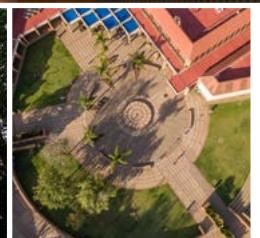


POSTGRADUATE STUDIES

AT THE UNIVERSITY OF PRETORIA

GO FURTHER **GO UP**



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Make today matter

OUR **VISION** IS TO BE ...

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

WE DO THIS THROUGH ...

- ... enhancing access and successful student learning
- ... strengthening the University's research and international profile
- ... fostering and sustaining a transformed, inclusive, and equitable University community
- ... optimising resources to enhance institutional sustainability
- ... strengthening the University's social responsiveness and impact in society.



CONTENTS



MESSAGE FROM THE **VICE-CHANCELLOR**

Welcome to the University of Pretoria!

We are very pleased that you are interested in enrolling or have already enrolled at the University of Pretoria (UP) for your postgraduate studies.

UP is one of the leading research-intensive universities nationally and internationally. The University provides an environment that is stimulating and conducive to cutting-edge research and innovation.

Postgraduate programmes are important in furthering your critical thinking and problem-solving skills through research and contributing to knowledge creation.

We lead in many research fields and hope that as a postgraduate student, your curiosity about the world interest and problem-solving will stand you in good stead. We have world-class facilities and laboratories for research. World-renowned researchers who are constantly pushing boundaries through cutting-edge, future-focussed research call UP their home. They are located in faculties and departments, research units, centres and institutes. In addition, we have over the last few years created multiple transdisciplinary research platforms, which bring UP researchers, fellow African researchers and our global research partners together, to co-create transformative impactful knowledge that contributes to better futures.

As you peruse this brochure you will get an overview of the many facets of UP – from our academic offerings to our support services

that enable you to succeed and enhance your academic skills on your postgraduate journey. This environment contributes to UP's status as one of the top universities on the continent.

We welcome you to a diverse student population with thousands of students from around the world at home at UP. Pretoria is the capital of South Africa and our campuses are nestled in the heart of the diplomatic and research hub of our country. Our qualifications are internationally benchmarked and recognised so with UP behind your name you have a bright future locally and globally.

More than all of this, the University of Pretoria is unique in that being part of our University is a way of life. THE UP WAY is how we teach and learn; innovate; impact; and live. We provide comprehensive support for your academic journey, so that you can graduate on time. We believe in providing quality education that is accessible through a hybrid model that can include a combination of in-person and online engagements depending on your field of study. We encourage research and innovation that seek to create African solutions to local and global challenges. We deploy our skills and resources to transform lives, communities, sectors, our country and continent, and to creating a better world. Our students are prepared for the world beyond



university because we provide work-readiness programmes and entrepreneurial training. We believe in ethical leadership and conduct. We encourage our students to have a good work ethic, be active and engaged citizens who contribute to society, and live in a way that is respectful, understanding and embraces the humane in all of us.

Thank you for
choosing UP for your
postgraduate journey.
We look forward to
meeting you!

Vice-Chancellor
PROF TAWANA KUPE





ON YOUR **WAY UP**

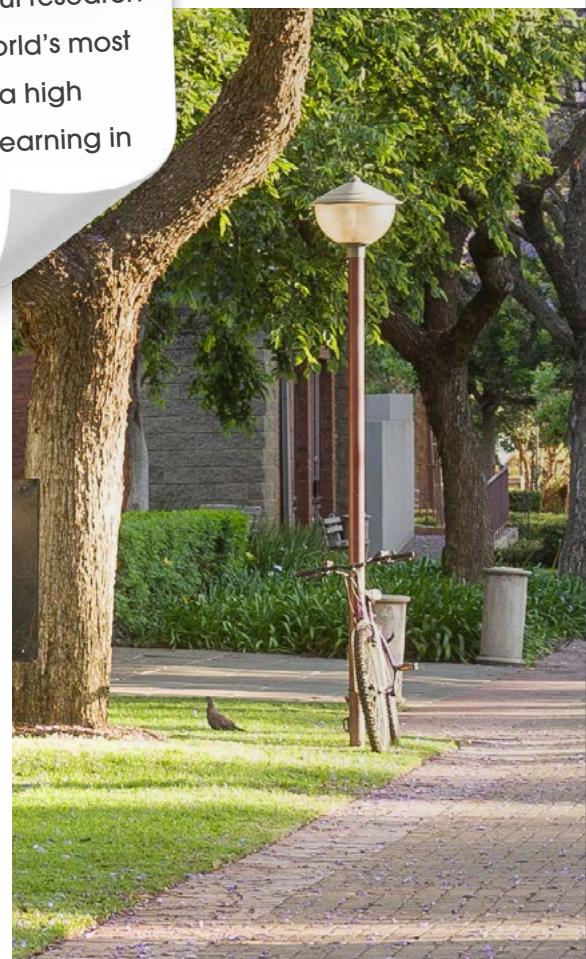
Finished your studies and looking for a suitable Postgraduate programme? Look no further than the University of Pretoria (UP), which offers a wide array of Postgraduate degrees that are exciting and highly beneficial to developing your skills further.

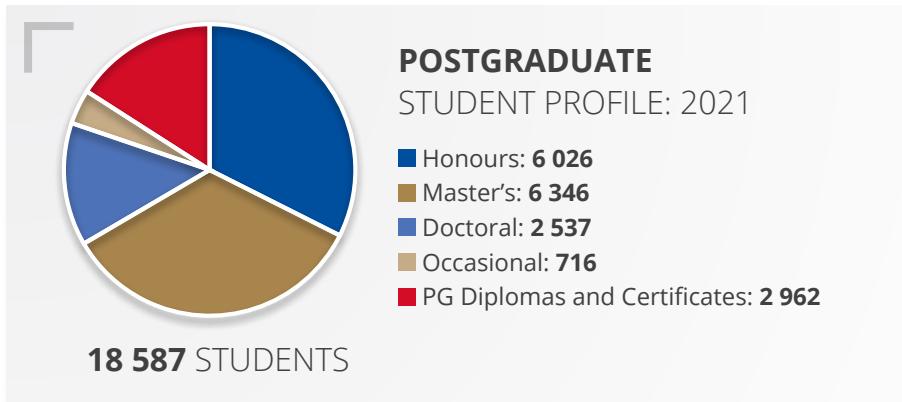
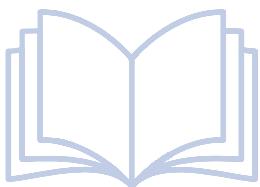
Being one of the largest research universities in South Africa means that we work on finding African solutions to global problems. We attract students from around the world who want to work and study at our excellent facilities and with our world-class researchers. The university has nine faculties, each of which has its own research focus areas and research interests. The faculties are well equipped with state-of-the-art research facilities, laboratories, academic libraries, skills development and practical learning opportunities. We pride ourselves on encouraging innovation by ensuring that UP innovators' inventions are patented by the **Technology Transfer Office (TTO)**.

The TTO has been involved in the creation of more than 10 start-up companies, which employ more than 200 people, the majority of whom are UP graduates.

We are 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 and in communities.

We know that postgraduate studies by research or coursework can be overwhelming; we therefore give our students support with their studies to ensure that they complete successfully and in a timely manner. The FlyHigher@UP programme ensures postgraduate students have all the information and tools to take their career planning and research training to the next level.



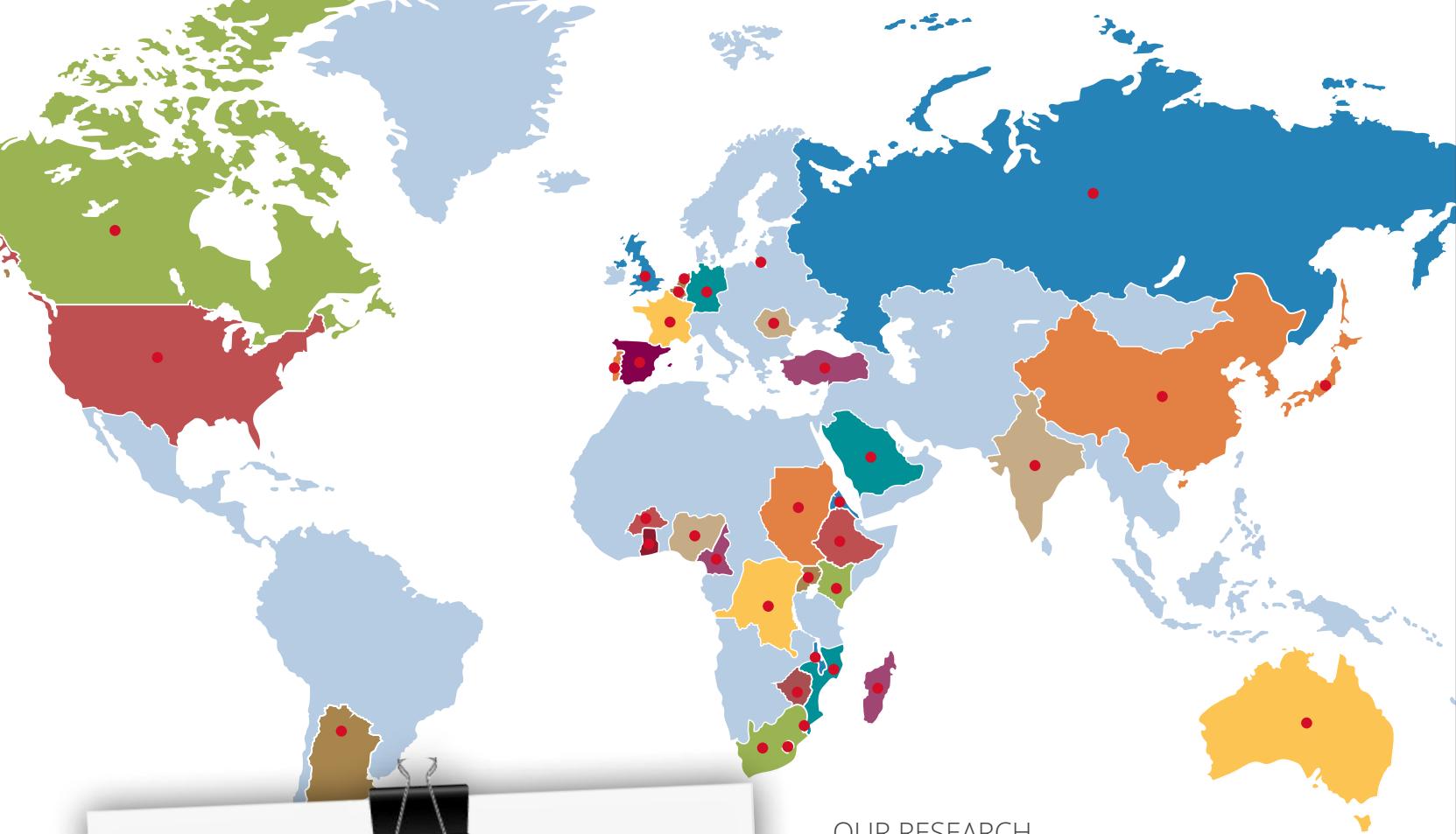


WELCOME TO THE
NEXT LEVEL: UP.

R626.7
million

External funding
received
for research
in 2020

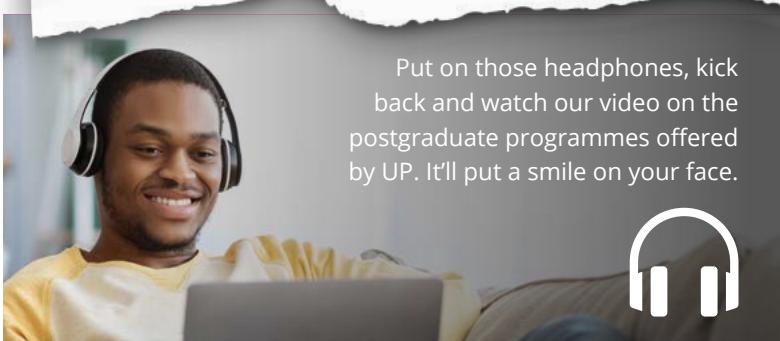




World-Wide Appeal

UP is the largest contact university in South Africa, with **55 738 students**, of which **18 587** are enrolled for postgraduate studies. The majority of students come from Africa, Asia and Europe.

The countries highlighted here reflect the countries of origin for students as at 2020.



Put on those headphones, kick back and watch our video on the postgraduate programmes offered by UP. It'll put a smile on your face.

OUR RESEARCH FOCUS AREAS:

-  Agriculture and sustainable food systems
-  Climate change and the environment
-  Economic development and sustainable futures
-  Energy
-  Heritage studies
-  Inequalities, Social Justice and Human Rights
-  One Health
-  Smart infrastructure and innovation
-  Water

#CHOOSEUP

A DOZEN GOOD REASONS TO STUDY FURTHER AT UP

Here are some good reasons why UP should be heading straight to the top of your list.



1 RATED HIGHLY IN THE WORLD TOP 1% IN THE WORLD

UP ranks in the top 1% internationally in 10 fields:
 Agricultural Sciences
 Biology & Chemistry
 Clinical Medicine
 Economics & Business
 Engineering
 Environment/Ecology
 Immunology
 Microbiology
 Plant and Animal Sciences
 Social Sciences
 Source: Web of Science Essential Science Indicators

45TH IN THE WORLD
 Zoology¹

48TH IN THE WORLD
 Mineral and Mining Engineering¹

49TH IN THE WORLD
 Faculty of Veterinary Science¹

60TH IN THE WORLD
 Law²

Source:

1. Universal Ranking by Academic Performance (URAP) for subjects
2. QS World University Rankings by Subject for 2021

2 RANKED TOP IN AFRICA

- **GIBS – top business school**
 Source: Financial Times Executive Education 2020 Ranking
- **Veterinary Science – top faculty**
 Source: 2022 Times Higher Education's World University Rankings
- **Law – top faculty**
 Source: 2022 Times Higher Education's World University Rankings

3 RANKED TOP IN SOUTH AFRICA

- **Faculty of Law – highest number of accredited research outputs**
 Source: Report on the evaluation of the 2018 Universities' Research Output released by the DHET, April 2020
- **Department of Materials Science and Metallurgical Engineering**
 Source: Minerals Education Trust Fund, 2020 and 2021
- **SAICA CA qualifying exam pass rate (100%)**
 Source: January 2021 Initial Test of Competence (ITC)
- **School of Engineering**
 Source: 2020 US News and World Report Rankings on the Best Global Universities for Engineering
- **School of the Arts (Information Design)**
 Source: Loerie Awards, 2020

4 RECOGNISED FOR THE BEST SUBJECTS IN SOUTH AFRICA

The Quacquarelli Symonds World University Rankings by Subject for 2021 place UP as the leading university in South Africa for four subjects:

- Theology, Divinity & Religious Studies
- Engineering (Electrical and Electronics)
- Mathematics
- Accounting & Finance

6 RECOGNISED FOR TRANSDISCIPLINARY RESEARCH

We address the world's challenges through collaboration, transdisciplinary approaches and exciting new platforms to co-create new knowledge that translates into solutions.

Future Africa Research Institute
Dedicated campus for research relevant to Africa's development

Engineering 4.0
Collaborative hub for Smart Cities and Smart Transport

Javett-UP Art Centre
Focusing on the importance of Africa and its art in the world

Innovation Africa@UP
Focusing on agriculture and food security

5 OUR STAFF ARE HIGHLY-RATED ACADEMICS

565
NRF-rated researchers

16
A-rated NRF-rated researchers, international leaders in their field

69.4%
Academic staff with doctorates, highest ratio in SA



7 RECOGNISED AS THE UNIVERSITY FOR PARTNERSHIPS

First university in Africa

- ... designated as a WHO Collaborating Centre for the prevention of deafness and hearing loss
- ... chosen to host the Nobel Prize Dialogue, the theme of which was 'The Future of Work'
- ... to sign an institutional agreement with Cornell University to facilitate academic exchange and collaborative research on sustainability

First university in South Africa

- ... to partner with the Joint Institute for Nuclear Research
- ... admitted to the Alliance for African Partnership (AAP) led by Michigan State University



8 A STRONG GLOBAL FOOTPRINT

UP is partnering with

... the Southern African-Nordic Centre (48 universities)

... the Atlantic ECOsystems (36 partners from the EU, Brazil and SA)

Principal coordinator

... of Dirisana, a medical capacity-building project, funded by the EU

Lead university

... in Food Systems Research Network for Africa

Working with

... UNICEF and the UNDP to address developmental challenges of young people

9 A STRONG REPUTATION FOR MAKING A DIFFERENCE

TOP 16

UP is the only representative from Africa in the new University Social Responsibility Network, an international group of 16 top universities

TOP 100

The Times Higher Education Impact Rankings rated UP among the top 100 universities in the world in five categories based on the Sustainable Development Goals:

- Good Health and Well-being
- Quality Education
- Industry, Innovation and Infrastructure
- Peace, Justice and Strong Institutions
- Partnerships

10 WE DRAW TOP STUDENTS FROM AROUND THE WORLD

55 738

Total number of contact students enrolled

3 756

International students (6.53%)

18 587

Postgraduate students enrolled

1 882

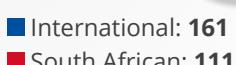
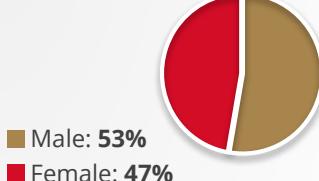
International postgraduate students

65.6%

Black postgraduate contact students

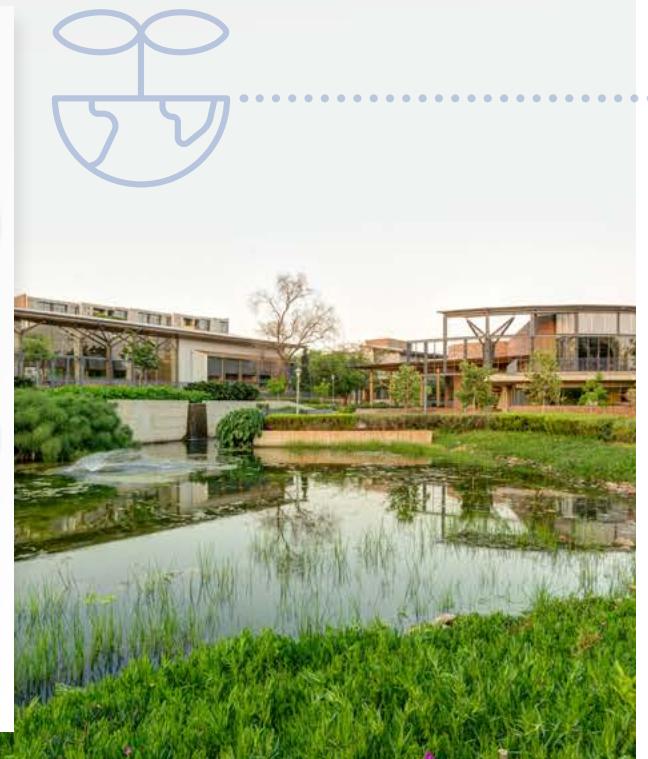
272

POSTDOCTORAL FELLOWS



225

International academic staff



11 INFRASTRUCTURE TO SUPPORT EXCELLENCE

4 Centres of Excellence

51 Research Chairs

Four of these chairs specialise in AI, data science, machine learning and cybersecurity.



72 Research Institutes and Centres

e-Techologies

Thanks to several years of developing a system-wide hybrid approach to teaching and learning we could seamlessly transition to online learning during the COVID-19 pandemic.

12 JOIN A WORLD OF INNOVATION



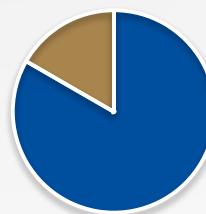
As a research-intensive university doing research that matters, we have made some major research breakthroughs recently in a number of areas.

- Clarified the **eating habits of massive black holes**, which links to the creation of new stars
- Discovered a **large group of 20 galaxies**, likely the most neutral hydrogen gas-rich group ever discovered
- Solved the **mystery of X-shaped radio galaxies** with the MeerKAT telescope
- Discovered new potent chemical compounds that could both **treat and eliminate malaria**
- Produced nanobodies that could be used to **test and treat COVID-19 patients**
- Developed **world-first technology** to measure personal sound exposure in a person's ear canal for safe listening
- Performed in vitro fertilisation to support **dwindling rhinoceros** populations
- Revolutionised the way TB is detected through a **3D-printed insert** added to simple face masks
- Involved in a groundbreaking study that reveals **southern Africa as birthplace** of modern Homo sapiens.



PATENTLY SMART

UP innovators' inventions are patented by the Technology Transfer Office. The TTO has been involved in the creation of more than 10 start-up companies, which employ more than 200 people, the majority of whom are UP graduates.



12

Number of patents granted in 2020

■ International: 10

■ South African: 2

WHAT WE OFFER



THERE'S A FULL LIST OF THE OPTIONS AVAILABLE TO YOU **HERE.**

An extensive range of postgraduate study options are available, including vocationally orientated postgraduate diplomas, and honours, master's and PhD degrees.

HONOURS DEGREE

– YOUR GATEWAY TO POSTGRADUATE STUDIES
Entry requirements: A bachelor's degree.
Duration: One year, full-time study.

POSTGRADUATE DIPLOMA – ADVANCED DEVELOPMENT

Entry requirements: A bachelor's degree (need not always be from the same discipline)
Duration: One year, full-time study.

We encourage lifelong learning and our variety of **Massive Open Online Courses (MOOCs)** will keep you occupied. These free online courses have no entry requirements other than your desire to keep improving.



IMPORTANT:

Entry requirements differ between faculties and programmes, and meeting the minimum requirement does not guarantee admission. It's best to check with the relevant faculty.

X2

DOUBLE YOUR CHANCES

We encourage international collaboration with institutional partners, giving you the opportunity to study for a dual degree. Contact the faculty of your choice for further information.

MASTER'S – ADVANCED RESEARCH-BASED DEGREES

Entry requirements: A relevant honours degree or postgraduate diploma. A relevant bachelor's degree at NQF level 8 may also be recognised.
Duration: Two to three years, full-time study.

Requirements to be awarded your degree:
A master's degree by dissertation – acceptance of a dissertation or other form of research such as a technical report, one or more creative performances or works, or a series of peer-reviewed articles or other research-equivalent outputs.

A master's degree by coursework and mini-dissertation – a research project comprising a minimum of 60 credits at NQF level 9, culminating in the acceptance of a mini-dissertation or other forms of research (mentioned above).

PHD (A DOCTORATE) –

MOST ADVANCED RESEARCH DEGREE

Entry requirements: A master's degree.
Duration: Three to four years, full-time study.

Requirements to be awarded your doctorate: Acceptance of a doctoral thesis, an original piece of work that contributes substantially to knowledge in the chosen field.



Still need more information?

A visit to our **Postgraduate Support Office** will help you decide which route to take, or you can contact Career Services on **012 420 6438** or **careerservices@up.ac.za** for a consultation.



HOW TO APPLY



While various departments and faculties may require specific requirements, here is a general guide to applying to UP for postgraduate study.

GET READY

- Check that you have the required qualifications.
- If you have international post-school qualifications, have them evaluated by the South African Qualifications Authority (SAQA).
- Read up about your potential department on the UP website.
- Email queries to the administrator of your chosen department.
- Identify – and secure – a supervisor before applying.
- Have your official academic record ready.

TIP: Please pay attention to opening and closing dates for applying to study at UP.

We don't want you to miss out!



GET SET

- Make sure you have all the information about your proposed study programme.
- Decide whether you need **funding** and see what is available to you. (You'll also find more on page 13.)

TIP: Prospective students may contact postgraduate recruitment at the Postgraduate Support Office, email pgrecruitment@up.ac.za or contact your specific **Faculty Advisor**.

GO

- Complete your application and submit it **online**.
- Apply for a postgraduate residence space with your initial application (click 'yes' on the Residence Interest tab on the online application).
- Watch out for your acknowledgment letter and student number by email.

SAQA PROCEDURE

Visit www.saqa.org.za to have your qualifications evaluated before applying for postgraduate studies. SAQA only accepts online applications for the evaluation of foreign qualifications. No other form of application is accepted.

Contact information:

Call centre +27 (0)12 431 5000/70

Helpdesk +27 (0)86 010 3188

HOW TO APPLY

FOR POSTGRADUATE STUDIES AT THE UNIVERSITY OF PRETORIA

- Go to '[Apply at UP](#)'.
- Complete** the application form.
- Check** the correctness of the information you supplied on the online application form.
- Hit the **submit** button.
- You will receive an acknowledgement of receipt email with your student number.
- Your faculty and/or academic department will now **consider your application**
- The **outcome of your application** can be tracked via the UP Student Centre, by following the instructions contained in the acknowledgement letter that was sent to you.



start

For more information on the application process, **press start**.

Find your internationally recognised postgraduate programme [here](#):

INTERNATIONAL STUDENTS

International students get comprehensive support when they are still in their countries of origin. The International Cooperation Division (ICD) in the Department of Research and Innovation provides guidance and advice on immigration and visa matters.

The ICD also helps international students to secure UP accommodation or UP-accredited accommodation and advises international students on how to obtain South African medical aid.

Contact information:

Phone: +27 (0)12 420 3111

Email: isd@up.ac.za

FUNDING YOUR STUDIES

There are two broad categories of bursaries: UP-funded and externally funded bursaries. These bursaries are offered to honours, master's and doctoral students. Different funding organisations have different eligibility criteria and conditions for the bursaries they offer, so make sure you are familiar with the requirements.

Some bursaries are for South African

nationals only, while others cover South African as well as non-South African students.

The Postgraduate Support Office (PSO) helps current and prospective students access funding for postgraduate studies and research by announcing calls for funding through the University website, social media platforms, faculties and information sessions.

Funding opportunities are further communicated through the weekly UP research funding bulletin managed by the Research Capacity Development Unit within the Department of Research and Innovation (DRI).

Calls for applications open at different times during the course of the year.

FIND OUT MORE [HERE](#)



IMPORTANT:

Only students registering for full-time honours, master's and doctoral degrees are eligible to apply for funding. Students who register for postgraduate diplomas and certificates, or for the fourth year of any bachelor's degree, are not eligible for postgraduate awards.

TIP:

You can ask for a one-on-one funding information session from the PSO – but only once you have applied for admission.

THE I IN FUNDING

Don't ignore your role in securing funding.

Investigation. There are many forms of financial assistance for postgraduates so be sure you investigate all the options.



Industrious. While some forms of funding are based on financial need, most consider academic merit as a priority. So, the better your academic scores, the more options you have.



Intention. If funding is vital to your study, then start looking well in advance. Deadlines for applications could be months before the deadline to register for your degree.

TEAM UP

HOW TO FIND THE RIGHT SUPERVISOR

You've taken that bold first step to study further and an exciting journey has begun. A supervisor is of immense help during this journey; consider them as your GPS to keep you on course.

Postgraduate students conduct their research projects under the guidance and mentorship of supervisors, who are academic researchers in specific fields of specialisation. Because this supervision is so important to your studies, the availability of suitable supervisors is one of the factors that determine whether or not you can be accepted for a particular postgraduate degree programme.

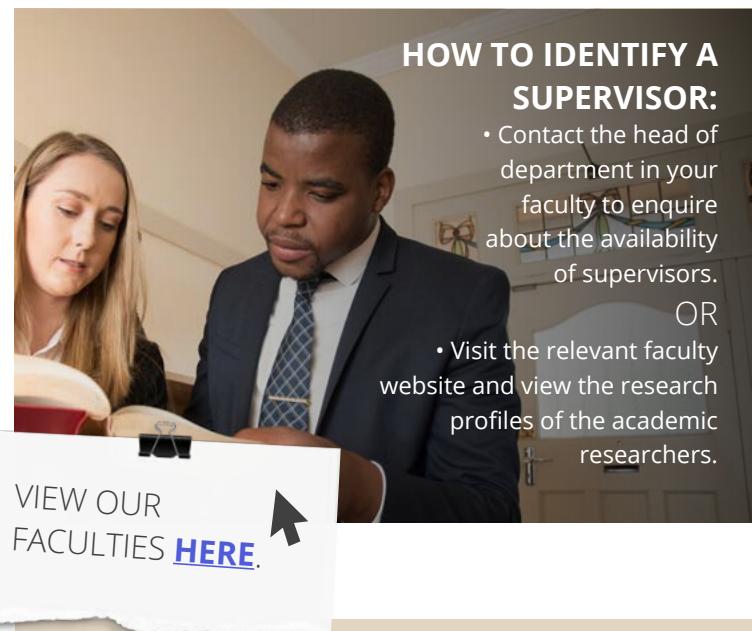
So, even before you start applying, please contact a potential supervisor to discuss your intended postgraduate studies.

Get to know your supervisor, as well as his/her area of expertise, before making a decision.

Should your potential supervisor decline your request for supervision, please do not take it personally – some supervisors may have reached the maximum number of students.

Availability of suitable supervisors is not the only criterion used for your admission. Other relevant factors that are taken into account include minimum entry qualifications and maximum numbers that can be enrolled per year per academic programme.

Once enrolled, you will sign a Memorandum of Agreement (MoA) with your supervisor, which stipulates the expectations, roles and responsibilities of each person.



HOW TO IDENTIFY A SUPERVISOR:

- Contact the head of department in your faculty to enquire about the availability of supervisors.

OR

- Visit the relevant faculty website and view the research profiles of the academic researchers.

VIEW OUR FACULTIES [HERE](#).

IMPORTANT:

We recommend that you identify a supervisor at least six months before applying.

IMPRESSIVE!

Learn about UP's research strengths by browsing the [Research Matters](#) website. You'll be impressed. Promise.



POSTGRADUATE SUPPORT

Our postgraduate students are an integral part of the University community and your contribution helps make us a leading research-intensive university in Africa.



Our Postgraduate Support Office (PSO) facilitates and coordinates continuous support from recruitment straight through to graduation. The PSO will help you with information about study programmes, research and funding opportunities as well as research support that will assist you in completing your qualification successfully.

The PSO promotes postgraduate education and research productivity through the **FlyHigher@UP programme**, which will enable you to gain invaluable research skills and workplace readiness in the process. This programme enables collaboration between the PSO and the academic staff across the university's nine faculties, business school and library services to ensure effective research training.

The programme was introduced to improve the throughput and success of postgraduate students and help them complete their studies in the minimum time.

Academic support comprises three main stages: proposal development and writing; data collection and analysis; and thesis, dissertation or journal article writing. The resources we offer allow students to participate in the University's major research breakthroughs that in turn lead to academic recognition and further career developments. This has demonstrated the quality of our research and as a result led UP to be among the top research-intensive universities in Africa and the world.

FIND MORE INFORMATION ON POSTGRADUATE RESEARCH SUPPORT [HERE](#).

2647

FlyHigher@UP
Number of postgraduate students who have benefitted from the programme since 2018.

Writing retreats and quantitative data analysis are the most popular topics.

A WORLD OF KNOWLEDGE

WHEN IN DOUBT, VISIT OUR LIBRARIES

The Department of [Library Services](#) has 11 faculty libraries spread over all the UP campuses. These provide access to a cache of print and digital publications and specialised services.

Each department at the University has a dedicated information specialist (trained librarian) who specialises in that department's resources. These information specialists form the link between the library and researchers and they can help with:

- literature searches
- relevant information
- referencing
- information literacy training
- research data management
- bibliometric analysis for funding and NRF applications
- appropriate accredited journals to publish in
- information on predatory journals.

There are subject guides for each subject field, as well as guides on copyright, EndNote, ORCID, Predatory publications, a research guide and researcher profiles and identifiers.

In the unlikely event of you not finding what you want, we can arrange interlibrary loans.

And don't forget to archive all your hard work: our institutional repository archives theses, dissertations, research articles and datasets for publication.



Quiet spaces

The University has a research commons on the Hatfield Campus in the Merensky II Library, at the Groenkloof Library and the Jotello F Soga library, Onderstepoort. These are dedicated spaces where researchers can work on their research articles, theses and dissertations free from noise and distractions, on computers that are all updated with statistical analysis tools, such as SPSS, Atlas.ti and SAS.



Creative spaces

UP is also home to the first Library MakerSpace in South Africa, a creative laboratory with 3D printers, 3D scanning, electronics and 3D design software. This is where people with ideas can get together with people who have the technical ability to make these ideas become a reality.

Learn how to navigate our online platform

The library has created a ClickUP course including the basic and advanced postgraduate trainings. These courses are self-paced.





11
Faculty libraries



700 000
Printed books



400 000
Licenced online books



165 500
Subscription-based
journal titles



74
Databases (among the
largest in the world)

AND THEN THERE'S LIBBY ...

The Library Services is at the forefront of our 4IR focus with a rather interesting "staff member", Libby, our resident library robot. She weighs just 19 kg and stands 90 cm tall, and sports more than 60 sensors. She performs general mundane, repetitive tasks which frees up other staff members to do more specialised and advanced work. Like help you.



Important!

All this information at your fingertips carries a responsibility to use it in a principled manner. UP has policies around ethical clearance and plagiarism and you need to acquaint yourself with these.

A PLACE TO CALL HOME

FINDING SOMEWHERE TO STAY



UP has **four dedicated postgraduate residences** and can offer on-campus accommodation to around 1 200 postgraduates. As space is limited, please apply early. You will not be considered for on-campus accommodation unless you apply.

Applications for postgraduate residence are processed and considered only once you have been conditionally admitted to a postgraduate programme. So, as soon as you have been admitted, follow up on your residence application.



OUR DEDICATED POSTGRADUATE RESIDENCES CAN BE VIEWED HERE:

- [Future Africa](#)
- [Tuksdorp](#)
- [Jakaranda](#)
- [Protea Mbelenhle](#)

TYPE OF ACCOMMODATION

Postgraduate residences all offer single-room facilities with shared common areas. Bachelor units are available but very limited. Enquire at tuksres.postgrad@up.ac.za. Remember to include your student number in all your enquiries.

OTHER RESIDENCES
OP Village (Onderstepoort) and **Hippokrates** (Prinshof campus) can accommodate both undergraduate and postgraduate students. View them here:

- [Hippokrates](#)
- [OP Village](#)

Enabling everyone

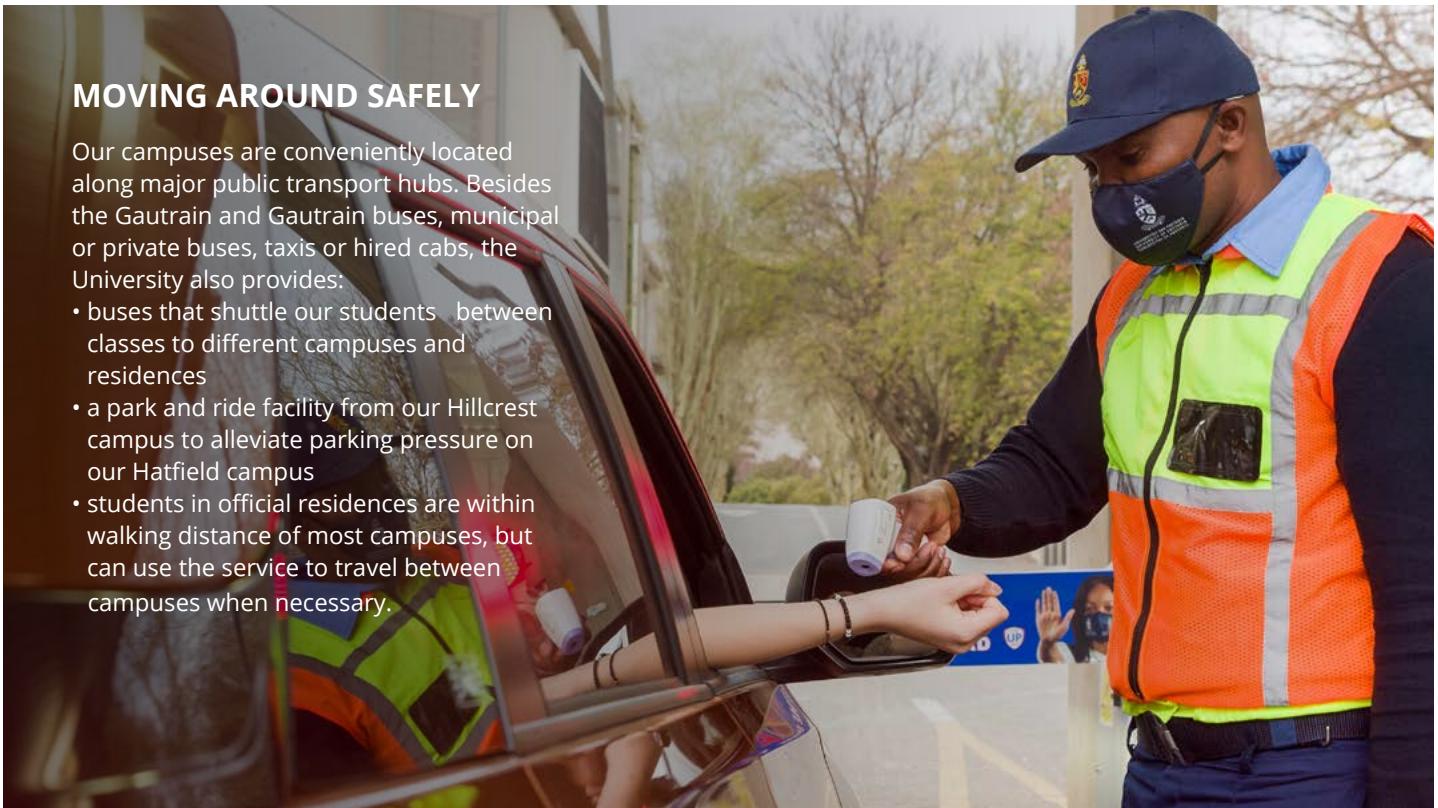
If you have a disability that requires a specific living environment, please indicate this when applying for accommodation. The UP Disability Unit and the Department of Residence Affairs and Accommodation will work together to find something that suits you.



MOVING AROUND SAFELY

Our campuses are conveniently located along major public transport hubs. Besides the Gautrain and Gautrain buses, municipal or private buses, taxis or hired cabs, the University also provides:

- buses that shuttle our students between classes to different campuses and residences
- a park and ride facility from our Hillcrest campus to alleviate parking pressure on our Hatfield campus
- students in official residences are within walking distance of most campuses, but can use the service to travel between campuses when necessary.



Gautrain, an express commuter rail system in Gauteng, links Johannesburg, Pretoria, Ekurhuleni and OR Tambo International Airport. Its Hatfield and Pretoria stations are near the University of Pretoria's Hatfield and Prinshof campuses respectively with bus routes stopping near each campus. The Hatfield station is within walking distance of the Hatfield campus.



The Green Route Project is one of numerous proactive initiatives by the University to provide and maintain a secure work and study environment for students and staff. The Route makes provision for security officers to accompany students and personnel members on foot to and from their residences and vehicles or any nearby places. More information on 24-hour security services can be found online at the [Department of Security Services](#).

TIP

If you cannot get in to any of our campus residences, try the following [reputable sources](#) for private accommodation.



SPOILT FOR CHOICE

OUR FACULTY FEATURES



9

FACULTIES



ECONOMIC AND
MANAGEMENT SCIENCES



HEALTH SCIENCES



THEOLOGY



EDUCATION



NATURAL AND
AGRICULTURAL
SCIENCES



LAW



HUMANITIES



ENGINEERING, BUILT
ENVIRONMENT
AND INFORMATION
TECHNOLOGY



1 BUSINESS SCHOOL



GORDON INSTITUTE
OF BUSINESS SCIENCE

120 ACADEMIC DEPARTMENTS

At UP you can choose an area for further study from our nine faculties and one business school. The faculties offer a total of 1 175 academic programmes, of which 145 are undergraduate and 1 030 are postgraduate programmes. This large number of postgraduate programmes

FOR FURTHER DETAIL VISIT YOUR **RELEVANT FACULTY** 

contributes significantly to the research outputs of the University, which are among the highest in the country.

Here is a high-level overview of each faculty as well as their niche offerings and significant achievements.



FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES

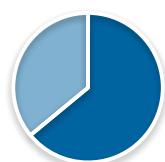


Academic departments:

- Accounting
- Auditing
- Business Management
- Economics
- Financial Management
- Human Resource Management
- Marketing Management
- School of Public Management and Administration
- Taxation

Centres, Institutes, Research Chairs:

- African Tax Institute (ATI)
- Albert Luthuli Leadership Institute
- Unit for Forensic Accounting
- South African Reserve Bank Chair in Monetary Economics
- South African Research Chair in Tax Policy and Governance



2021 Postgraduate student enrolments
■ M: 534
■ D: 251



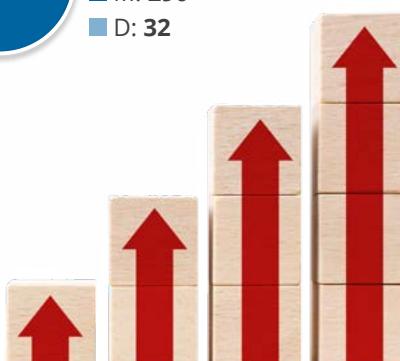
2020 Postgraduate student graduations
■ M: 290
■ D: 32



2020 Total research outputs: **114.8 units**



NRF-rated researchers: **37**



RANKED NO 1 IN SOUTH AFRICA: • Accounting & Finance

Source: Quacquarelli Symonds World University Rankings by Subject for 2021

PROF MARGARET
CHITIGA-MABUGU
Dean

PROF JOHAN OBERHOLSTER
Deputy Dean: Teaching and Learning

PROF KARIN BARAC
Deputy Dean: Research and
Postgraduate Studies

Niche areas:

- The Department of Auditing is one of only 11 tertiary institutions in the world to be accredited at Centre of Excellence level in the Institute of Internal Auditors Global Internal Audit Education Partnership (IAEP) programme. Students with postgraduate qualifications in Internal Auditing are sought-after in the market.
- The Albert Luthuli Institute (also hosting in the SA SDG Hub) offers a Master's in Development Practice, Africa's first multidisciplinary postgraduate qualification that focuses on the implementation of the SDGs.
- The Department of Business Management, in collaboration with UP's Faculty of Law, offers a first-of-its-kind master's degree in insolvency and business rescue.
- The Faculty is a member of AACSB International – the Association to Advance Collegiate Schools of Business

2020-2021 HIGHLIGHTS

- The Department of Economics has been ranked 27th worldwide, based on its 10 most productive economists for their publications during the last 10 years, by IDEAS. repec.org.

- The Quacquarelli Symonds World University Rankings by Subject for 2021 has also ranked Economics and Econometrics 2nd in South Africa.

FACULTY OF HUMANITIES



Academic departments:

- African Languages
- Afrikaans
- Ancient and Modern Languages & Cultures
- Anthropology and Archaeology
- English
- Historical and Heritage Studies
- Philosophy
- Political Sciences
- Psychology
- School of the Arts
- Sociology
- Social Work and Criminology
- Speech-Language Pathology and Audiology

Centres and Units:

- Centre for Augmentative and Alternative Communication (CAAC)
- Centre for Mediation in Africa (CMA)
- Centre for Sexuality, AIDS and Gender
- Unit for Academic Literacy
- Unit for Creative Writing
- Itsoseng Clinic
- Emerging Scholars Initiative

Niche areas:

- Africa's first and only Master's programme in Tangible and Heritage Conservation
- Africa's only Specialist Neuro-Otologic Test Centre
- Department of Political Sciences participated in the world's first Global Classroom



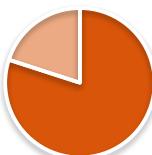
2020 Total research outputs: **177.7 units**



NRF-rated researchers: **71**



2021 Postgraduate student enrolments
■ M: **639**
■ D: **340**

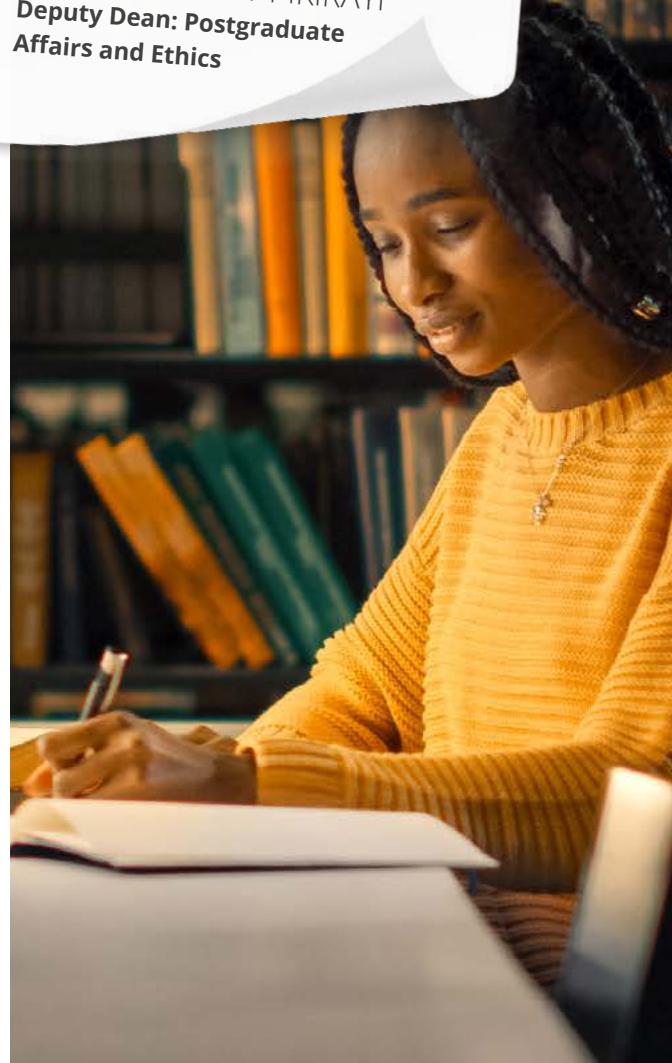


2020 Postgraduate student graduations
■ M: **167**
■ D: **48**

PROF VASU REDDY
Dean

PROF SANDY AFRICA
Deputy Dean: Teaching and Learning

PROF INNOCENT PIKIRAYI
Deputy Dean: Postgraduate Affairs and Ethics



RANKED NO 1 IN SOUTH AFRICA:

- School of the Arts (Information Design)



Source: Loerie Awards, 2020

FACULTY OF
VETERINARY SCIENCE

Academic departments:

- Anatomy and Physiology
- Companion Animal Clinical Studies
- Paraclinical Sciences
- Production Animal Studies
- Veterinary Tropical Diseases

Centres, Institutes, Research Chairs:

- SARChI Research Chair in Poultry Health and Production
- Afrivet Chair in Primary Animal Healthcare
- Equine Research Centre (ERC)
- Centre for Veterinary Wildlife Research
- Onderstepoort Veterinary Academic Hospital (OVAH)

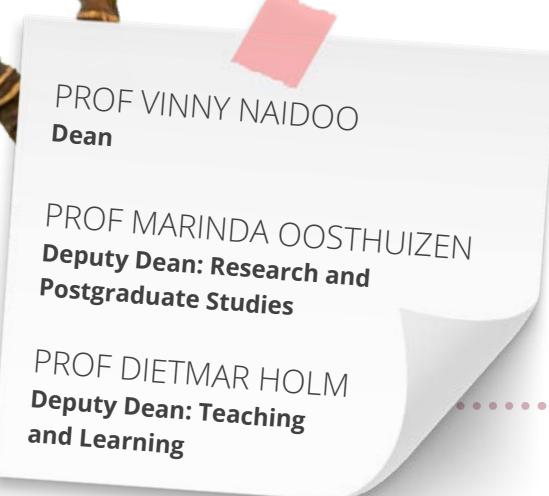
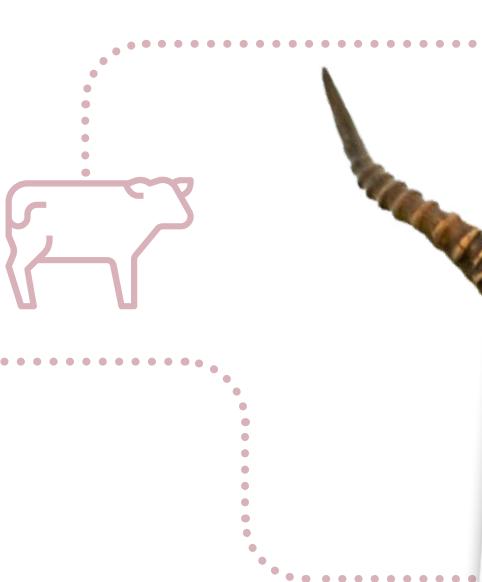
Niche areas:

- Research into high-impact infectious diseases
- One Health and Zoonotic Diseases
- Wildlife research projects, from disease epidemiology to advanced wildlife immobilisation
- Clinical diagnostics and advanced patient care
- Ethnoveterinary medicine, toxicology and pharmacology
- Development of new diagnostic tests, such as a test for African Horse Sickness (AHS)
- New vaccine development, such as the avian influenza vaccine derived from the tobacco plant



TOP RANKINGS:

- Ranked in the Top 50 in the QS World University Rankings and Shanghai Rankings (2020)
- 7th ranked veterinary school in the southern hemisphere
- Only faculty of its kind in South Africa



PROF VINNY NAIDOO
Dean

PROF MARINDA OOSTHUIZEN
Deputy Dean: Research and Postgraduate Studies

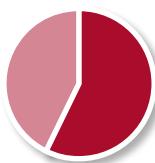
PROF DIETMAR HOLM
Deputy Dean: Teaching and Learning



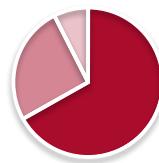
2020 Total research outputs:
113.8 publication units
A record high, which translates to **251 manuscripts** in 2020.



NRF-rated researchers: **40**



2021 Postgraduate student enrolments:
■ M: **156**
■ D: **116**



2020 Postgraduate student graduations
■ M: **54**
■ D: **21**
■ PG DIP: **6 (first cohort)**

2020-2021 HIGHLIGHTS

- Opened a dedicated wildlife clinic at its Onderstepoort Veterinary Academic Hospital (OVAH).
- In a first for South Africa, Makokou, the gorilla from the Johannesburg Zoo, was airlifted to the Faculty for a once-in-a-lifetime CT scan to determine the cause of a nasal discharge which led to veterinary and human medical specialists joining forces for a historic surgical procedure to save Makokou.
- The OVAH acquired its first high-field MRI scanner, the first of its kind in Africa.

- Performed the first dynamic neuroprosthesis on a horse in South Africa.
- Performed life-saving, groundbreaking heart surgery on two dogs.
- Performed partial knee replacement surgery on a cat, a first for South Africa.
- Launched Bovine Tuberculosis and Brucellosis diagnostic services in its Department of Veterinary Tropical Diseases.

FACULTY OF EDUCATION



Academic departments:

- Humanities Education
- Science, Mathematics and Technology Education
- Educational Management and Policy Studies
- Educational Psychology
- Early Childhood Education

Centres, Institutes, Research Chairs:

- Lesson Study
- Unit for Distance Education
- Centre for Evaluation & Assessment
- The Centre for the Study of Resilience
- Interuniversity Centre for Education Law and Education Policy
- Living Lab for Innovative Teaching at the University of Pretoria (LLITUP)
- Centre for Diversity and Social Cohesion

Niche areas:

Through strategic collaborations, the Faculty contributes to the renewal of skills in the education profession. School leadership, leadership in the Technical and Vocational Education and Training (TVET) sector, training in virtual impairment and Information and communications technology (ICT) in education are some of the 21st-century skills in which we are developing expertise in response to the needs of the education sector.

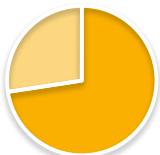


2020 Total research outputs: **71.3 units**



2021 Postgraduate student enrolments

**M: 291
D: 229**



2020 Postgraduate student graduations

**M: 67
D: 28**



NRF-rated researchers: **20**



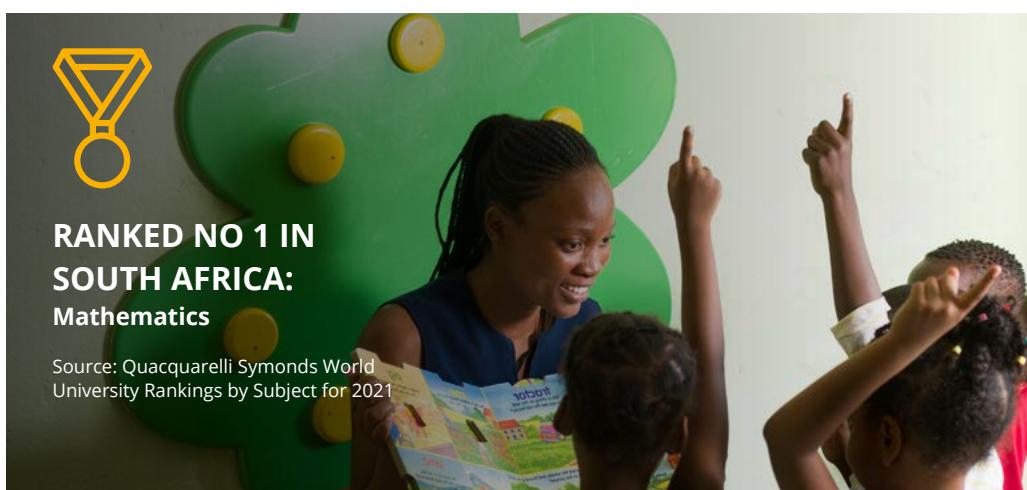
2020-2021 HIGHLIGHTS

The Faculty successfully delivered a Postgraduate Programme in School Leadership and Management, presented in partnership with the Limpopo Department of Education and ETDP SETA for 2020/2021, and has secured a second cohort from Limpopo and another cohort after partnering with Mpumalanga Department of Education.



RANKED NO 1 IN SOUTH AFRICA: Mathematics

Source: Quacquarelli Symonds World University Rankings by Subject for 2021



FACULTY OF ENGINEERING, BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY

Academic departments:

- School of Engineering
- School for the Built Environment
- School of Information Technology
- Graduate School of Technology Management

Centres:

- African Centre of Excellence in Information Ethics
- Centre for Asset Integrity Management
- Centre for Connected Intelligence
- Centre for Electromagnetism
- Centre for New Energy Systems
- Centre for Nuclear Safety and Security
- Centre for Pyrometallurgy
- Centre for Transport Development
- SAIW Centre for Welding Excellence
- Mining Resilience Research Centre

Institutes:

- Carl and Emily Fuchs Institute for Micro-electronics
- Industrial Metals and Minerals Research Institute (IMMRI)
- Institute for Big Data and Data Science
- Institute for Technological Innovation



RANKED NO 1 IN SOUTH AFRICA:

- School of Engineering¹
- Engineering (Electrical and Electronics)²
- Department of Materials Science and Metallurgical Engineering³

Industry Chairs

- Absa Chair in Data Science
- AEL Mining Services Chair in Innovative Rock-breaking Technology
- Anglo-American Chair in Pyrometallurgy
- Chair in Nuclear Safety and Security
- Eskom Chair in Plant Asset Management
- Exxaro Chair in Energy Efficiency
- Exxaro Chair in XR Technology
- Harmony Chair in Rock Engineering and Numerical Modelling
- Rand Water Chair in Business Management
- Rand Water Chair in Electrical Engineering
- Rand Water Chair in Electrical and Water Utilisation
- Sedibeng Water Chair in Water Utilisation Engineering
- Sentech Chair in Broadband Wireless Multimedia Communication
- South African Council of Shopping Centres Chair
- MultiChoice Chair of Machine Learning Research entities

SARChI Chairs

- SARChI Chair in Artificial Intelligence

PROF SUNIL MAHARAJ

Dean

PROF JAN ELOFF

Deputy Dean Research and Postgraduate Studies

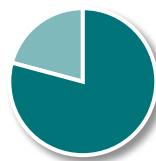
PROF ALTA VAN DER MERWE

Deputy Dean Teaching and Learning

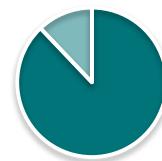
Niche areas:

Since 2017, the focus in the Faculty has been to establish cross-cutting research focus areas, which are mostly interdisciplinary in nature. These research focus areas are based on existing strengths and expertise, which can each exploit pockets of excellence to embrace the 4IR. These focus areas cover the following themes:

- Smart cities and transportation
- Big data science, information and communication technology (ICT), and technology and innovation management
- Water and environmental engineering
- Energy
- Minerals and materials beneficiation
- The Fourth Industrial Revolution.



2021 Postgraduate student enrolments
■ M: 1 359
■ D: 352



2020 Postgraduate student graduations
■ M: 403
■ D: 57



2020 Total research outputs: 300.8 units



NRF-rated researchers: 100

Source: 1. News and World Report Rankings on the Best Global Universities for Engineering 2. Quacquarelli Symonds World University Rankings by Subject for 2021 3. Minerals Education Trust Fund, 2020 and 2021



2020-2021 HIGHLIGHTS

- Alumnus Dr Sunveer Matadin has invented a kinematic robotic arm that provides six degrees of freedom. This robotic system is lightweight, performs well and can be reconfigured for industrial robot application, exoskeletons and prostheses.
- Alumnus Nicol Verheem has been honoured by the Academy of Motion Picture Arts and Sciences in the Scientific and Technical Awards (Sci-Tech) category. Verheem's company invented the Teradek Bolt, a wireless radio transmitter that can transmit uncompressed video to a receiver over 3km away with no delay, thereby freeing cameras of their cables.
- Alumnus Kgothatso Ngako is sharing the excitement of bitcoin with the more than 1bn people on the African continent by translating its materials into all major African languages.

- Researchers in the Department of Mechanical and Aeronautical Engineering have needed to use the moon to help improve solar energy. The researchers form part of a collaborative project called Solar Turbo Cogeneration Heat and Power that plans to commercialise small-scale hybrid concentrating solar power systems that use concentrated solar power to generate electricity and process heat for commercial use.
- Due to its reputation in smart transportation, the Department of Civil Engineering was approached to devise a solution that ensures agricultural products intended for the export market arrive at their destination unblemished and suitable for further distribution and sale. Its development of a concept known as "civiltronics" played an important role in finding an innovative solution. This entails the combination of

traditional civil engineering with electronics, the internet of things (IoT), programming, computer science and additive manufacturing (3D printing).

- One of the Faculty's flagship transdisciplinary research projects is seeking to establish new electronic system design techniques and reliable packaging strategies that best exploit modern additive manufacturing technologies, thereby creating a fair and sustainable economic environment for small and medium enterprises in the electronics sector. This research is being conducted in the Carl and Emily Fuchs Institute for Microelectronics (CEFIM) in the Department of Electrical, Electronic and Computer Engineering.

FACULTY OF
**NATURAL AND
AGRICULTURAL SCIENCES**



Academic departments:

- Actuarial Science
- Agricultural Economics, Extension and Rural Development
- Animal Science
- Biochemistry, Genetics and Microbiology
- Chemistry
- Consumer and Food Sciences
- Geography, Geoinformatics and Meteorology
- Geology
- Mathematics and Applied Mathematics
- Physics
- Plant and Soil Sciences
- Statistics
- Zoology and Entomology

Centres:

- African Research Universities Alliance (ARUA) Centre of Excellence in Food Security
- DST/NRF Centre of Excellence in Food Security
- DST/NRF Centre of Excellence in Tree Health Biotechnology
- African Centre for Gene Technologies (ACGT with CSIR and Wits)
- Centre for Bioinformatics and Computational Biology
- Centre for Environmental Economics and Policy in Africa (CEEPA)
- Centre for Environmental Studies (CFES)
- Centre for Geo-information Sciences
- Centre for Microbial Ecology and Genomics (CMEG)
- Centre for Wildlife Management
- Centre for Sustainable Malaria Control



PROF BARENDE ERASMUS
Dean

PROF VINESH MAHARAJ
Deputy Dean: Research and Postgraduate Education

PROF PAULETTE BLOOMER
Deputy Dean: Teaching and Learning

- Joint Centre for Mathematics and Technology Education
- Sci-Enza Science Centre
- UP Natural Hazard Centre Africa

Institutes:

- Genomics Research Institute (GRI)
- Institute for Applied Materials
- Institute for Food, Nutrition and Well-being (IFNuW)
- Mammal Research Institute (MRI)
- UP Water Institute

Units:

- Biomath Forum
- Botanical Garden
- Conservation Ecology Research Unit (CERU)
- Experimental Farm

SARCHI Chairs:

- Non-Parametric, Robust Statistical Inference and Statistical Process Control
- Mammal Behavioural Ecology & Physiology
- Mathematical Models and Methods in Bioengineering and Biosciences
- Sustainable Malaria Control
- Fungal Genomics
- Plant Health Products from Indigenous Knowledge Systems
- Carbon Technology and Materials
- Conservation Physiology (Facilities co-host)

Industry Chairs:

- Rand Water Chair (Chemistry)
- Mondi Chair in Tree Pathology
- Sappi and Mondi Chair in Forest Genomics and Biotechnology
- SAFCOL Forest Chair
- Exxaro Chair in Geodynamics
- Barclays Chair in Agribusiness Management
- Rand Water Chair in Water Microbiology
- Eugene Marais Chair of Wildlife Management
- ABSA Chair in Actuarial Sciences

Niche areas:

- Traditional medicines and natural products (bioprospecting, medicinal plant science)
- Physical Sciences (radio astronomy, biophysics, green chemistry, drug discovery, separation science, renewable energy)
- Big data and data science (bioinformatics and computational biology, mathematical modelling in bioengineering and biosciences)

**2020-2021 HIGHLIGHTS**

A study led by a UP master's student in Physics, Shilpa Ranchod, has led to the discovery of a group of 20 galaxies. This large galaxy group is likely the most neutral hydrogen gas-rich group ever discovered, and it is the first time this group has been identified, despite residing in

a very well-studied area of the sky. Prof Roger Deane supervised the study, using South Africa's MeerKAT telescope.

A team from UP's Department of Statistics in collaboration with other international universities has developed what is believed to be the

first interactive app in the country that provides real-time data on COVID-19 using R-Shiny (a statistical software package).


**RANKED NO 1 IN
SOUTH AFRICA:
Mathematics**

Source: Quacquarelli Symonds World University Rankings by Subject for 2021



2020 Total research outputs: **442.3 units**



NRF-rated researchers: **214**



2021 Postgraduate student enrolments
■ M: **796**
■ D: **563**



2020 Postgraduate student graduations
■ M: **201**
■ D: **106**



**RANKED NO 1 IN
SOUTH AFRICA:
Theology, Divinity &
Religious Studies**

Source: Quacquarelli Symonds
World University Rankings
by Subject for 2021.

Academic departments:

- Historical and Systematic Theology
- New Testament and Related Literature
- Old Testament and Hebrew Scriptures
- Practical Theology and Mission Studies
- Religion Studies

Centres, Institutes, Research Chairs:

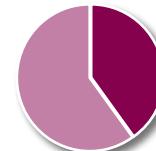
- Centre for Faith and Community

Niche areas:

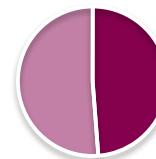
- Religion and Sustainable Development
- Inclusive Communities
- Religion and Science
- Economy, Ecology and Theology



2020 Total research outputs: **175 units**



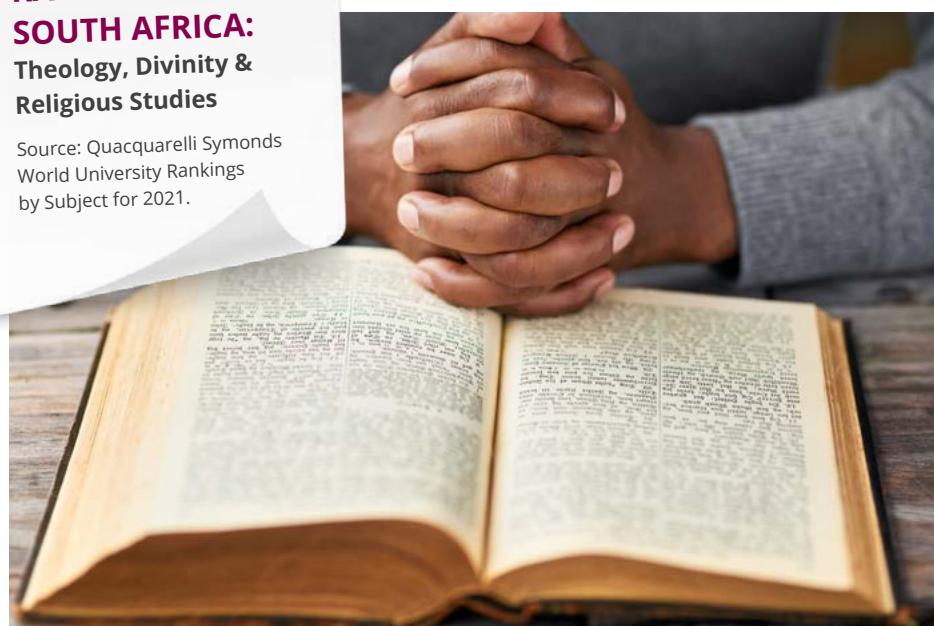
2021 Postgraduate student enrolments:
■ M: 93
■ D: 138



2020 Postgraduate student graduations
■ M: 34
■ D: 38



NRF-rated researchers: **20**



GORDON INSTITUTE OF BUSINESS SCIENCE

Centres, Institutes, Research Chairs:

- Centre for African Management & Markets (Camm)
- Centre for Business Ethics (CfBE)
- Entrepreneurship Development Academy (EDA)
- Centre for Leadership & Dialogue (CL&D)
- Media Leadership Think Tank
- Personal & Applied Learning (PAL)
- Responsible Finance Initiative (RFI)
- GIBS Principles for Responsible Management Education (PRME)



DR MORRIS MTHOMBENI
Interim Dean

PROFESSOR LOUISE
WHITAKER
Interim Deputy Dean

Gordon Institute of Business Science

University of Pretoria

2020-2021 HIGHLIGHTS

- Ranked among leading Business Schools in South Africa and Africa for the 17th year by UK *Financial Times*
- Recognised as Number 1 business school – Top 500 Best Managed Companies
- Ranked as having Best Reputation among employers and First Choice for students by *Financial Mail* Magazine

- MBA programme ranked highly
 - Top in *Financial Mail* South Africa's Top MBAs Ranking
 - In Top 60: QS Global Executive MBA Ranking
 - In Top 30: QS Executive MBA Ranking 2021
 - Number 12 in latest *CEO Magazine* Global MBA Rankings
- GIBS receives UN PRME Award for Excellence in SIP reporting – for the

- GIBS 2019.20 SIP Report
- GIBS launches the Responsible Finance Initiative
- GIBS launches Media Leadership Think Tank



TOP RANKINGS:
#1 business school in Africa
#1 business school in the world for gender balance
 Source: UK Financial Times



2021 Total research outputs: **108 units**



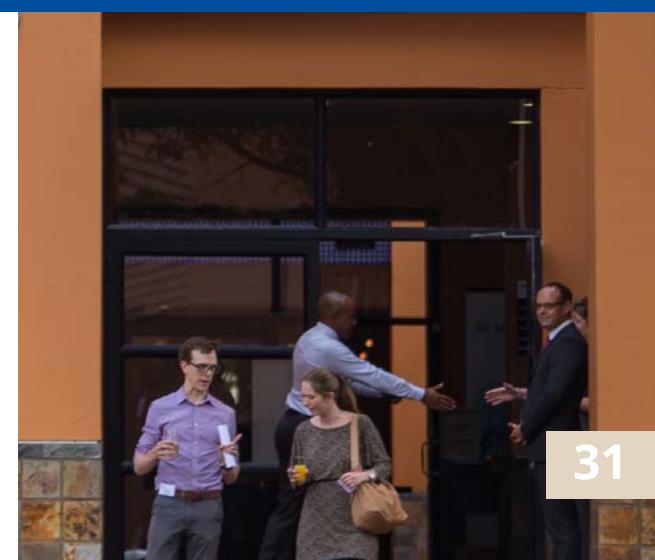
NRF-rated researchers: **8**



2021 Postgraduate student enrolments
█ M: **877**
█ D: **82**



2020 Postgraduate student graduations
█ MBA: **293**
█ DBA: **1**
█ PhD: **10**





2020-2021 HIGHLIGHTS

- UP Law is ranked 60th in the world for law by the [Times Higher Education World University Rankings 2022 by subject: law](#).
- Oliver R Tambo Law Library has the largest Law of Africa collection in the world.

PROF ELSABE
SCHOEMAN
Dean

PROF CHARLES
MAIMELA
Deputy Dean

Academic departments:

- Private Law
- Public Law
- Procedural Law
- Jurisprudence
- Mercantile Law

Centres:

- Centre for Child Law
- Centre for Human Rights
- Centre for Intellectual Property Law
- Centre for Law and Medicine
- Centre of Excellence in Extractive Industries Law
- Sports Law Centre in Africa

Institutes:

- Institute for International and Comparative Law in Africa (ICLA)

Units:

- International Development Law Unit (IDLU)
- Unit for Insurance Law and Governance
- Unit for Business Rescue and Insolvency Law
- International Development Law Unit
- Law Clinic

Research Chairs:

- ABSA Chair in Banking Law in Africa
- UNESCO Chair in Education Law in Africa

- SARChI in International Constitutional Law
- SARChI in International Development Law and African Economic Relations

Niche areas:

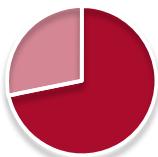
- Human Rights
- Children's Rights
- Education Law
- Trade and Investment Law
- Banking Law
- Constitutional Law and Governance
- Extractive Industries Law
- International Law
- Intellectual Property Law
- Cyber Law
- Critical Legal Theory



2020 Total research outputs: **79 units**



NRF-rated researchers: **28**



2021 Postgraduate student enrolments
■ M: 602
■ D: 223



2020 Postgraduate student graduations
■ M: 136
■ D: 26



RANKED NO 1 IN AFRICA:

- For the fifth year in a row, UP Law remains the leading law faculty on the Africa continent.

Source: THE World University Rankings by Subject 2021

FACULTY OF HEALTH SCIENCES



2020 Total research outputs: **237.6 units**

2020 Postgraduate student graduations
M: 219
D: 40

2021 Postgraduate student enrolments
M: 1 046
D: 265

NRF-rated researchers: **54**

Schools:

- School of Dentistry
- School of Health Care Science
- School of Health Systems and Public Health
- School of Medicine

Academic departments:

43 specialised departments

2020-2021 HIGHLIGHTS

- One of the first institutions in the higher education sector to open a vaccination site at the University of Pretoria's Prinshof Campus.
- Along with Steve Biko Academic Hospital, we welcomed Stevie, a mobile robot that will help improve the treatment of patients during the COVID-19 pandemic.
- The University of Pretoria Institute for Sustainable Malaria Control (UP ISMC) was awarded a Bill & Melinda Gates foundation grant to develop and deliver a leadership

PROF TIAAN DE JAGER
Dean

PROF VANESSA
STEENKAMP
Deputy Dean: Teaching and Learning

PROF TIVANI MASHAMBA-THOMPSON
Deputy Dean: Research & Postgraduate Studies

PROF FLAVIA SENKUBUGE
Deputy Dean: Health Stakeholder Relations

Institutes:

- Institute for Cellular and Molecular Medicine (ICMM)
Stem Cell Research Unit (within ICMM)
- Institute for Sustainable Malaria Control (UP ISMC); also recognised as an SAMRC Malaria Research Collaborating Centre
- Sport, Exercise Medicine and Lifestyle Institute (SEMLI)
- Pan African Cancer Research Institute (PACRI)
- SAMRC/UP Precision Prevention and Novel Drug Targets for HIV-Associated Cancer Research Unit

Centres:

- Centre for Ethics and Philosophy of Health Sciences
- Centre for Neuroendocrinology
- Forensic Anthropology Research Centre
- Centre for Viral Zoonoses

- UP Research Centre for Maternal, Fetal, Newborn and Child Health Care
- Maternal and Infant Health Care Strategies Unit
- Diabetes Research Centre Tuberculosis Research Centre

Units:

- Community Orientated Primary Care (UP COPC) Research Unit
- Environmental Chemical Pollution and Health Research Unit

Research Chairs:

- SARChI Chair in Sustainable Malaria Control
- AMPATH Chair in Human Genetics
- Co-chair with NAS to the DSTNRF-SAMRC SARChI Research Chair in Biostatistics
- NRF-DSI SARChI in Infectious Diseases of Animals (Zoonoses) – also holds the

Future Africa Research Chair on People, Health and Place

Niche areas:

- Ranks in the top 1% internationally in¹:
- Clinical Medicine
 - Immunology
 - Microbiology

- Ranks highly in the United Nations' Sustainable Development Goals (SDGs):²
- Ranked 101-200 globally in Good Health and Well-being (SDG 3)
 - Achieved a score of 85.7%, in the 'Collaboration and health services' category, indicating that it is extremely active in leading initiatives to promote good health and well-being.

Source 1: Web of Science (WoS) Essential Science Indicators (ESI)

Source 2: Times Higher Education World University Rankings 2022

and management training course to support the malaria elimination agenda, starting in 2022.

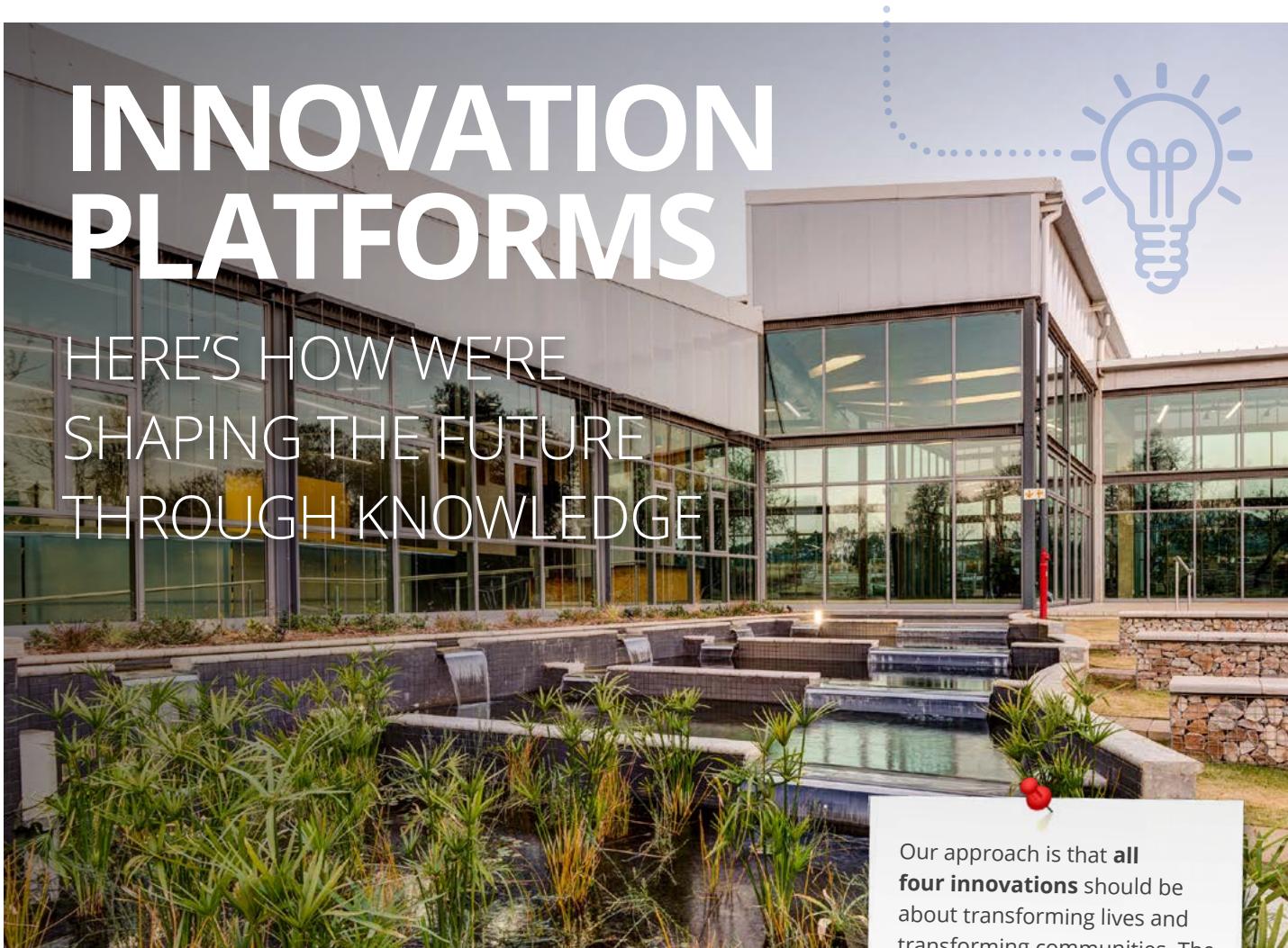
- The Children's Chest and Allergy Clinic at the University of Pretoria and Steve Biko Academic Hospital was selected as a World Allergy Organization (WAO) Center of Excellence for the 2020-2023 term. Currently, there are only three WAO Centers of Excellence in Africa.
- The Community Oriented Primary Care Research Unit (COPC) launch Imvelo Urban Farms, a transdisciplinary initiative that aims

to serve as safe havens and a source of food security for vulnerable communities.

- Established the Life-Changers Fund, a student solidarity fund to support students with the tools and subsistence required to complete their academic training and to provide future support for the same purpose.
- Department of Public Health awarded a WHO-Collaborating Centre status (WHO Centre for Social Determinants for Health).

INNOVATION PLATFORMS

HERE'S HOW WE'RE SHAPING THE FUTURE THROUGH KNOWLEDGE



As ideas and technologies evolve at an increasingly rapid rate, Africa needs a new generation of original thinkers with international perspectives, yet with a vision and voice that are rooted here – in the continent's leading economy.

Our approach is that **all four innovations** should be about transforming lives and transforming communities. The main driver lies in the fusion of knowledge not only for economic advancement but, equally, for social justice.

We are producing this new knowledge through transdisciplinary approaches and exciting new platforms – spaces that enable collaboration and partnerships between academia, business, government and policymakers as well as civil society to co-create new knowledge that translates into solutions.

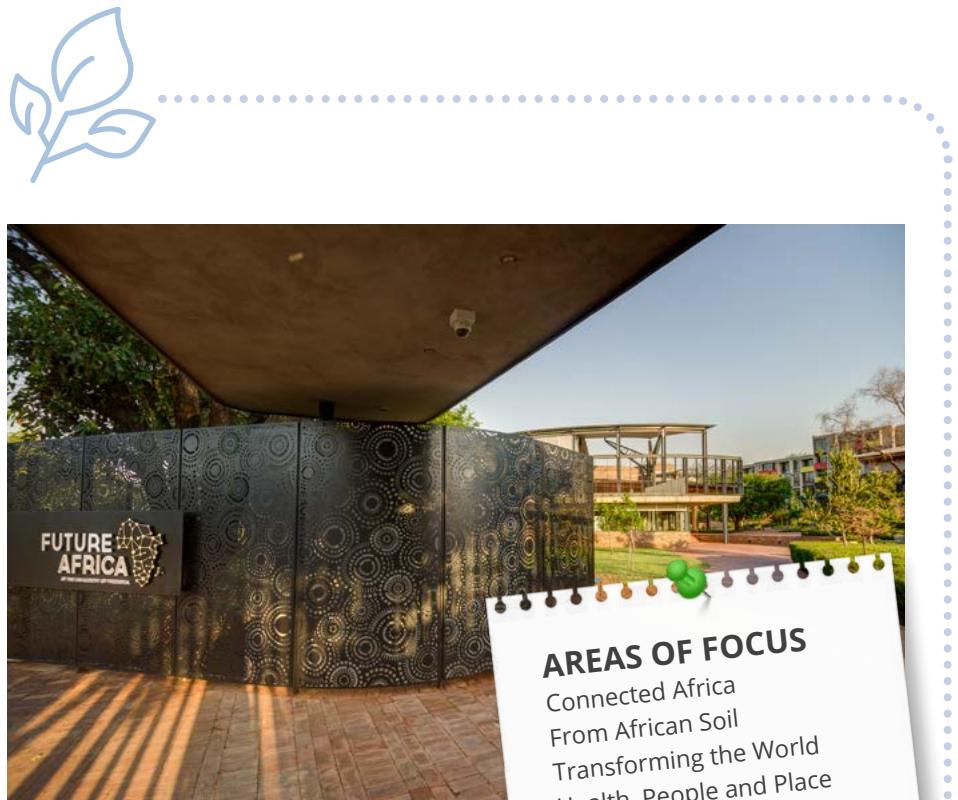
These collaborative spaces enable joint research, staff and student mobility, and the training of a new generation of researchers able to network, fundraise and communicate knowledge to a diverse range of stakeholders to ensure Africa achieves sustainable and inclusive development.

Wouldn't you like to be part of this future?

SUSTAINABLE FUTURE FUTURE AFRICA INSTITUTE

This purpose-built transdisciplinary research institute and green campus is dedicated to creating the knowledge that addresses the importance of sustainable futures for Africa in a world marked by rapid political, economic, cultural, social and technological changes.

These changes include the Fourth Industrial Revolution that is transforming the way institutions, the economy, the world of work and society function. At Future Africa, African scientists and scholars work in partnership with each other, key stakeholders in society and their global collaborators to co-create knowledge that addresses the many grand challenges the continent faces.



AREAS OF FOCUS

- Connected Africa
- From African Soil
- Transforming the World
- Health, People and Place
- Equity and Global Africa
- Future Education

SMART FUTURE ENGINEERING 4.0 RESEARCH HUB

UP's Engineering 4.0 complex is a purpose-built transdisciplinary facility focused on research, teaching, training and testing for transport and mobility in all their forms.

Working collaboratively and in partnership with government agencies and players in the private sector, Engineering 4.0 leverages the opportunities that come with artificial intelligence, big data and data science, and cloud computing.



CREATIVE FUTURE THE JAVETT-UP ART CENTRE

Arts and creativity drive discovery and challenge us to envisage a better world. The Javett-UP Art Centre is a platform and space to explore what makes us human, what inspires us to think, feel, act, dream, innovate and advance. This Centre focuses on the importance of Africa and its art in the world to promote a global understanding of the myriad cultures and people of the continent.

Supporting UP's academic programmes and encouraging the development of creative, flexible, adaptable minds with the emotional and intellectual intelligence to thrive, the Javett-UP Art Centre is integral to promoting sought-after Fourth Industrial Revolution subjects, which the University refers to as STEAM (Science, Technology, Engineering, Arts, Mathematics).



AREAS OF FOCUS

A unique (and first in Africa) transdisciplinary master's degree in Tangible Heritage Conservation, taught by academics from the humanities and sciences, focused on restoring artworks and preserving heritage.

SECURE FUTURE INNOVATION AFRICA @UP INITIATIVE



AREAS OF FOCUS

Agriculture-related activities to support world-class capacity development and research programmes such as in food security, smart agriculture, nutrition, plant health and biosecurity.

TAKE IT FROM ME

TWO POSTGRADUATE RESEARCHERS SHARE THEIR UP EXPERIENCE



"From this experience I have learnt that when you choose the best, the sky becomes the starting point to greater ideas and results. I have never regretted choosing UP."

David is a final year Intra-ACP and NRF-funded doctoral student based in the Forestry and Agricultural Institute (FABI), Department of Plant and Soil Sciences. His Doctoral research has focused on grey leaf spot (GLS) disease, a notorious foliar disease of maize globally.

David's passion for plants and their biotic interactions stems from his father, a maize farmer and veterinarian who taught him that without plants in the ecosystem, there is no completeness in the ecological pyramid. In his career path, David has encountered mentors who have the passion for science and determination to transform the world through their research in plant sciences and their contributions in terms of publications and the empowerment of farmers.

DAVID LIVINGSTONE
NSIBO

Forestry and Agricultural Institute (FABI),
Department of Plant and Soil Science

Various university programmes organised by the Postgraduate Support Hub, FABI and the Library have enabled David to share ideas with professors and students, both visiting and in-house, through seminars, workshops and laboratory updates. While his experiences have increased his scientific knowledge, he points out that they have also expanded his network. David's study has yielded one publication in a peer-reviewed journal and two manuscripts awaiting publication. He has attended and presented his research findings at three scientific conferences, three national or international symposia and countless seminars.

MENTORS DETERMINED TO TRANSFORM THE WORLD

CREDIT: PHOTOGRAPH BY ERIK AQUINO, UNSPLASH



SIMON KIONGO

Department of Plant and Soil Science, Faculty of Natural and Agricultural Sciences

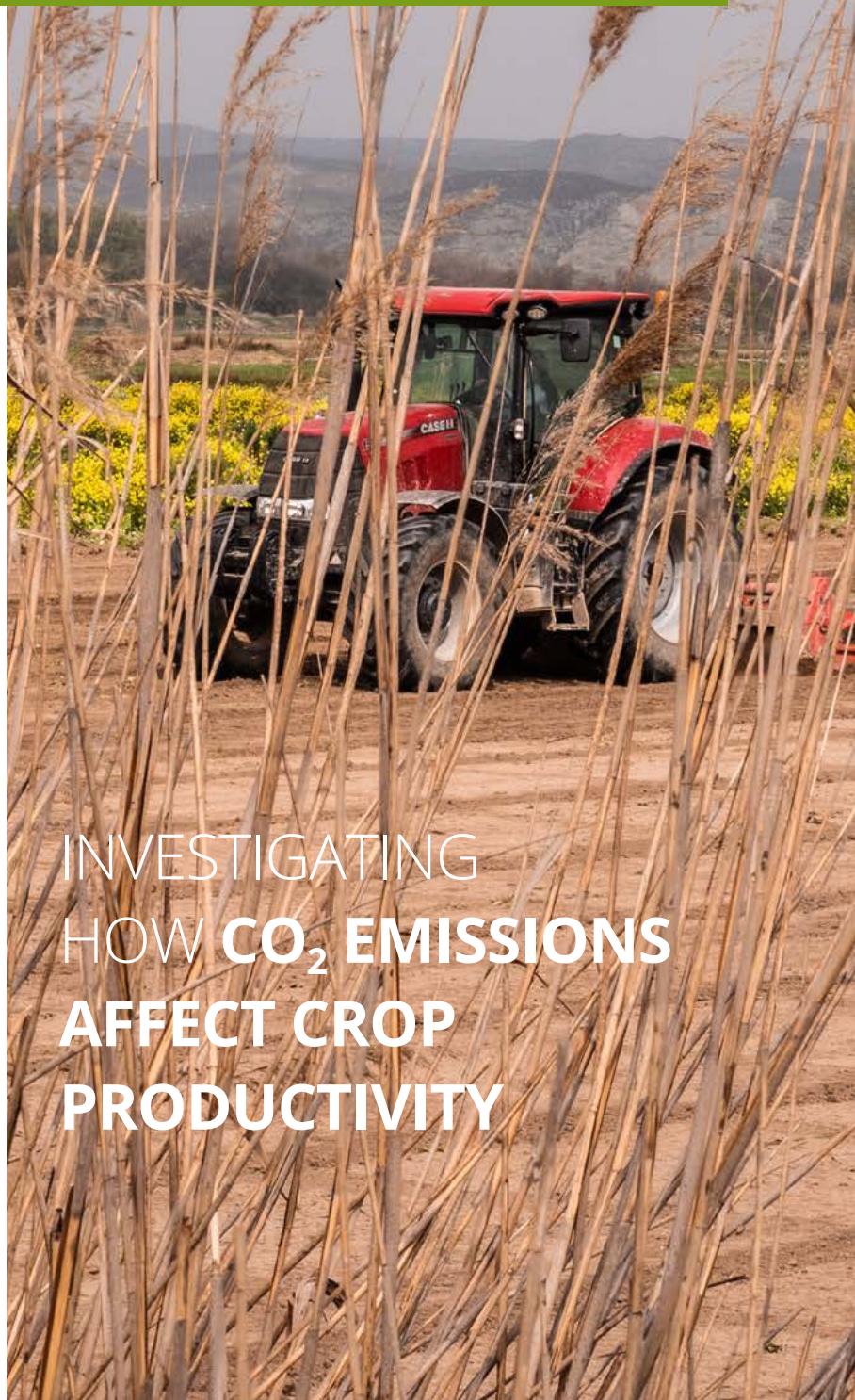
Simon's passion for agriculture was ignited after watching his parents make avoidable mistakes on their small family farm in Kenya due to the lack of technical knowhow. He vowed to work and get the necessary skills to ensure sustainable and profitable farming on an even larger scale.

Due to the family's economic situation this looked like a pipe dream. When his parents could only manage part of the school fees, teachers told them to choose which sibling went to school and which one stayed at home. Much of the time vegetables from the farm covered part of the school fees.

Despite these obstacles, Simon never let go of his vision of a better life for his family. After obtaining a degree in Agriculture, he was selected to further his studies at UP thanks to a scholarship opportunity from the Queen Elizabeth Commonwealth Scholarship (QECS). The QECS opened doors even wider for him when his supervisor offered him an opportunity to study for his PhD, investigating how carbon dioxide emissions and rising temperatures will influence crop productivity in the near and far future.

Simon credits the University's Department of Research and Innovation (DRI) and the QECS for this life-changing opportunity, and looks forward to returning home to progress the transition of farming into agribusiness among the farming communities.

"This opportunity exposed me to a world never seen before – from the quality of the studies to the visits to mega farms producing on hundreds of hectares. I also got a chance to work with one of the leading researchers in potato production."



INVESTIGATING HOW CO₂ EMISSIONS AFFECT CROP PRODUCTIVITY

TASTE A SLICE OF SA

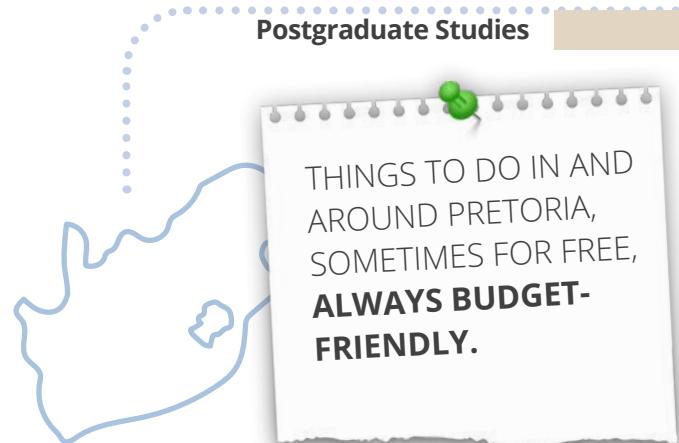
Pretoria is one of South Africa's three capital cities, serving as the seat of the executive branch of government, and as the host to all foreign embassies to South Africa. The city is surrounded by nature as it straddles the Apies River and extends into the foothills of the Magaliesberg mountains.



TAKE A HIKE

Moreleta Kloof Nature Reserve spans 100 hectares in the foothills of Moreleta Kloof near the city centre, with a variety of hiking trails. In the 19th century, the reserve was a dairy farm, and one of the original buildings has been converted to a restaurant where visitors can dine on a beautiful deck, often with a parade of animals in view.

- Other lovely green spaces close to the city centre include:
- Faerie Glen Nature Reserve, part of the Moreleta Spruit Nature Trail
- Groenkloof Nature Reserve, with hiking, horseback riding, and 4WD trails
- Austin Roberts Bird Sanctuary, named after the South African ornithologist who wrote a popular handbook on the birds of South Africa.



WRAP UP IN A PURPLE CLOAK

From late September to middle November, close on 70 000 Jacarandas bloom all over Pretoria and drape the city in a purple cloak. Be sure to be standing under one as South Africa's university students believe that if a Jacaranda flower falls on your head during exam time, you'll pass all your subjects! The more realistic ones believe that if you haven't started studying for year-end exams by the time the Jacarandas bloom, you've left it too late.



GO GAME VIEWING

The Rietvlei Nature Reserve offers a peaceful escape to nature and great game viewing less than a 20-minute drive from the city centre. Highveld game you'll see are eland, red hartebeest, buffalo, blesbok, waterbuck, zebra, black wildebeest, hippo, and even cheetah. Birders should keep a lookout for the comical secretary birds, as well as the blue crane, South Africa's national bird, and a breeding pair of fish eagles.



VISIT A NATIONAL HERITAGE SITE

The Voortrekker Monument is one of the country's most visited historic monuments. It was built in 1949 to commemorate the Voortrekkers who pushed northward into unknown territory, known as the Great Trek of 1838. This 40m-high square granite structure is a prominent landmark with steps leading up to the Hall of Heroes, where 27 marble reliefs depict the Great Trek.



IMMERSE YOURSELF IN AFRICAN ART

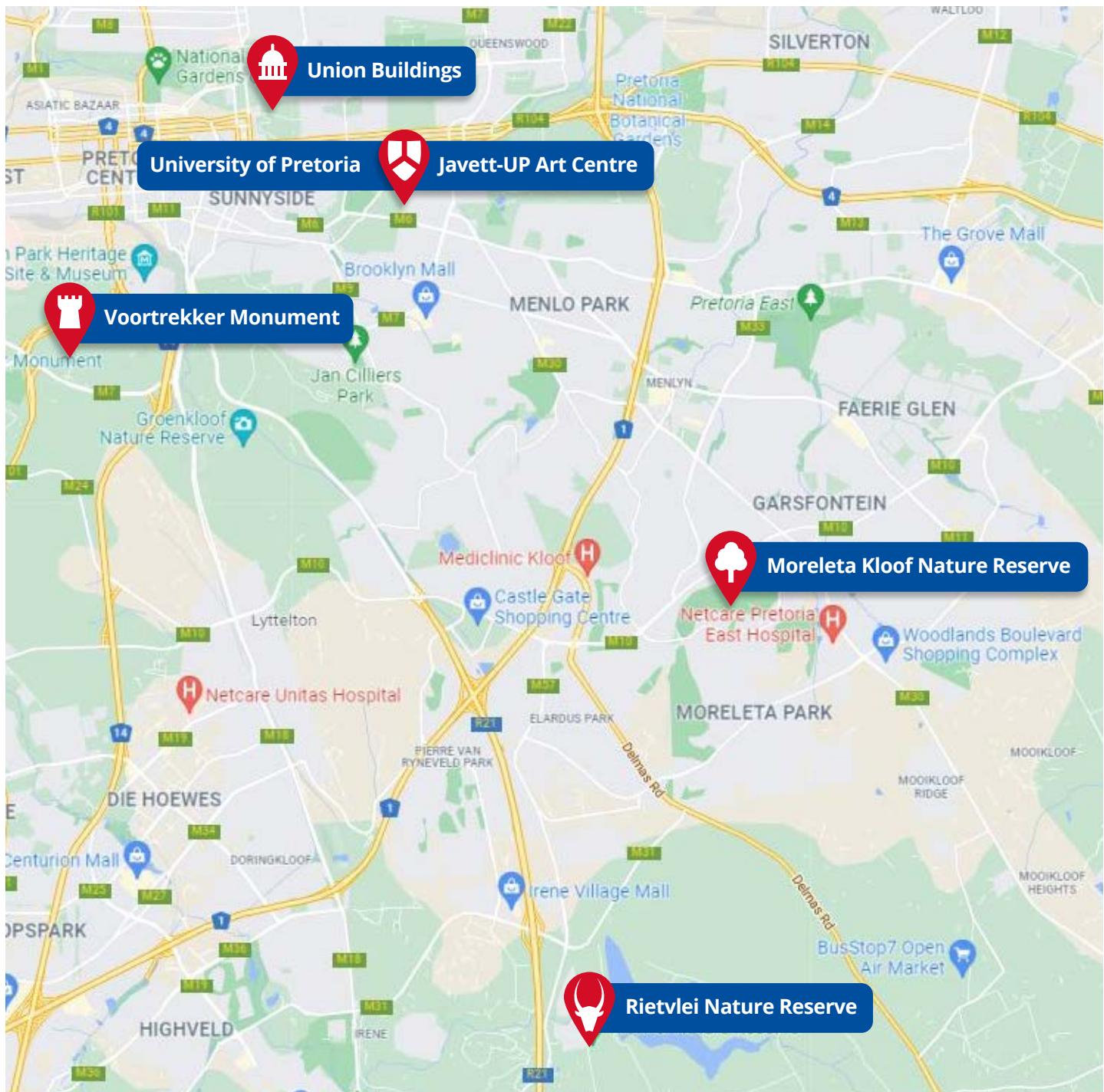
The Javett-UP Art Centre at the University of Pretoria hosts many public cultural programmes and houses three permanent collections. They are the Javett Foundation's collection of 20th century South African art, which contains a number of significant works, the AngloGold Ashanti Collection, and the Mapungubwe Gold, an archaeological collection that is historically and culturally important for South Africa, the southern African region and the world.



KNOCK ON GOVERNMENT'S DOOR

The Union Buildings are the official seat of the South African Government and also house the offices of the President of South Africa. Designed by Sir Herbert Baker in 1913, this impressive range of sandstone buildings mixes Italian Renaissance, English Renaissance, and Cape Dutch styles. Go down the slope towards the Delville Wood Memorial, where you'll find a 9m-tall statue of Nelson Mandela.

AN OVERVIEW OF PRETORIA





Photographic credit:

The photographs of the birds at the Austin Roberts Bird Sanctuary and animals at Rietvlei Nature Reserve were all reprinted with kind permission of Dr Elize Labuschagne-Hull, a UP alumnus.



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