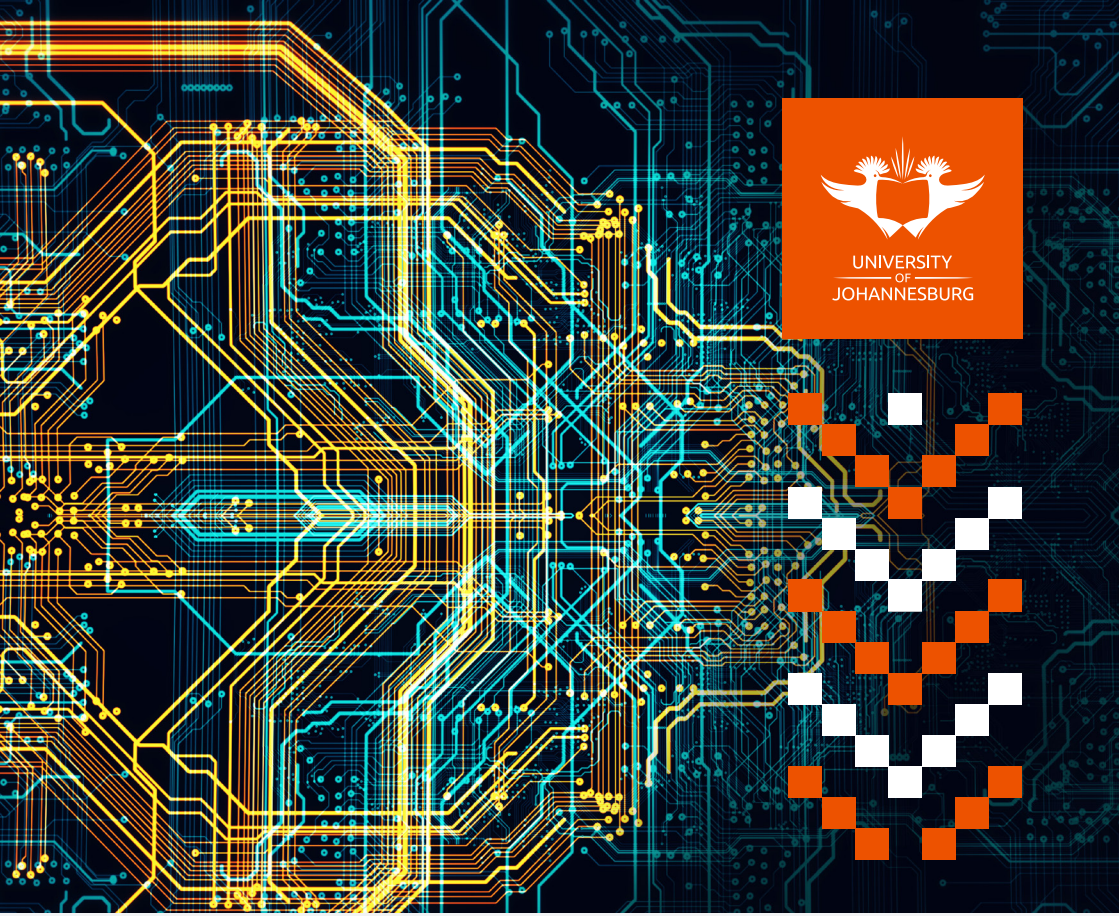

Master of Engineering in Electrical and Electronic by Coursework (M6ER5Q)-NQF Level 9

Dreaming of a career in Electrical Engineering?

The Department of Electrical and Electronic Engineering Technology is pleased to offer a new postgraduate programme:

Master of Engineering in Electrical and Electronic by Coursework

The primary objective of this Master's programme is to develop high-level specialist in the fields of Power and Telecommunication Engineering. It is aimed at harnessing and applying data science and computational techniques in order to elevate engineering problem-solving capabilities. Additionally, the programme is designed to equip students with the skills necessary for effective research reporting tailored to the requirements of their academic and disciplinary pursuits.

RATIONALE

The traditional role of engineers and technologists in the industrial landscape is undergoing rapid transformation. Nowadays, engineers and technologists are expected to operate within an environment profoundly influenced by vast quantities of data, shaping the design and development of future components and systems. Consequently, it is imperative for professionals in various engineering disciplines to possess the capability to manage and process data effectively, enabling them to design intelligent components and systems for the future. As a response to this evolving landscape, our new program includes a mandatory component that meticulously acquaints learners with data science techniques and statistical modelling, along with their practical applications. Proficiency in data science and statistical modelling within the domains of Power and Telecommunications engineering is indispensable in the era of the Fourth Industrial Revolution.

ENTRY REQUIREMENTS

Honours degree or NQF level 8 qualification in Electrical and Electronic Engineering.

Honours degree in Engineering includes the following: Bachelor of Engineering and Bachelor of Engineering Technology (Hons), Bachelor of Science in Engineering (Hons).

Candidates with a postgraduate diploma (PGDip, NQF 8) in Electrical and Electronic Engineering are also eligible.

Students are selected on the basis of academic merit and an approved field(s) of study.

PROGRAMME OVERVIEW

This programme is offered through a full-time (1 year) or part-time (2 years) study. The Master of Engineering in Electrical and Electronic (coursework) is a professional Masters qualification, which consists of 187 credits and combines 2 compulsory and 3 elective modules at NQF level 9:

Compulsory Modules

- Data Science and Computational Techniques (30.2 credits)
- Minor Dissertation (91.1 credits)

Elective Modules (any 3)

- Telecommunication Systems (21.9 credits)
- IoT & Cyber Security (21.9 credits)
- Digital Communications Techniques (21.9 credits)
- Electric Power Grids (21.9 credits)
- Design and Modelling of Electric Machines (21.9 credits)
- Power Electronics (21.9 credits)

HOW TO APPLY AND REGISTER

The university will soon be accepting applications for this programme via the online application system. Should you be interested in applying for this programme, please visit http://www.uj.ac.za/admission-aid/postgraduate and apply for the Master of Engineering in Electrical and Electronic by coursework (M6ER5Q) with code: (73987). Then email certified copies of your supporting documents to ujappdocs@listrv.uj.ac.za with your reference number as the subject line.

Please note that there are a limited number of seats available for the 2024 programme intake. Candidates will be selected on the basis of eligibility and academic merit.

ENQUIRIES For further information and queries relating to this programme, you may contact: **Prof. Pitshou Bokoro** (Programme Coordinator), pitshoub@uj.ac.za
Ms Lwazi Mapule Jayiya (Secretary: School of Electrical Engineering), mapulej@uj.ac.za