

2025

FACULTY

At a Glance



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Natural and Agricultural Sciences

Fakulteit Natuur- en Landbouwetenskappe
Lefapha la Disaense tša Tlhago le Temo

Make today matter

www.up.ac.za

The University of Pretoria (UP) is one of Africa's top universities and the largest contact university in South Africa. We produce socially impactful research to find solutions for the world's most pressing issues.

We have a high quality of teaching and learning in the classroom, online, or in communities.

We have support in place for our students to graduate on time as well-rounded, responsible citizens, fully prepared for the world beyond university.



Our degrees are locally accredited and internationally recognised. We have agreements in place with the relevant legal accreditation bodies around the world to ensure the recognition of our programmes.



VISION

To be a leading research-intensive university in Africa, recognised internationally for its quality, relevance and impact, as also for developing people, creating knowledge and making a difference locally and globally.



MISSION

In pursuing recognition and excellence in its core functions of research, teaching and learning, and integrating engagement with society and communities into these, the University of Pretoria will use quality, relevance, diversity and sustainability as its navigational markers.



Promoting research with real-world impact

UP's research is focused on making a lasting impact and on changing the lives of people. Our theme-based approach leverages knowledge fields and research platforms for the greatest impact. Transdisciplinary research projects with the potential to make a real-life difference are strongly encouraged.

Fostering excellence in teaching and learning

Our educational approach has a strong focus on inclusivity and equitable access to education, but ultimately on equity of outcomes. Our committed academics have multiple approaches to teaching to ensure that students with a variety of learning strengths succeed.

Our teaching and learning approach is based on inquiry-based learning, hybrid learning and community-based learning. This means that students can ask questions and do research in their field to learn and discover answers on their own; be taught in a classroom or other formal contact environment, but also find additional activities, notes, resources and videos to supplement their classes online; or apply their knowledge in a practical way to help communities around University campuses.

ENABLING STUDENT SUCCESS FOR AN EQUITABLE FUTURE

UP is dedicated to fostering an environment where students can thrive and achieve success. We are fully committed to providing support and opportunities to our students in order to get them ready for work.

FACULTY OF NATURAL
AND AGRICULTURAL SCIENCE

NAS

NAS is the largest faculty of its kind in Africa. This diverse Faculty is renowned for its expertise in forestry and agriculture, food systems, biotechnology, life sciences, physical, mathematical and statistical sciences. Our broad range of disciplines allows us to tackle interdisciplinary societal problems by finding solutions to complex issues in modern society such as the sustainability of food production and food security and cures for poverty-related and infectious diseases such as Tuberculosis, HIV/AIDS and Malaria. This is achieved through targeted research, and appropriate training focused on the latest technology and innovation.



ACADEMIC OFFERING

33

Specialised
undergraduate
degree programmes

139

Specialised
postgraduate
degree programmes

UNIQUE DEGREES

BSc Meteorology (only degree of its kind offered in sub-Saharan Africa)

BSc Culinary Science (only degree of its kind in Africa)

13 specialised academic
departments

JOIN A WORLD-CLASS INSTITUTION



TOP 101–150

in the world for Agriculture and
Forestry (2ND in SA)*

TOP 301–350

in the world for Biological Sciences
(2ND in SA)*

TOP 301–350

in the world for Environmental
Sciences (3RD in SA)*

TOP 401–450

in the world for Mathematics
(1ST in SA)*

TOP 401–450

in the world for Natural Sciences
(Joint 3RD in SA)*

TOP 501–550

in the world for Chemistry
(3RD in SA)*

TOP 551–600

in the world for Physics and
Astronomy (5TH in SA)*

*2024 QS Subject Rankings

AGRICULTURE AND FORESTRY

TOP 100

H-Index

TOP 200

Citations

INTERNATIONAL RESEARCH NETWORK

TOP 100

Agriculture & Forestry

NUMBER 30

Environmental Sciences

NUMBER 58

Biological Sciences

NUMBER 60

Mathematics

NUMBER 68

TOP 150

Physics

TOP 250

Chemistry

Plant & Animal Science

#60 GLOBALLY · #1 IN SA

Ecology

#140 GLOBALLY · #3 IN SA

Food Science & Technology

#242 GLOBALLY · #4 IN SA

2025 US News Best Global Universities by Subject

SDG 15: LIFE ON LAND

TOP 200 #1 in SA and Africa
2024 THE Impact Rankings

27TH

in the world for Zoology and Entomology

URAP 2022–2023



RESEARCH EXCELLENCE

FACULTY OF NATURAL AND AGRICULTURAL SCIENCES



89%

Academic staff members with a doctorate



219

NRF-rated researchers



14

Research chairs



10

Research centres and institutes

WORLD-RENOWNED

- Centre for Microbial Ecology and Genomics (CMEG)
- Mammal Research Institute (MRI)
- UP Natural Hazard Centre

TOP 1% GLOBALLY

Agricultural Sciences, Biology and Biochemistry, Molecular Biology and Genetics, Environment/Ecology, Microbiology, and Plant and Animal Science

Essential Science Indicators

RESEARCH FOCUS AREAS



AGRICULTURE: Wide-ranging expertise in crop breeding, pre- and post-harvest applications, crop pests and pathogens, animal breeding, animal welfare, agricultural economics and extension, food production, consumer adoption, sensory evaluation, African crops, food systems and food security



BIG DATA AND DATA SCIENCE: Bioinformatics and computational biology, mathematical modelling in bioengineering and biosciences



ENVIRONMENTAL SCIENCES: Hazards modelling, environmental modelling, sustainable environmental management and biodiversity conservation



INFECTIOUS DISEASES: Human (Tuberculosis, HIV/AIDS, malaria) and veterinary diseases (ticks and tick-borne diseases, rabies, Helminths, African Horse sickness, bluetongue disease, etc)



PHYSICAL SCIENCES: Radio astronomy, biophysics, green chemistry, drug discovery, separation science, renewable energy



BIOPROSPECTING AND BIODISCOVERY: Traditional medicines, natural product drug discovery, medicinal plant science

INTERFACULTY RESEARCH CHAIRS



DSI/NRF South African Research
Chairs Initiative (SARChI) in
Sustainable Malaria Control



York Timbers Chair
in Wood Engineering

STUDENT LIFE

5 620+

NAS
students

81%

Undergraduate
student pass
rate

420+

International
students



CLICK/SCAN TO
LEARN MORE

COMMUNITY ENGAGEMENT Sci-Enza

NAS is not only committed to being a catalyst for the bettering of lives within our institution, but also within the various communities around us.

One of the biggest community engagement initiatives in the Faculty is the science centre, **Sci-Enza**



ENQUIRIES

Admission

Student Service Centre
+27 (0)12 420 2983

Make today matter
THE UP WAY

www.up.ac.za/nas