

## THE BIGGER PICTURE

South African HIGHER EDUCATION landscape

Public higher education institutions in SA



Conventional universities



Universities of technology

Comprehensive

universities

06

6

North-West University (NWU) One of the conventional universities in SA

**Universities South Africa** Governing body for SA's higher education institutions



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Please note that all 2019 figures used are provisional as final auditing was still in progress at the time of writing.

## UNLOCKING THE FUTURE

## The spirit of the university

The spirit of the university is reflected in the way we unlock the future for people and enable them to make their dreams come true.

This spirit runs across all our activities and operations, from our academic offerings and research to our student body, community engagement and sports achievements. The "keys" we use to unlock the future for our stakeholders include:

- Our focus on internationalisation (p14-15)
- Our faculties (p20-31)
- Our exceptional programmes (p20-31)
- Our entrepreneurial learning (p20-31)
- Our distance learning capability (p32)
- Our sporting excellence (p37-39)

## NWU logo

The interlocking links of our logo symbolise the unity of our university.



## Pay-off line



## MAKING DREAMS COME TRUE

## A united institution

The NWU is committed to functioning as a unitary, integrated, multi-campus university that enables equity, redress and globally competitive teaching and research across all campuses.

## Our strategy statement

To transform and position the NWU as a unitary institution of superior academic excellence, with a commitment to social justice.

## Our dream

To be an internationally recognised university in Africa, distinguished for engaged scholarship, social responsiveness and an ethic of care.

## Our purpose

To excel in innovative learning and teaching and cutting-edge research, thereby benefiting society through knowledge.

## WHERE IT HAPPENS...

Our core activities, teaching-learning and research, are intertwined with community engagement and innovation in our eight faculties, most of which serve both distance and contact students.



## .....keeping this in mind

The NWU will foster engaged and caring staff and students and embed the following foundational values, based on the constitutional principles of human dignity, equality and freedom:

- Ethics in all endeavours
- Academic integrity
- Academic freedom and freedom of scientific research
- Responsibility, accountability, fairness and transparency
- Embracing diversity



### A winning team

Gender and racial composition of NWU staff in \*2019



\*(2019 figures not final)

#### How we empower people

Black executive directors (as % of total university management committee members)	33%
Female executive directors (as % of total university management committee members)	67%
Black staff (as % of total staff)	36%
Female staff (as % of total staff)	55%

### Pathfinders and knowledge seekers

#### **Research scorecard**

- 2 605,507 weighted research output units in 2017
- 1 300,04 article equivalents published in 2017
- 215 postdoctoral fellows in 2017



Between 2014 and 2018, there was a 45% increase in the number of PhDs awarded.



The number of NRF-rated researchers increased from 182 in 2014 to 232 in 2018.

### **Building research capacity**

To encourage more academic staff to apply for ratings and raise their research output, the NWU provides training on preparing abstracts and conference papers, article writing and best practices in preparing research questionnaires.

#### Recruiting postgraduate students

We are also broadening our pool of research skills by actively recruiting more master's and doctoral students. In 2018 we had 1 472 international postgraduate students on our campuses.

## TOWARDS EXCELLENCE: HERE WE GO!

## Our language policy is unique

In line with our multilingual policy, we strive to promote the academic status of the predominant African languages of the regions in which our campuses are situated, namely Setswana and Sesotho. We do this in addition to maintaining English and Afrikaans as the current languages of instruction.

To reach these multilingual goals, we use all linguistic resources at the disposal of our staff and students, who have widely varying linguistic repertoires. Our ultimate purpose is to achieve improved teaching and learning.

This we will achieve by enhancing the student experience, which includes welcoming whatever languages students bring to the university. To this end, we continue to use the following mediums of instruction: single medium (English, Afrikaans, Setswana and Sesotho), parallel medium, dual medium and educational interpreting.

We also use translanguaging. This means accommodating the various linguistic repertoires that both students and lecturers bring to the class. Linguistic facilitation then takes place by a variety of means, including educational interpreting and translation.

Ultimately this will enable our students to master, internalise and reproduce teaching and learning content better – and they will be able to do so in a number of languages.



## AN ACADEMIC MEDLEY

### **The NWU offers more than just an education: we offer people a place in the world**. Academically, students benefit from great choice and flexibility, enabling them to fulfil their potential and start preparing for their careers.

## Teaching and learning scorecard

We have significantly increased our student enrolments, pass rates and qualifications awarded since 2004, when the NWU was established.

<b>Students</b> enrolled 2004 → 2018 40 145 → 61 212	52% total growth	Undergraduate pass rate 2005 → 2018 78,02% → 83,2%	<b>7%</b> total growth
<b>Qualifications</b> <b>awarded</b> 2004 → 2018 9 657 → 15 350	59% total growth	PhDs           awarded           2004 → 2018           87 → 248	185% total growth

## Pass rates and qualifications from 2014 to 2018

A year-to-year breakdown of our performance in the past five years gives a more recent perspective:

	2014	2015	2016	2017	2018
Undergraduate pass rate	86,1%	85,1%	86,16%	85,08%	83,2%
Graduation rate	24,1%	24,3%	27,62%	25,6%	25,1%
Degrees and diplomas awarded	15 254	15 597	17 510	16 004	15 350
Master's degrees awarded	746	742	744	813	753
PhDs awarded	171	222	238	235	248

## CRITICAL SKILLS FOR THE COUNTRY

Using contact and/or distance education and appropriate teachinglearning technologies, the NWU offers a range of qualifications and academic programmes that focus on developing scarce and strategic skills in its graduates.



#### **Teachers**

The Faculty of Education makes a significant contribution towards meeting the critical need for qualified, professional teachers. It is one of the few higher education facilities involved in the training of mechanical, civil and electrical technology educators, who are in great demand.

Engineering graphic design is also prioritised as a critical learning area, as are undergraduate and postgraduate programmes with scarce skill specialisations, such as sciences, mathematics and languages.

#### Accountants

We offer four professional accountancy degrees up to honours level. They are BCom in forensic accountancy, chartered accountancy, management accountancy and financial accountancy. The NWU is the only university in South Africa offering all four specialisations at undergraduate and honours levels.

NWU students consistently perform exceptionally well in the qualifying examinations of the South African Institute of Chartered Accountants.

We offer master's degrees in much-needed specialisations such as accountancy, forensic accountancy, taxation, human resource management, tourism management, statistics, informatics, risk management and international trade.

We also offer a PhD in economic and management sciences with programmes in critical research areas such as forensic accountancy, international trade, risk management, accountancy, tax and labour relations management, among others.



#### Law experts

The Faculty of Law is known for its graduates in international trade law, environmental law and sustainable development; fields that are important for any developing country.

### **Tourism managers**

To address the shortage of well-qualified tourism managers in South Africa, we offer degrees that fit the needs of the industry. With our BA, BCom and BSc offerings, we take tourism education to a professional level and deliver graduates able to contribute to the growth of tourism in South Africa.

This industry has the potential to help change the outlook of South Africa for the better in the coming years.

### Mathematicians and natural scientists

We offer a number of undergraduate and postgraduate qualifications in the critical fields of mathematics and natural sciences. Mathematics is the language of science, and it underpins all scientific development and research. It contributes in many ways, such as providing methods for gathering, analysing and reporting data.

We also offer degrees in business mathematics and informatics with specialisations in business analytics, quantitative risk management and financial mathematics. In addition, we educate computer scientists, information technologists and information systems specialists, and equip our students with skills needed in the fourth industrial revolution.

Natural sciences such as physics, chemistry and biological sciences are also crucial for the development needs of the country.

### Language practitioners

In multilingual and multicultural South Africa, specialised skills for translation, text editing, interpreting, audio-visual translation (subtitling and audio description for the blind) and sign language are invaluable. In fact, there is growing demand for qualified language practitioners who contribute to the development of our multilingual society.

We offer dedicated education and training at undergraduate and postgraduate level in these areas of language practice. At postgraduate level, we develop specialised research skills and offer training in advanced research methods for language practice. (Examples are corpus analysis, eye tracking and keystroke logging, which only the NWU offers at postgraduate level.)



### Engineers

We offer specialisations ranging from chemical engineering (including minerals processing) and electromechanical engineering to mechanical and industrial engineering. The Faculty of Engineering has a focus on equipping engineers and researchers for integrated energy solutions.

In business and industry, women are underrepresented in maths and statistics (4:5, in other words, four women for every five men) and ICT and technology (2:5), as well as engineering, manufacturing and construction (3:10).

Over the past three years, the female cohort of engineering students has comprised, on average, 20% of the total engineering headcount. This is an increase of 5% since our Women in Engineering interventions started in 2015.

### Animal health technicians

We train animal health technicians who play a very important role considering the critical shortage of professionally qualified veterinarians in South Africa, as well as the need for technicians trained in research.





## Transdisciplinary health professionals

The MHSc in transdisciplinary health promotion empowers students to research well-being across disciplinary boundaries, through active participation in communities. It equips students with the essential skills needed in a country with complex health challenges.

### Pharmaceutical scientists

The DST/NWU Preclinical Drug Development Platform is a hosted platform initially funded by the Department of Science and Technology. One of its functions is to train postgraduate students studying pharmaceutical sciences in the Faculty of Health Sciences.





#### Medicine regulation specialists

The WHO Collaborating Centre for the Quality Assurance of Medicines is continuously developing new short courses for international medicines regulatory authorities, to build and strengthen regulatory capacity.

### **Occupational hygienists**

The BHSc in occupational hygiene is the only four-year professional degree for occupational hygienists in South Africa. This is also of value to neighbouring countries, whose occupational hygiene frameworks rely on South African legislation and expertise.

#### Health science educators

The Centre for Health Professions Education equips academics to be scholars in higher education teaching and learning, thus providing excellent learning environments for health science students and developing critical research skills in health professions education.

### Interpreters of ancient languages

The NWU is unique in the number of ancient languages it offers. Knowledge of these languages has always been a scarce skill and although ancient languages is a small field, interpreters of ancient documentary evidence are in high demand.





#### **Environmental managers**

The Department of Higher Education and Training has listed environmental management as a "highest demand" occupation and rates it 35<sup>th</sup> out of the 100 most scarce skills in South Africa.

Our master's programme in environmental management, presented by the Unit for Environmental Sciences and Management, provides worldclass postgraduate training and research on the performance of different environmental management approaches and instruments.

### Urban and regional planners

Urban and regional planning is also a national scarce skill, as well as one of five priority skills earmarked for immediate attention in the Joint Initiative on Priority Skills Acquisition (JIPSA) report.

Our Faculty of Natural and Agricultural Sciences offers a BSc in urban and regional planning, a professional degree that is accredited by the SA Council for Urban and Regional Planners.



## THE WORLD IS OUR STAGE

Through collaboration with other universities and institutions internationally, we are part of the global higher education community. Our internationalisation activities include student and staff exchange and cooperation in academic, research, cultural and sports matters.

In 2018, we had 2 614 international students from over 80 countries. Among them were 1 472 postgraduates, including 517 doctoral candidates.

### Cooperation at home and abroad

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The NWU has relationships with many universities in South Africa and abroad. (See world map.)

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We also cooperate with numerous international bodies spread across the world. They are active in a range of disciplines, from medicine, health, theology and energy to economics, education, trade and sport.

In South Africa, we collaborate with players in industries such as pharmaceuticals, tourism, mining, banking and electricity supply, as well as local businesses, museums and a zoo.

Then there are our relationships with national professional entities and governing bodies in the fields of psychology, law, education, health, tourism, agriculture, accountancy, treasury, engineering and artificial intelligence.

We also liaise with several provincial and national government departments, and cooperate closely with local communities, traditional authorities, sports clubs (local, provincial and national), business chambers and local municipalities.

## MAKING A DIFFERENCE TO OUR NEIGHBOURS

## Ensuring sustainable impact

Sharing our expertise is intertwined with our core business (teaching and learning, and research) and emphasises sustainability and community impact.

Some of these activities generate third-stream income through short courses, consulting or technology transfer.

However, our engagement activities are often not for profit. Rather, they enable staff and students to uplift the community through developmental engagement, community service projects, outreach and volunteering.

Our engagement activities often involve research about, with and in communities. These activities are interactive, entail twoway learning experiences and provide work-integrated learning or service-learning opportunities for students. Our commitment to engaging with local communities is embedded in our vision (dream), which highlights engaged scholarship, social responsiveness and an ethic of care. We consider the three municipal areas where our campuses are based as our primary communities.

In 2018, the NWU was involved in nearly 201 community-related activities. We were solely responsible for some of the projects and participated in others through projects driven by other groupings.

Almost 100 student-driven community outreach activities took place on the three campuses. In addition, there were many ad hoc activities such as water collection drives and Cancer Association of South Africa support walks.



### Engaging with communities

To enable, develop and engage communities, we initiate or participate in a variety of projects that:

- train pre-school caretakers, members of NGOs, government officials, business startups (focusing on female entrepreneurs) and empower emerging farmers
- share our expertise on community radio programmes
- provide free legal services and primary animal health services to people who cannot afford commercial services
- present sport clinics in and around our campuses



## Partnering with schools

We prepare promising grade 12 learners for their matriculation examinations, present a Winter School and a Science Week, donate MyLab sets and help with natural science experiments.

In addition, we train teachers, office-based staff and education leaders, help to establish new libraries or assist existing ones to expand, teach music to talented young musicians and help teachers to hone their skills as sport coaches.

Our Sustainability and Community Impact team has also completed several studies for corporate and civil society partners, measuring the impact of their communitybased interventions.



## **GOING GREEN**

Environmental stewardship and awareness are important to us. We run annual energy-saving competitions for student residences and are currently determining baseline consumption of all essential resources. Working groups help to manage and reduce consumption of water and energy.

During Global Climate Change Week, we display books on climate change and hold art exhibitions (with artworks from recycled materials) and panel discussions on the topic.



## **Combating HIV/Aids**

The HIV/Aids pandemic has a huge impact on South Africa and combating HIV/Aids is a priority for the university.

HIV/Aids services are available on all campuses through student counselling and development services, staff wellness services, and our campus health clinics. These entities provide voluntary counselling (including long-term counselling) and testing to staff and students.

Students can become involved as activists on their campuses. Our HIV office focuses on raising awareness about the prevention of HIV, stigmatisation and discrimination, reproductive health education, prevention of mother-to-child transmission, safe sexual behaviour and healthy interpersonal relationships.

## INNOVATING FOR THE FUTURE

## Income through innovation

Patents and product sales generated almost R18 million in 2018. There are 56 granted RSA-patented inventions in our intellectual property portfolio, and many are also registered internationally, spanning 59 different countries in total. Altogether 636 individual patent applications have been registered so far.

The NWU was named the most innovative South African university in the Clarivate Analytics IP and Innovation review, which was presented at the South African Research and Innovation Management Association (SARIMA) Conference in 2017.

### Spin-off companies

The NWU forms innovative small and medium-sized spin-off companies as part of our commercialisation strategy and holds equity in or earns royalties from some of these. Historically, the NWU has developed 36 technology-related spin-off companies, 27 of which are still active.

## Being money-wise counts

Total income in 2018: R4 901 million						
	2014	2015	2016	2017	2018	
Total income	R3 206m	R3 527m	R3 838m	R4 193m	R4 901m	
Surplus (recurrent items)	R104m	R136m	R229m	R500m	R860m	
Staff cost/total cost	52,6%	54,7%	54,8%	55,9%	55,2%	
Self-generated income	R933m	R946m	R990m	R1 038m	R1 166m	
% of income from government	39,5%	38,8%	40,1%	41,4%	41,0%	
% of income from tuition fees	31,2%	33,2%	32,4%	33,8%	35,1%	
Capital expenditure on upgrading projects	R76m	R63m	R53m	R72m	R115m	

The NWU is a financially stable university that runs at a profit and has a growing income, despite cost pressures.

## HEARTBEAT OF THE NWU: OUR FACULTIES



#### Here are the faculties' student numbers for \*2019:

Faculty	Students	Faculty colour
Education	29 549	
Economic and Management Sciences	11 579	
Engineering	1 804	
Health Sciences	6 848	
Humanities	6 284	
Law	3 123	
Natural and Agricultural Sciences	6 548	
Theology	812	
Total	66 547	

\*(2019 figures are not final)

## **EDUCATION**

#### Entrepreneurial learning

As part of teacher education, the Economic and Management Sciences for Education subject group offers programme content with strong entrepreneurial foundations to promote economic growth and financial independency.

Short learning programmes with an entrepreneurial approach and content are also offered as part of the professional development and training of serving educators.

#### NWU research entities

- Education and Human Rights in Diversity (Edu-HRights)
- Self-Directed Learning (SDL)
- Community-Based Educational Research (COMBER)
- Edu-Lead

#### Community engagement

- Postgraduate students in education psychology offer specialised support services at a provincial hospital.
- The Little African Scientists project assists with in-service training of foundation phase educators in a group of schools, and monitors and supports learners in mathematics and science. Standard Bank of South Africa provides financial support.
- The faculty provides 'green' sanitary ware to female students for the duration of their studies. The next phase of this project involves manufacturing and entrepreneurial initiatives.

#### **Exceptional programmes**

We are a one-stop teacher training facility, spanning the full spectrum of education phases and teacher needs and using a multimodal delivery model that caters for contact and distance learning.

- The faculty's offerings cater for all levels of schooling and teacher development. The flagship offering is the BEd, which includes the full spectrum of initial teacher education programmes, namely the foundation, intermediate, senior and further education and training phases.
- Postgraduate programmes include the Postgraduate Certificate in Education, an advanced programme taught through contact or distance learning, and BEdHons, MEd and PhD qualifications.
- We also offer various continuing education programmes at certificate and diploma levels as well as much sought-after postgraduate programmes (BEdHons, MEd and PhD).

#### **Research chair**

 UNESCO Chair on Multimodal Learning and OER (Open Educational Resources)

## ECONOMIC AND MANAGEMENT SCIENCES

#### Entrepreneurial learning

- As formal job markets shrink and traditional employment opportunities diminish, entrepreneurship is becoming increasingly important. Through a range of academic offerings and skills development opportunities on entrepreneurship, we enable students to acquire the skills needed to put creative ideas into action.
- Hands-on entrepreneurship experience is nurtured at the bhive Enterprise Development Centre in Vanderbijlpark. Activities include a student business competition, two student societies (YEBO and Enactus) and a postgraduate leadership and skills development programme for IT graduates.

Female entrepreneurs can participate in the Enterprising Women Programme, while community-based entrepreneurs can join our incubation programme or benefit from our coaches and mentors.

Programmes in entrepreneurship are included in the BCom in management sciences whether with safety or business management. Modules in problem solving for managers are included in the BCom in management sciences, BSc IT and BSc Consumer Sciences.

#### **NWU Business School**

The school offers part-time qualifications and academic programmes on Saturday mornings in Afrikaans at the campus in Potchefstroom, Monday evenings in English at the campus in Vanderbijlpark, and in English over selected weekends at the campus in Mahikeng. The MBA qualification is accredited by the Association of MBAs.

#### Exceptional programmes

- Our programmes include topics such as transport economics, logistics management, forensic accountancy, international trade, agricultural economics, tax, banking and financial risk management, applied risk management, management accountancy, financial accountancy, and tourism management.
- The short learning programme in wildlife management attracts national and international participants and our Centre for Applied Risk Management offers an exceptional two-year part-time MCom in applied risk management.
- The programme in forensic accountancy hosts the preparatory courses and board examination for full membership of the Institute of Commercial Forensic Practitioners, a self-regulatory professional body for commercial forensic practitioners in South Africa, accredited with SAQA.

#### **Research Chair**

World Trade Organisation Chair (WTO)

#### **NWU research entities**

- Tourism Research in Economic Environs and Society (TREES)
- Workwell: Research Unit for Economic and Management Sciences
- Trade and Development (TRADE)
- Global Innovative Focussed Talent (GIFT)
- Technology-Enhanced Learning and Innovative Education and Training, South Africa (TELIT-SA)

#### Community engagement

- Our staff and students are committed to assisting neighbouring communities through the transfer of knowledge and volunteerism. Staff from the School of Accounting make their expertise available to the public sector by serving on the boards of General de la Rey and Thusong hospitals, offering financial training to Mahikeng local municipality and upskilling accountancy teachers at local schools.
- Students give extra accounting and mathematics classes at local schools to assist learners and are also involved in book collection and recycling projects. Entrepreneurial programmes are organised for women and the Economic Literacy Centre has assisted 30 men from the community with financial management.

## **●** NWU<sup>®</sup> | bhive

- CALLING FEMALE ENTREPRENEURS!
  - Did you recently start a business or do you wish to start one?
    Do you require support in developing your business?

IF YOU'VE ANSWERED YES, THE ENTERPRISING WOMEN PROGRAMME IS JUST FOR YOU!

## ENGINEERING

#### Entrepreneurial learning

Our academic approach is based on entrepreneurial thinking. Several finalyear and postgraduate projects have been transformed into successful enterprises such as CFAM Technologies, Jonker Sailplanes and Genio Intelligent Roasters.

The business engineering module within Industrial Engineering is structured around the students forming a fundable business plan. The engineering management module has a multidisciplinary and inter-disciplinary approach, with students addressing various aspects, including economics.

#### -• Exceptional programmes

- Our internationally accredited BEng degrees have seven different areas of specialisation. These are chemical engineering, chemical engineering with minerals processing, computer and electronic engineering, electrical and electronic engineering, electromechanical engineering, mechanical engineering and industrial engineering.
- There are extensive postgraduate study opportunities. At master's level, there are two pathways: master's degrees in engineering or master of science in engineering.

The former has seven specialisations, namely chemical, computer and

#### • NWU research entities

- Centre of Excellence in Carbon-Based Fuels
- Unit for Energy and Technology Systems
- Multilingual Speech Technologies (MuST)

electronic, electrical and electronic, mechanical, nuclear, development and management, and industrial. The master of science offerings are in chemical, computer and electronic, electrical and electronic, mechanical and nuclear engineering.

- Doctoral degrees are offered in chemical, computer, computer and electronic, electronic, electrical, electrical and electronic, development and management, mechanical, nuclear, engineering science and industrial engineering.
- We are also one of very few engineering faculties to offer a postgraduate diploma in nuclear science and technology.

#### • Research chairs

- DST/NRF Research Chair in Coal Research (SARChI)
- DST/NRF Research Chair in Biofuels and Other Clean Alternative Fuels (SARChI)
- DST/NRF Research Chair in Nuclear Engineering (SARChI)
- ESKOM EPPEI Specialisation Centre for Emission Control

## Hosted entities, platforms and institutes

- DST/HySA Infrastructure Centre of Competence in hydrogen production, storage, reticulation and safety codes and standards
- DTI Centre for Advanced Manufacturing (CFAM)

#### • Community engagement

- Our Science, Engineering, Technology and Health (SETH) Academy prepares future engineers through extra classes at a high school in Potchefstroom. The academy also runs a pre-university programme, Xcel, that helps applicants to improve their National Senior Certificate results in mathematics and physical sciences.
- We also build devices and apparatus that assist staff and patients at the Occupational Health section of the Potchefstroom Hospital, and develop facilities for an Orange Farm community garden project.



## HEALTH SCIENCES

#### **Exceptional programmes**

From the pharmaceutical sciences and nutrition to occupational hygiene, positive psychology and child protection, the Faculty of Health Sciences has a rich and varied range of programmes.

Some are one-of-a-kind programmes in South Africa, such as the BHSc and PhD in occupational hygiene and the MSW in forensic practice and in child protection.

- Our Master of Pharmacy in pharmacy practice programmes prepare professionally qualified pharmacists for specialised fields of practice. These are pharmacovigilance and pharmacoepidemiology, pharmaceutical and health economics and policy, and pharmaceutical public healthcare governance.
- Other notable programmes are:
  - MSc and PhD in pharmaceutical sciences
  - MSc (nutrition) and MSc (dietetics)
  - MHSc and PhD in health professions education
  - MHSc in transdisciplinary health promotion
  - PhD in transdisciplinary health sciences
  - BHSc in occupational hygiene and biokinetics (a four-year professional degree)
  - MA and PhD in positive psychology
  - Master of Health Sciences in research psychology

#### Entrepreneurial learning

A discipline that lends itself to entrepreneurial development is consumer sciences, where students gain practical and theoretical exposure in food, fashion, business management and marketing.

An exciting element of the new programmes in food product development and the fashion production line involves actual consumer-focused product development, adding to students' entrepreneurial toolkits.

- Our Africa Unit for Transdisciplinary Health Research (AUTHeR) takes a strong sustainability, participatory and entrepreneurial approach to research, teaching-learning and community engagement.
- The Social Greenhouse® enables sustainable community-based product development to bridge the technologycommunity gap.
- The DST/NWU Preclinical Drug Development Platform offers postgraduate qualifications that straddle academia and industry. Students' research projects are often based on requests from industry, or from national government departments. This enables students to apply scientific principles while gaining exposure to the regulatory requirements of the workplace.

#### **NWU** research entities

- Centre of Excellence for Nutrition (CEN)
- Centre of Excellence for Pharmaceutical Sciences (PharMaCen)
- Hypertension in Africa Research Team (HART)
- Africa Unit for Trans-disciplinary Health Research (AUTHeR)
- Community Psychosocial Research (Compres)
- Physical Activity, Sport and Recreation (PhASRec)
- Quality in Nursing and Midwifery (NuMiQ)
- Lifestyle Diseases
- Medicine Usage in South Africa (MUSA)
- Occupational Hygiene and Health Research Initiative (OHHRI)

## Hosted platforms, centres and institutes

DST/NWU Preclinical Drug Development Platform (PCDDP)

Medical Research Council Extramural Unit for Hypertension and Cardiovascular Disease

#### **Commercial research entity**

Centre for Pharmaceutical and Biomedical Services

#### **Research chair**

DST/NRF Research Chair in Early Detection and Prevention of Cardiovascular Disease in Africa (SARChI)

#### **Community engagement**

- We strive to improve the health of South Africans, as well as people in other African countries.
- AitaHealth is a community-oriented primary care project that involves visiting households and collecting real-time data on a mobile application.

We also present exercise classes for women in Ikageng in Potchefstroom and run a programme to develop the motor skills of the residents of House Amelia, a care centre for mentally disabled people. Through the Phelophepa Train, psychology, pharmacy and nursing students provide services to community members.

Two projects focus on capacity building. ImpENSA improves early nutrition and health by empowering health professionals and community health workers. The African Nutrition Leadership Programme, a Pan-African programme, develops leadership capacity in nutrition among professionals on the African continent.

## **HUMANITIES**

#### • Exceptional programmes

The humanities equip students with critical thinking and analytical skills, which are becoming increasingly important in the digitally driven world of work.

- Our four-year BA Graphic Design programme is geared towards producing creative problem-solvers who are ready for the job market.
- The School of Languages annually administers a bursary grant worth R1 million from the Department of Arts and Culture for students studying languages, linguistics and applied linguistics from undergraduate to master's level. Bursaries are available to all students registered in our programmes across all campuses.
- An important quality that permeates our language offerings is our wealth of digital resources and expertise. The NWU hosts the South African Centre for Digital Language Resources, which is building a multilingual learner corpus of academic language, among other projects.

We are also a partner in the Interinstitutional Centre for Language Development and Assessment, which seeks to ensure fair and unbiased academic literacy testing and is developing an online writing tool.

#### **NWU** research entities

- Unit for Language and Literature in the South African Context
- Enabling Optimal Expression of Individual, Social and Institutional Potential (OPTENTIA)
- Population and Health
- Social Transformation
- Understanding and Processing Language in Complex Settings (UPSET)
- Indigenous Language Media in Africa (ILMA)
- Musical Arts in South Africa: Resources and Applications (MASARA)
- Visual Narratives and Creative Outputs through Interdisciplinary and Practice-led Research (VINCO)

#### Hosted platforms, centres and institutes

South African Centre for Digital Language Resources (SADiLar)

#### Community engagement

The Musikhane Community Music Engagement Programme at the School of Music creates opportunities for learners and student teachers to have meaningful musical experiences.

The programme is linked to compulsory community music modules and involves five community partners, including three secondary schools around Potchefstroom. The programme explores music education, staff development and community music participation.  Byderhand is an interdisciplinary digital literature project of our subject group Creative Writing.

It provides interactive, multisensory reading experiences to visually impaired learners, using digital devices and a variety of media, content and settings. These settings include the NWU Botanical Gardens in Potchefstroom and the Poetry Garden at the Breytenbach Centre for the visually impaired in Wellington.

## LAW

#### **Exceptional programmes**

Our Faculty of Law is highly regarded for its leadership in growing fields such as environmental law, governance law and international trade, while maintaining an edge in more traditional branches of the law such as mercantile law and criminal law.

Our postgraduate offerings include the following:

- Doctor of laws in various disciplines, such as public law, criminal and procedural law, international trade and business law, environmental law and mercantile law
- PhD in laws with law and development
- Two LLM streams (research or coursework) with 19 different programme specialisations in different fields of law
- MPhil in environmental law and governance law and a professional LLM in criminal law and procedure

#### **NWU research entity**

Research Unit for Law, Justice and Sustainability

#### **Research Chair**

DST/NRF Research Chair in Cities, Law and Environmental Sustainability (SARChI)

#### Community engagement

We share our legal expertise on community radio programmes and provide free legal services through our law clinics to people who cannot afford legal counsel.

## NATURAL AND AGRICULTURAL SCIENCES

#### Entrepreneurial learning

We have various qualifications that focus on entrepreneurial learning, for instance in the fields of actuarial science, business mathematics and informatics, and business analytics.

#### **NWU** research entities

- Centre for Space Research
- Unit for Business Mathematics and Informatics (BMI)
- Unit for Environmental Sciences and Management (UESM)
- Chemical Resource Beneficiation (CRB)
- Human Metabolomics
- Material Science Innovation and Modelling (MaSIM)
- ► Food Security and Safety

#### **Research chairs**

- DST/NRF Research Chair in Astrophysics and Space Physics (SARChI)
- DST/NRF SA-NAM Bilateral Research Chair in Astronomy and Astrophysics (SARChI)

## Hosted platforms, centres and institutes

- DST/NRF Centre in Indigenous Knowledge Systems (CIKS)
- Centre for Human Metabolomics

#### **Exceptional programmes**

The faculty offers an extensive array of undergraduate agricultural, environmental and sciences programmes, but stands out from many other institutions for the depth and range of its master's and doctoral programmes. These include:

- MSc in astrophysics and space science
- MSc in environmental sciences with integrated pest management
- PhD in animal health
- Bachelor and master's degree in indigenous knowledge systems
- PhD in science with disaster risk science
- BScHons in environmental sciences

#### Community engagement

Our projects are closely connected to the needs of communities on the ground.

- One of our projects brings disaster risk reduction knowledge to local governments to improve service delivery for local communities. In another, we teach a local community how to produce and market the climate change-resilient super food, amaranth grain. Then there is the nano-water filtration plant, which provides safe drinking water to the village of Madibogo.
- Our Nguni cattle project empowers emerging farmers to become commercially orientated, while another project is about developing indigenous therapies for cattle feed industries.
- We have two science centres that promote science, technology, engineering, mathematics and information sciences to local schools and the public.

## THEOLOGY

#### **Exceptional programmes**

- Our BA in ancient languages is one of the few programmes in Africa that offer specialisation in Greek, Hebrew, Aramaic and other languages necessary for deep analysis and study of ancient texts and the Bible.
- We are also among the few universities that offer a traditional classics degree. In addition, we offer an exceptional general course in ancient cultures and a wide selection of specialist courses in Egyptian, Akkadian and other ancient cultures.
- The BTh with pastoral counselling and psychology has the unique combination of training in pastoral care and psychology.
- Then there is the BTh for students who wish to enter ordained ministry in the Apostolic Faith Mission (AFM). This programme is presented via distance delivery.
- On the other hand, the BDiv is for students who wish to become ministers in the Reformed Churches in South Africa (or other churches in the reformed tradition).
- The MTh in Christian ministry has eight specialised branches and focuses on the praxis of ministry.
- Also noteworthy is our PGDip programme, which enables students from study fields outside theology to do a master's degree in theology.

#### **Community projects**

We work with farm workers, inmates of correctional facilities and school learners on programmes that are both practical and spiritually nourishing.

- Our LIFEPLAN® Training and Equipping Programme provides training to farm workers on themes such as relationships, self-image, financial management and citizenship.
- Through the Fatherhood Training and Equipping Programme we train inmates at the Potchefstroom Remand Detention Facility to be more effective fathers.
- We have several programmes at local schools. These programmes encourage good citizenship among learners, offer guidance with study methods, focus on the hygienic wellbeing of female learners, and promote literacy and academic skills for learners.

The School for Ancient Languages presents formal language classes for primary and secondary school learners in Potchefstroom.

#### **NWU** research entities

- Unit for Reformational Theology and the Development of the South African Society
- Ancient Texts: Text, Context and Reception

## KNOWLEDGE KNOWS NO BOUNDARIES

Our Unit for Open Distance Learning (UODL) is the second largest provider of open distance learning programmes in South Africa, managing and delivering academic programmes from six of our eight faculties. Most of the 19 000 students reached are from the Faculty of Education.

In addition, the unit delivers the University Preparatory Programme (UnivPrep) to about 550 participants in South Africa.

Over the past 16 years, more than 85 000 NWU qualifications have been awarded to ODL students. In 2018 alone, almost 6 000 qualifications were conferred through the unit.

## How do we do it

Our 86 learning support centres across South Africa, as well as in Namibia, are equipped with interactive whiteboards.

With this interactive technology, students and lecturers can type, draw, see and hear one another on the more than 200 interactive whiteboards.

Eight modern studios allow national and international broadcasts from the Unit for Open Distance Learning building on the campus in Potchefstroom. The contact sessions are recorded and posted on the web so that students can access them any time afterwards for revision.

The unit has 114 exam centres and handles about 50 000 exam scripts during each examination session.

## Our footprint is growing

Over the past few years, the majority of provincial education departments entered into agreements with the NWU, enabling unqualified and underqualified educators to enhance their qualifications and skills. The generosity of donors enables us to offer bursaries to some educators in rural areas.

## PRODUCING WELL-ROUNDED STUDENTS

The NWU is a place where students can achieve academic excellence and at the same time give their imagination wings, visualise their aspirations and incubate future success. Campus life is geared to holistic growth and development, and students are encouraged to participate in a wide range of cultural, sports, counselling and well-being activities.

## Student profile

Diversity is the defining characteristic of the NWU's student profile. This gives our students a competitive advantage as they grow in their ability to communicate and interact.

#### In \*2019, the NWU student profile looked like this (as on 1 June):

	2014	2015	2016	2017	2018	2019
Total student enrolment	63 135	64 070	69 736	62 558	65 212	66 737
Contact	37 193	37 943	39 064	41 765	43 418	43 930
Distance	25 942	26 127	30 672	20 793	17 794	22 807

\*(2019 figures are not final)



### Undergraduate vs postgraduate

Although the majority of students were undergraduate students, the NWU also had significant numbers of postgraduate students enrolled in \*2019. Among them are:



\*(2019 figures are not final)

## Study options

Here are some of the study choices of students in \*2019:

Major field of study	Contact	Distance
Science, engineering and technology	11 741	91
Business and management	11 590	0
Education	7 219	21 988
Humanities and social sciences	11 078	598

\*(2019 figures are not final)

## Promoting academic success

We offer several programmes to assist students academically:

- All first-year students do academic literacy and skills tests to determine whether they would benefit from the additional academic literacy modules offered.
- Other academic support includes peer mentoring, tutorials, reading laboratories and writing centres.
- We also offer Supplementary Instruction (SI), which is an internationally recognised student academic support system.
- Our University Preparatory programme (UnivPrep) is a bridging programme for students who would otherwise not qualify for admission to university.
- We offer refresher programmes in mathematics to first-year students registered for programmes that include modules in mathematics.
- Our various extended programmes enable students to complete their studies over an extended period of time.

### Home sweet home

We currently provide 10 646 beds which are managed by Residence and Catering Services. These include beds owned by the NWU and others leased from private providers (operated as part of the formal residences of the university).

The number of students living in accredited housing facilities provided by private landlords is estimated at another 3 350 beds while many more students live in private non-accredited facilities.

There are 38 NWU-owned residences on the three campuses, plus one off-campus residence in Vanderbijlpark, where we are also renting an additional four residences off campus. A new residence on the campus in Vanderbijlpark was completed and students moved in in July 2019.

The aim is to house at least 50% of contact students and 75% of first-year students in residences in the next 10 years.



## Lending a helping hand

#### We encourage our students to contribute to society through volunteerism.

Since 2001, our campus in Potchefstroom has had the biggest registered student welfare organisation (the Student RAG Community Service) in the world. In 2019, the Rag committee of 2018 donated about R2,1 million to deserving projects and individuals from money raised by the Student RAG Community Service and RAG the previous year.

In addition, the campuses hold fundraising events such as golf and jazz days and cycling events to ensure that needy students eat two balanced meals every day. Students also do voluntary community service at local children's homes, shelters for the homeless, old age homes and organisations that work with animals, such as the SPCA or Paws.

A total of 15,7 tons of clothing and blankets – gathered in fundraising events – were distributed in the community. Students in need received a total of R925 776 from the Student RAG Community Service.

Students also offer extra maths classes in schools to assist teachers.

## BUILDING IMAGINATION AND MUSCLE

Students have many opportunities to develop their talents by

participating in sport, arts, cultural and other extramural activities.

## Culture in the spotlight

Cultural activities include debate, drama, dance and cultural societies, orchestras, first-year concerts, musicals, talent competitions, choirs, vocal groups, art festivals, exhibitions and competitions, beauty contests, campus radio stations and student newspapers.

## Off to a running start

Based on achievements on the sports field, the university is one of the top sports universities in South Africa. We boast the following:



#### We also have numerous smaller sports codes and activities:

Cycling / karate / softball / squash / rock-climbing / table tennis / competitive chess / body building / boxing / netball / dancing / rugby sevens / aerobics / ju-jitsu / water sports (rowing and canoeing) / marathon running / basketball / equestrian tent pegging

### We are the champions

NWU sports teams and individuals have produced outstanding performances in the University Sport South Africa (USSA)

championships and the Varsity Sport Competition.

#### Here are some of the latest USSA highlights:



### On the world map

A number of NWU students are making their mark in the international student sports arena.

Fourteen athletes took part in the International University Sports Federation World University Games in Italy. Chederick van Wyk won silver medals for the 100 m and 200 m. Rantso Mokopane won silver in the 3000 m steeplechase.

Three athletes represented South Africa in the IAAF Cross Country World Championships in Denmark and six athletes attended the Africa Games in Morocco.

Chederick van Wyk competed at the World Relays in Yokohoma, Japan. He was part of the men's 4x200 m squad that won a silver medal. They also set a new Sout African record.

Chanté du Toit took part in the International Gymnastics Federation's rhythmic gymnastics event in Russia.

Swimmer Nadia Blaauw was invited to join Swimming South Africa's Open Water squad taking part in the Len Cup 10 km event in Spain.

Pieter van den Berg was appointed as head coach for the World University 7's held in Milan, Italy. Two NWU players, Longulo Goza and Eugene Hare were part or the SA squad.

## Top training venues

Elite sportspeople from various levels of participation use the top-of-the-range facilities at the NWU High Performance Institute (HPI) in Potchefstroom. It has one of the bestequipped sports gymnasiums in Africa and offers a complete range of sports training, medicine, research, nutritional and sport psychology services. The Institute for Sport Science and Development provides scientific support services to national and provincial sports federations, the North-West Academy of Sport and various sporting codes on our campuses.

A modern Sports Village accommodates national and international sports teams that train at these venues.



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#### Acknowledgements:

Compilation: Corporate Communication, NWU

#### Design, layout and printing:

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#### Photography

NWU service providers and colleagues



