

FACULTY FACT SHEET



ON GOOD AUTHORITY

Message from the executive dean, Prof Liezl van Dyk



At the Faculty of Engineering we want to change the world for the better and develop exceptional engineers by creating an industry-relevant environment, based on cutting-edge research and academic excellence.

We are deeply invested in the progress of our students, whom we choose with great attention and care. We want our graduates to have a solid academic foundation as well as practical applications experience within the world of work.

Therefore, ground-breaking research and the commercialisation of our expertise – both locally and abroad – have always been top priorities for us.

If you sign up for a qualification within the field of engineering, be prepared to grow, thrive and succeed

THIS IS US

Women in engineering

The aim of the Women in Engineering programme is to increase the number of female engineers who are available for industry to employ, bring about gender equality in the workplace and provide fresh perspectives on the problems faced in industry.

Effective ways to attract more women to the profession are to introduce and improve access to engineering studies for high school girls and inspire existing female engineering students to successfully complete and further their studies.

We work towards this aim through the following projects:

- Femmeengineering, a unique programme to expose young females to the different facets of engineering
- Modiragatsi, a competition on innovation and problem-solving for high school girls, equipping them with valuable skills.

Faculty facts

We won an international award from the Covid-19 Innovation Challenge of the United Nations Africa Innovation and Investment Forum 2020 for our TjopTjop app, developed to speed up Covid-19 screening at schools.

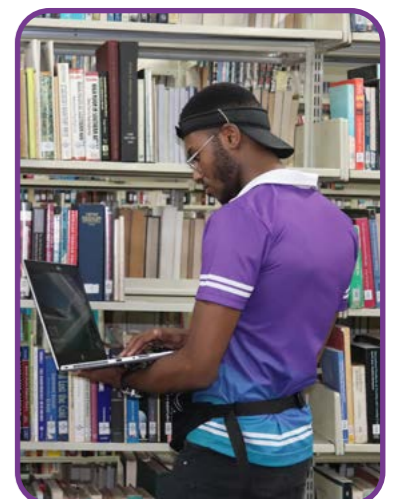
The NWU's solar car, Naledi, has competed in six Sasol Solar Challenges so far and is on track to compete once again in the 2022 events in July and September. Our car started out as Phoenix in 2014 and now races as Naledi 2.0.

The NWU Faculty of Engineering is a dynamic training hub for world-class, versatile and innovative engineers able to develop engineering solutions in fields such as integrated energy and Industry 4.0 (smart factories equipped for digital manufacturing).

Internationally known

Our BEng programmes meet the requirements of the Engineering Council of South Africa (ECSA), as well as international standards through the Washington Accord.

South Africa is a member of the accord, along with Australia, Canada, Chinese Taipei, Hong Kong China, India, Ireland, Japan, Republic of Korea, Malaysia, Russian, New Zealand, Singapore, Sri Lanka, Turkey, the United Kingdom and the United States of America.



Our faculty in numbers

(Staff and student figures as on 31 May 2022)



Undergraduate students:
1 426



Postgraduate students:
244



International students:
58



Academic staff:
101



Support staff:
97



NRF-rated researchers:
17

SCHOOLS & PROGRAMMES



The faculty consists of four schools:

- Chemical and Minerals Engineering
- Electrical, Electronic and Computer Engineering
- Mechanical Engineering
- Industrial Engineering

[Click here to see which undergraduate programmes we offer](#)

[Click here for our honours programmes](#)

[Click here for our postgraduate programmes](#)

RESEARCH

Research chairs

- DSI/NRF Chair in Coal Research (SARChi)
- DSI/NRF Chair in Biofuels and Other Clean Alternative Fuels (SARChi)
- DSI/NRF Chair in Nuclear Engineering (SARChi)
- ESKOM EPPEI Specialisation Centre for Emission Control

Research entities

- Centre of Excellence in Carbon-based Fuels
- Unit for Energy and Technology Systems
- Multilingual Speech Technologies (MuST)

Hosted entities, platforms and institutes

- DSI HySA Infrastructure Centre of Competence in hydrogen production, storage, reticulation and safety codes and standards
- DTI Centre for Advanced Manufacturing (CFAM)

APPLICATIONS

Admission requirements

- Full matriculation exemption, with an APS score of at least 34
- Mathematics level 6 or higher (70% +)
- Physical Sciences level 5 or higher (70% +)
- Language level 5 or higher (60% +) – in the language of instruction on either the Home or First Additional Language level
- For prospective engineers who do not quite meet the minimum requirements, an optional engineering test may provide the necessary entrance.

How do I apply?

Please refer to our [website](#) for online application.

Money matters

The Bursary Office assists in the distribution of advertisements for various bursaries in the field of engineering. For more information, contact **Claudie Kroese** (018 288 1530) or **Angie Danster** (018 299 1985). For additional financial support, please contact 018 299 2672.

We want to hear from you

Phone 018 285 2453 or contact **Sonette Becker** (prospective students) or **Tanya Fouche** (faculty administrator) or visit our [webpage](#).

