Structured Masters

INDUSTRIAL ENGINEERING

Offered by Stellenbosch University

Stellenbosch
UNIVERSITY
IYUNIVESITHI
UNIVERSITEIT

Engineering
Department of Industrial Engineering
iSebe lobuNjineli kwezoShishino
Departement Bedryfsingenieurswese

Focus: **Data Sciences**

Data science is the scientific investigation that employs innovative approaches and algorithms, most notably machine learning algorithms, for processing and analysing data. Data Science technologies can be applied to both small and big data, of various types such as relational, images, video, audio, and text. Big data constitutes extremely large data sets that may be analysed computationally to reveal patterns, trends and associations, especially relating to human behaviour and interactions.

The data science programmes focus on enabling students to develop innovative optimisation and machine learning techniques to produce novel, efficient and robust data science technologies, for use in Industrial Engineering, Engineering Management and related applications.

MEng (IE) programme structure

180 credit programme – 8 x 15 credit modules

- Data Sciences (Eng)
- Applied Machine Learning (Eng)
- Optimisation (Eng)
- Big Data Technologies (Eng)
- Data Analytics (Eng)
- Choice of 1 specialization and 2 elective modules

Additional module: Professional Communication

Research assignment in industry relevant topics (60 credits)

ACADEMIC HEAD OF PROGRAMME

Prof AP Engelbrecht
Voight Chair in Data Science

SU and Industry lecturers
View Lecturers' Bios

PRESENTATION MODE

FULLTIME and PARTTIME
ONLINE or in person at SU

Module based with continuous assessment
 - 2 weeks pre-reading
 - 1 week lectures (synchronous)
 - 6 weeks post block assignments

APPLICATION

Apply here.

APPLICATION DATES 2025

Applications open April 2024.
Find closing dates here.

REQUIREMENTS

Get requirement information here.

FURTHER INFORMATION

Visit our website.

CONTACT

mfrei@sun.ac.za   021 808 4237