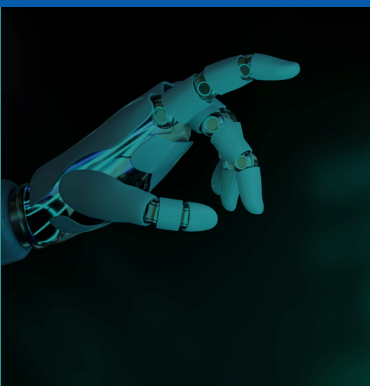


FACULTY

At a Glance 2024



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

**Faculty of Engineering,
Built Environment and
Information Technology**

Fakulteit Ingenieurswese, Bou-omgewing en
Inligtingtegnologie / Lefapha la Boetšenere,
Tikologo ya Kago le Theknotlotši ya Tshedimošo

Make today matter



Make today matter

THE UP WAY

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 inside the classroom, online and in communities. We also have support in place for our students to graduate on time as well-rounded, responsible citizens – fully prepared for the world beyond university.



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.

With UP behind your name, you can rely on a competitive, recognised qualification.

122

Undergraduate
programmes

806

Postgraduate
programmes

660⁺

Industry-relevant
short courses

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.



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.

Learn more: www.up.ac.za/education-innovation



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.

EBIT

Global technology is evolving at an exponential rate. To respond to this, the Faculty of Engineering, Built Environment and Information Technology is developing sustainable technologies for inclusive societies. The Faculty prides itself in equipping a generation of innovators to innovate our tomorrow.

28%

EBIT produces an estimated **28%** of South African engineers



ACADEMIC OFFERING

29

undergraduate
degree programmes

140

postgraduate
degree programmes

SCHOOL OF ENGINEERING
SCHOOL FOR THE BUILT ENVIRONMENT
SCHOOL OF INFORMATION TECHNOLOGY
GRADUATE SCHOOL OF TECHNOLOGY MANAGEMENT

14

specialised academic
departments

FACILITIES

EBIT boasts over **90 laboratories** across three of the
University's campuses.

This includes the state-of-the-art **Engineering 4.0 Complex.**

RESEARCH EXCELLENCE

72%

Academic staff members
with a doctorate



RESEARCH FOCUS AREAS

- Water and Environmental Engineering
- Minerals and Materials Beneficiation
- The Fourth Industrial Revolution (4IR)
- Smart Cities and Transportation
- Big Data Science, ICT, and Technology and Innovation Management
- Energy

100

NRF-rated researchers

16

Externally
funded
research chairs

13

Research
centres and
institutes

QS-RATED SUBJECTS

1

Chemical
engineering

2

Computer
science and
information
systems

3

Electrical
and
electronic
engineering

4

Mechanical
and
aeronautical
engineering

5

Mineral
and mining
engineering

6

Architecture
and built
environment

RANKINGS



AMONG THE TOP

engineering schools in the **Africa**

TOP 284

in the world for engineering and technology
(featuring in the top 550 in **FIVE** different engineering and
technology subject areas)

TOP 35

in the world for mineral and mining engineering

TOP 240

in the world for architecture and built environment

#1

in South Africa for electrical and electronic engineering
(four years running)

#1

in South Africa for materials science and metallurgical engineering
Minerals Education Trust Fund

Rankings based on 2023 QS Rankings & US News and World Report

ENGINEERING 4.0



EBIT's state-of-the-art Engineering 4.0 Complex is a research and training hub for smart transport systems and smart cities in partnership with SANRAL, CSIR and York Timbers. Its research will support the economic growth of South Africa through the improved understanding of vehicle-pavement interaction. Research conducted at Engineering 4.0 will contribute to UP's ranking as **94th** in the world for contributions to SDG 9: Industry, Innovation and Infrastructure.

JCP

COMMUNITY-BASED PROJECT MODULE

Through the Faculty's compulsory community-based project module (JCP), students participate in community service and service-learning projects for 40 hours during the course of their studies.

23 000⁺

students have completed
the JCP module since its
inception in 2005

ENGAGE

ENGINEERING AUGMENTED DEGREE PROGRAMME

The ENGAGE programme provides a carefully structured engineering curriculum to help students adjust to university life and cope with academic demands.

ENGINEERING 4.0

UNIVERSITY OF PRETORIA
SANRAL



www.up.ac.za/ebit



ENQUIRIES

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