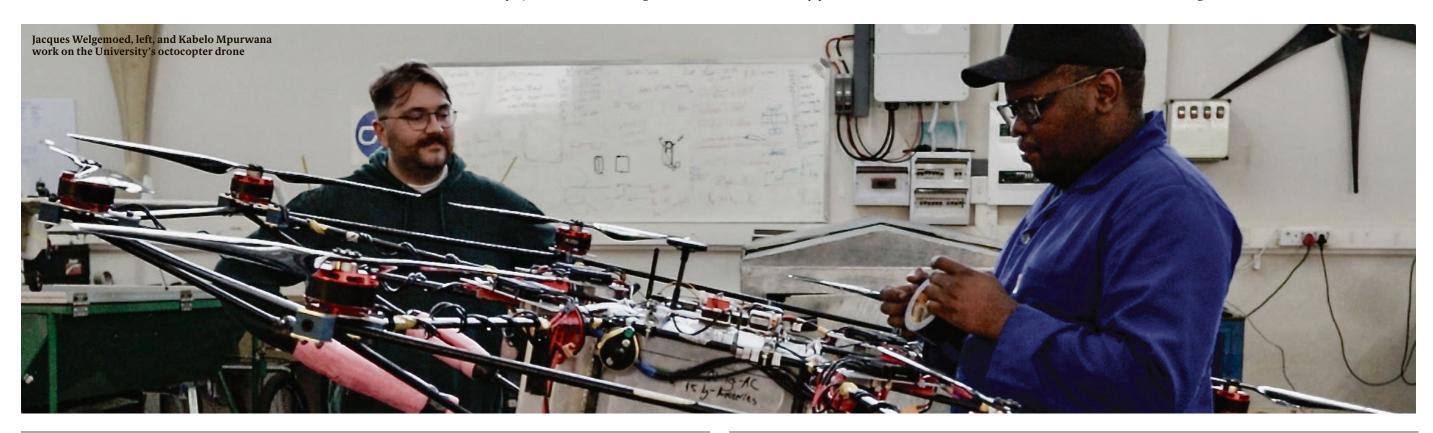
"Currently, the drone is being prepared for its initial test flights. Following this phase, the necessary sensors and equipment for crop spraying will be added, and testing in that capacity will commence."

The octocopter has a diameter of 2m. Unloaded, it weighs 22kg with a ready-to-fly weight of 36.8kg. It can carry a payload of between 23 and 38kg, with a maximum take-off weight of 75kg.

Once loaded and in the air, it can fly for 18 minutes. If there is no load and it is empty, the drone can hover for double this time.

Mpurwana said the octocopter will have a projected operational speed of between five and eight metres per second, which translates to 18-28kms per hour. It is powered by eight 14kg thrust brushless electric motors, and two in-series 2.4kWh LiPo 50V batteries weighing 16.6kg. He says the higher number of motors added to its safety. It is part of the University being able to offer design concepts for new heavy-lift drones, which may be used in long range payload delivery scenarios such as disaster management and famine relief.

The University's focus on real-world drone solutions means it can offer products that may be commercially produced and used in relevant research and support. By collaborating with industry, the MAO group can help to grow drone technology in South Africa, and contribute to economic growth.



## Greenhouse and community food systems project

A young cooperative of PE College engineering graduates is looking for funding to build community managed greenhouses with eco-conscious materials to produce seedlings. Nelson Mandela University's Centre for Integrated Post School Education and Training (CIPSET) is working with the group of TVET college graduates on the greenhouse and community food systems project.

A group of seven formerly unemployed youngsters make up Green Technologies Engineering Cooperative – GreenTEC – which is the implementing organisation for the project. CIPSET's role is to provide mentoring support to GreenTEC, and to community farmers across the metro. CIPSET researcher Irna Senekal says the action research project aims to help the TVET team apply developing artisanal skills through eco-conscious design.

So far GreenTEC has completed a number of plumbing, maintenance and installation jobs in schools and private homes in Nelson Mandela Bay, including retrofitting lights for energy efficiency. The main benefits of the project are support for cooperative members to develop and apply their skills in green construction, plumbing and electrification, and mentoring to strengthen their policies and systems. An additional benefit is the focus on seedling production with community food producers. This will support local food production and contribute to ecoconsciousness and climate change resilience. Until now, seedlings have been bought from commercial producers.

GreenTEC cooperative secretary Khanya Liwani says the group was "super excited" to be part of the greenhouse and community food systems project. "Greenhouses are not just a tool for the home gardener to extend the growing season; they can be an incredibly

**Supporting Community Kitchens** 

Nelson Mandela University has partnered with the Ikhala Trust, a

non-profit community grant-maker and development incubator in the

Eastern Cape, to develop Community Kitchens. During the COVID-19

pandemic, Ikhala identified existing "soup kitchens" with the purpose

of them becoming "Community Kitchens" which provide much more

community kitchens and we would like to continue what we started

Ikhala Trust staff member Unathi Meslane has seen a ripple effect of the collaboration. "The Community Kitchens manage the big community garden, and this can inspire people to see the benefit of having their own backyard garden," says Meslane. The Kuyga food garden, for example, has expanded, and the University's Hubs of Convergence have enabled the purchase of a JoJo water tank for this site. Beetroot, spinach, spring onions and broccoli were recent harvests. In Wells Estate, the Yizani Sakhe CK has learnt the skill of loom mat making and sells beautiful woven mats. Its reading club is continuing at the local primary school with a Funda ambassador from Yizani Sakhe working with the school. Members have also encouraged households to start their own gardens and they now require seedlings

The Moeggesukkel group received permaculture gardening training,

seeds and a JoJo tank from the Interchurch Local Development Agency.

with the Moeggesukkel CK in Kariega, Yizani Sakhe CK in Wells Estate, and Kuyga CK in Greenbushes," says Ikhala Trust director Bernie

"We continue to work with four of the six initially identified

to help feed families

for these square metre gardens.

valuable educational tool too."

"Growing plants in a greenhouse is not only good for mental and physical well-being - it can also teach students and the community responsibility, plant biology, entrepreneurship and more."

GreenTEC was established at the end of 2021 and started operating in 2022, with funding and mentoring support through CIPSET. CIPSET's work over the past five years with community-based food producers includes a range of organised, and frequently youth-led, actions to address the livelihoods crisis and hunger across the Nelson Mandela Bay Metro. Initially, this greenhouse and community food systems project will serve community food producers associated with the Zwide Development Forum. Later, depending on funding, it hopes to serve across the Nelson Mandela Bay Metro.



GreenTEC members, from left, Bongi Mkolose, Sinenthlanthla Zono, Seofra Nathane, Khanya Liwani, Nozama Gege and Siyamthanda Gwayi (absent: Thandile Martins)

"Unfortunately the fence that was erected was stolen but the members used their creative skills and found an old spring mattress and have used that as a temporary measure to protect their plants," says Dolley.

The Ikhala Trust's signature programme is Asset Based Community Development which takes stock of all the financial, social, natural, physical and human assets that already exist. "This acknowledges that no person or community has nothing and helps to build the confidence of individuals and partners to appreciate what they are able to do," says Dolley.

"We not only provide small grants to qualifying community partners but also mentor and accompany them on their development journey to achieve their objectives." Supporting the Nelson Mandela University Food Systems project therefore means far more than providing food for a family.



Unathi Meslane, left, and Shelley Canzibe harvest vegetables from Kuyga's Community Kitchen food garden

#### Entrepreneurship incubator addresses youth unemployment

The Madibaz Youth Entrepreneurship Lab (YouthLab) is becoming an increasingly powerful incubator for students' business dreams.

With rising youth unemployment, especially in the Eastern Cape region, youth employability and student entrepreneurship deserve attention. Student Governance and Development Director, Dr Bernard Sebake highlights how Nelson Mandela University is tackling this thorny social problem.

"Building on the successes of the Student, Employability and Entrepreneurship Development prorgramme and our dedicated YouthLab, we are repurposing our infrastructure towards a rapid youth entrepreneurship incubator, in partnership with the Small Enterprise Development Agency," he explains.

Although not sector specific, areas of focus include the oceans economy – an obvious fit with an ever-developing Ocean Sciences Campus at Nelson Mandela University – along with tourism, manufacturing and agriculture.

"The main aim is to help early-stage businesses to develop and succeed. We will offer a supportive environment with the necessary tools and expertise," says Sebake.

Student Governance and Development student entrepreneurship specialist Karen Snyman, who is deputy chairperson of the Entrepreneurship Development in Higher Education's Community of Practice for Student Entrepreneurship, is thrilled with the growth of the lab, which is now expanding into a fully fledged incubator.

"We applied to the Small Enterprise Development Agency (SEDA) to establish this centre which will provide services to student and alumni entrepreneurs, as well as unemployed youth and youth-owned businesses," says Snyman. Based on North Campus, it includes a boardroom, mini-amphitheatre, makerspace, meeting areas and more. This is a physical point of contact, and helps to formalise and streamline the coordination of entrepreneurial activities for students.

Snyman describes how Student Governance and Development has been championing a bottom-up approach in response to the voices of students. "Students want a door of opportunity on which to knock and we want to provide it." she added.

"And it has just grown, we developed a policy for students operating a business on campus because of the huge demand.

The number of entrepreneurship projects going on right here is astounding, says Snyman. There are at least 20 small businesses on Gqeberha and George campuses, including tuck shops, fashion outlets and a driving school, as well as the expanded YouthLab as point of contact and 'office space' for these and other entrepreneurs.

Second year Mandela University accountancy student Fidel Mabolabola, 21, is one of the young entrepreneurs using the incubator's services. "You basically start your own venture and they help you to build your business by learning how to develop a business model, market your business, get finance and so on," says the Limpopo entrepreneur-in-training. "It was really beneficial because after that, I had all the knowledge that I needed to start my business. Before that, I didn't have the tools."

"STUDENTS WANT A DOOR OF OPPORTUNITY ON WHICH TO KNOCK AND WE WANT TO PROVIDE IT."



#### The Herald Citizen of the Year

# Congratulations to the Inspirational Winners.













Gender-based-violence



**Business** 



Sport







Arts, Culture & Heritage





**Civil Society** Education

**Motherwell Community** & Enviro Hub **Environment** 

Jenny Rump Sister Ethel Award

CONGRATULATIONS FROM PROUD PARTNERS

The Herald

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## SPAR (1)

## Good citizens are our kind of people

Like all good citizens our work in the community goes beyond talk, each **SPAR** supports its community with what it needs, everything from feeding schemes and small farmer development to providing resources for schools and supporting women's sport and gender equality.

That's why we're for anyone, who is for community.





#### Nelson Mandela University - Change the World

As the only university in the world to carry the name of Nelson Mandela, our institutional identity and core academic missions are underpinned by our namesake's legacy, ethos and values.

The University strives to promote the public good through the expansion of human understanding, pushing forward the frontiers of knowledge and cultivating socially conscious graduates who make a positive impact on society as responsible global citizens and leaders.

Journey with us as we set out to be a dynamic, African university recognised for its leadership in generating cutting-edge knowledge for a sustainable future.