

QUALITY IN TEACHING-LEARNING, RESEARCH AND SERVICE DELIVERY

The Faculty of Natural and Agricultural Sciences offers diverse and interesting qualifications, characterised by relevant and integrated training. Here, students develop life skills that enable them to handle challenges in the workplace.

Our academic staff are diligent and committed to students and research activities. Some of our staff also enjoy international recognition. The Faculty of Natural and Agricultural Sciences strives to equip students with knowledge and life skills in order to make a success of their careers. We offer quality training that includes general moulding of the student, personal attention, quality equipment and meaningful, outcome-based academic programmes.

INTERNATIONALLY KNOWN

The NWU proudly represents the African continent on the global stage as one of the largest and most sought-after universities in the world. Well known for its excellence in teaching-learning and research, the University boasts a student population that is representative of 66 different nationalities. The latter, bears testament to the NWU's global competitive advantage.

Through strategic international collaborations with experts and other institutions of higher learning, the NWU further ensures a global footprint of distinction and quality. Consequently, the NWU takes great pride in the worth of its comprehensive undergraduate and postgraduate programmes, as well as its proven research track record. It is therefore no surprise that NWU graduates are held in high regard by employers the world over.

FACT, NOT FICTION!

- The NWU is rated among the top 5% of universities in the world (QS ranking).
- The Faculty of Natural and Agricultural Sciences excels in research and innovation
- We have a state-of-the-art weather radar on the Lekwena Wild Life Estate in Potchefstroom.
- We have a top-of-the-range telescope on our Mafikeng Campus, called the MAT. The MAT calls the Mafikeng Astronomical Observatory (MAO) its home. It is a 16-inch Meade LX200 GPS telescope. With top-of-the-range software and an app, the MAT can be accessed by anyone located anywhere as long as they have the necessary permission granted by our Centre for Space Research. The dome that protects the telescope was the first of its kind to be built in South Africa by South Africans.
- Researchers from our Unit for Environmental Sciences and Management won a research grant from *National Geographic*.
- Our Centre for Radiation Science and Technology also received a grant from the nuclear regulator.
- We offer services such as water-quality testing, eco-analytic tests, statistical consultation services and instrument making to the public.



ON GOOD AUTHORITY

A message from the acting executive dean, Prof Eno Ebenso

“The Faculty of Natural and Agricultural Sciences offers diverse and interesting qualifications, characterised by relevant and integrated training. Here, students develop life skills that enable them to handle challenges in the workplace. Our academic staff are diligent and committed to students and research activities. Some of our staff also enjoy international recognition. The Faculty of Natural and Agricultural Sciences strives to equip students (at undergraduate and postgraduate levels) with knowledge and life skills in order to make a success of their careers. We offer quality training that includes the general moulding of the student, personal attention, quality equipment and meaningful, outcome-based academic programmes.”

WE WANT TO HEAR FROM YOU



Phone 018 852 761 (undergraduate and honours)
018 299 2816 (higher degrees)



E-mail adelle.jerling@nwu.ac.za (undergraduate and honours)
farzana.hussain@nwu.ac.za (higher degrees)



Web <http://natural-sciences.nwu.ac.za/>

APPLICATION REQUIREMENTS

The Faculty of Natural and Agricultural Sciences has 11 different application requirements for various diploma and degree courses. Please refer to the link below to download detailed information:
<http://studies.nwu.ac.za/undergraduate-studies/fields-study>

HOW DO I APPLY?

Please refer to our website for online application.
<http://studies.nwu.ac.za/studies/apply>

MONEY MATTERS

For a wide range of bursaries and financial support, please contact 018 299 2672 or visit
<http://studies.nwu.ac.za/financial-support>



Fact Sheet

Faculty of
**NATURAL AND
AGRICULTURAL SCIENCES**



THE NUMBERS SPEAK FOR THEMSELVES



Male:
3 788



Female:
2 869



Master's degrees:
638



Doctorates:
397



African students:
4 290



International students:
314



Academic staff:
362



NRF-rated researchers:
83



Total students in faculty:
6 657



■ Undergrad: 5 144
■ Postgrad: 1 486
(Occasional students: 27)

UNDERGRADUATE STUDIES:

School of Physical and Chemical Sciences

The School of Physical and Chemical Sciences provides relevant, value-driven training which prepares students for the industry. The school's expertise is divided into three subject groups, namely Biochemistry, Chemistry, and Physics.

School of Biological Sciences

At the School of Biological Sciences, our vision is to provide relevant value-driven training and research of international standard, focus on proven expertise in the environmental sciences. We also offer a unique BSc degree in Tourism in which the subject-specific disciplines of Botany, Zoology and Geography are combined with Tourism.

School of Geo and Spatial Sciences

Geography and Environmental Management is the science in which the interaction between mankind and its environment is studied and researched. The school focuses on Geography, Geology, Environmental Management and Urban and Regional Planning.

School of Agricultural Sciences

The School of Agricultural Sciences on the Mafikeng Campus, comprises of four disciplines, namely Agricultural Economics, Animal Health, Animal Sciences and Crop Science.

On the Potchefstroom Campus students can register for two new BSc (Agric) degrees, namely: BSc (Agric) with Agricultural Economics and Agronomy, and BSc (Agric) with Soil Sciences and Agronomy.

School of Mathematical and Statistical Sciences

The School of Mathematical and Statistical Sciences is available on all three of the North-West University's campuses. It comprises two subject groups, namely Mathematics and Applied Mathematics and Statistics.

School of Computer Science and Information Systems

There is an urgent need in South Africa for computer scientists and information technologists. The different programmes in the School of Computer Science and Information Systems aim to equip graduates with degree-level expertise and applicable skills in the field of Computer Science and Information Systems.

The faculty has two centres at an undergraduate level:

- The Centre for Business Mathematics and Informatics (offering BSc degrees in Actuarial Sciences, Quantitative Risk Management, Financial Mathematics and Business Analytics/Data-mining). They are on the Potchefstroom and Vaal campuses, but the Vaal Campus does not offer Actuarial Sciences. The Vaal Campus has extended programmes in BMI which the Potchefstroom Campus does not have.
- Indigenous Knowledge Systems Centre, on the Mafikeng Campus. They offer a B-IKS undergraduate degree.

CUTTING EDGE RESEARCH

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

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

POSTGRADUATE PROGRAMMES AND RESEARCH

The Faculty of Natural and Agricultural Sciences offers four main options for postgraduate studies:

HONOURS DEGREES

BSc Honours in:

- Agricultural Economics
- Agricultural Extension
- Agriculture in Animal Health
- Agriculture in Crop Science
- Applied Radiation Science
- Botany
- Mathematical Statistics
- Biochemistry
- Microbiology
- Actuarial Science
- Quantitative Risk Management
- Financial Mathematics
- Business Analytics
- Applied Mathematics

- Geography
- Environmental Sciences

BCom Honours in:

- Informatics

MASTER'S DEGREES

MSc in:

- Agricultural Economics
- Agricultural Extension
- Animal Health
- Animal Science
- Agronomy
- Computer Science
- Business Statistics
- Mathematical Statistics
- Applied Mathematics
- Mathematics
- Natural Science Teaching
- Risk Analytics
- Business Mathematics and Informatics
- Physics
- Astrophysical Sciences
- Astrophysics and Space Science

- Chemistry
- Applied Radiation, Science and Technology
- Biochemistry
- Environmental Sciences
- Zoology
- Geography
- Geography and Environmental Management
- Microbiology
- Biology
- Botany
- Urban and Regional Planning
- Master of Environmental Management
- Master of Indigenous Knowledge Systems
- Master of Commerce in Computer Science and Information Systems

PHILOSOPHIAE DOCTOR

PhD in:

- Agriculture
- Animal Health
- Computer and Information Sciences
- Science with Statistics
- Science with Applied Mathematics
- Science with Mathematics
- Natural Science Education

- Chemistry
- Atmospheric Chemistry
- Environmental Sciences
- Zoology
- Environmental Sciences and Management
- Geography
- Geography and Environmental Management
- Microbiology
- Botany
- Biochemistry
- Hydrology and Geohydrology
- Operational research
- Radiation Science
- Urban and Regional Planning
- Social Science with Indigenous Knowledge Systems
- Disaster Risk Sciences

PhD of Philosophy in:

- Science with Business Mathematics
- Science with Risk Analysis

PhD in Science with:

- Space Physics
- Physics

Postgraduate Diplomas in:

- Agricultural in Economics and Management
- Agricultural in Economics
- Disaster Risk Management