2021

Faculty of Engineering, Built Environment and Information Technology
Fakulteit Ingenieurswese, Bou-omgewing en Inligtingtegnologie / Lefapha la Boetšenere, Tikologo ya Kago le Theknolotši ya Tshedimošo

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
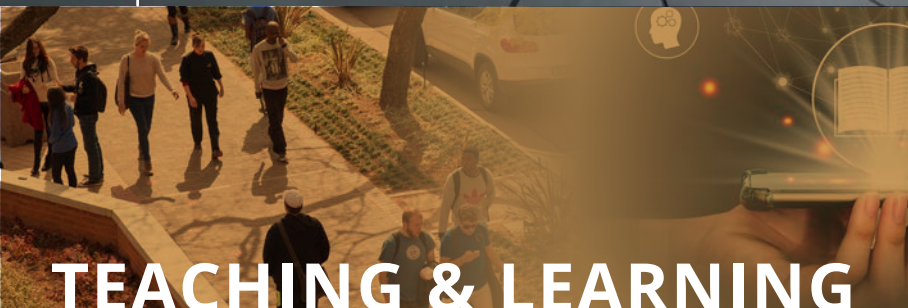YUNIBESITHI YA PRETORIA

FACULTY
AT A GLANCE

1956

The Faculty of Engineering, Built Environment and Information Technology (EBIT) was established in 1956.

LEGACY OF EXCELLENCE

1908

The University of Pretoria was established in 1908. Today, it is one of the largest research universities in South Africa. UP has transformed into a dynamic university community of staff and students who come from a range of diverse backgrounds and cultures showcasing South African and global societies.

TEACHING & LEARNING

Our educational approach has a strong focus on inclusivity and equitable access to education, but ultimately on equity of outcomes.

UP effectively uses contact sessions in traditional lectures, seminars, laboratories and practical sites, together with online learning platforms. This has enabled access and success for an increasing number of students. The 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; while also being taught in a classroom environment and accessing additional resources online.

VISION & GOALS

OUR VISION IS TO BE

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

OUR GOALS ARE TO

1. enhance access and successful student learning
2. strengthen the University's research and international profile
3. foster and sustain a transformed, inclusive, and equitable University community
4. optimise resources and enhance institutional sustainability
5. strengthen the University's social responsiveness and impact in society.

HYBRID LEARNING AMIDST DISRUPTION

Through UP's hybrid model of teaching and learning, part of the learning is dependent on access to the online learning management system known as ClickUP.

A system is in place for students to buy their own devices at very competitive rates but more than **6 000** computers are available in computer laboratories across all campuses and within residences for student use. There are Wi-Fi hot spots across all campuses for use by students with their own devices.

95%
Undergraduate modules available online

EBIT

Global technology is evolving on an exponential scale. In answer to this, the Faculty of Engineering, Built Environment and Information Technology is developing sustainable technologies for inclusive societies. The Faculty prides itself on equipping a generation of innovators to innovate our tomorrow.

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

ACADEMIC OFFERING

31 undergraduate degree programmes

146 postgraduate degree programmes

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

14 specialised academic departments

STUDENTS

8 080
Undergraduate students

3 027
Postgraduate students

2020 GRADUATES

1 213 Undergraduate degrees

594 Honours degrees

403 Master's degrees

57 Doctoral degrees

83%
Undergraduate pass rate

232
Academic staff members

RESEARCH EXCELLENCE

71%
Academic staff members with a doctorate

100 **2X A**
NRF-rated researchers

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

31 Externally funded research chairs

17 International agreements

RANKINGS

TOP 356

in the world for engineering and technology
2020/21 QS Rankings

TOP 1%

of engineering schools in the world
2019 Clarivate Analytics ESI

#1

engineering school in Africa
2020 US News and World Report

#1

in South Africa for electrical and electronic engineering
2020/21 QS Rankings

#1

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

6 QS-RATED SUBJECTS

Chemical Engineering, Computer Science and Information Systems, Electrical and Electronic Engineering, Mechanical and Aeronautical Engineering, Mineral and Mining Engineering

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 the SANRAL, the CSIR and York Timbers. Its research will support the economic growth of South Africa through improved understanding of vehicle-pavement interaction. Research conducted at Engineering 4.0 will contribute to UP's ranking as **94**[th] 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.

7 255
projects since 2005

918 320
service hours since 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.

The
UP Way

It's as much about where UP comes from as to **where we are headed**

It's about UP's excellence, innovation, diversity, growth, kindness and **making a difference** every day

It's about what we do to...

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Make today matter