

FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

ENGINEERING *Management*

The Engineering Management programmes strives to develop professionals with advanced abilities in applying fundamental engineering sciences and related interdisciplinary principles enabling them to contribute as leaders in industry.

The Engineering Management Programmes focus on the development of professionals for leadership roles in engineering and related technology fields.

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UNIVERSITY
OF
JOHANNESBURG

What will the Engineering Management programmes offer you?

- Advanced capability to conduct fundamental independent systems engineering and management research independently.
- The ability to apply research tools and techniques on engineering management problems in the real-world.
- Advance knowledge and skills to integrate engineering and management principles to solve complex problems.
- Skills to manage engineering activities such as design, planning, research, problem solution, project management and many more.

Who should apply

Master's programmes: MEng / MPhil (Engineering Management)

Applicants need a four-year Bachelor's degree in Engineering or a Baccalaureus Technologiae, Engineering or an equivalent qualification of an equivalent standard with at least 1.5 years engineering experience.

Doctoral programmes: DPhil / DIng (Engineering Management)

An approved Master's degree in Engineering or a similar approved degree at Master's level with relevant engineering experience.

International students

The University of Johannesburg welcome international students.

PROGRAMMES

Coursework Master's Engineering Management

Duration: 2 years part-time or at least 18 months full-time

The coursework programmes consist of six compulsory modules and a research component which contributes to fifty percent of the programme.

The modules' have been designed to provide skills and knowledge across four dimensions: i) systems engineering approach, ii) management principles, iii) engineering principles and iv) research capability.

MODULES

Engineering Management | *Management concerned with the application of engineering principles to the planning and operational management of industrial and manufacturing operations.*

Advanced Engineering Economics | *Technology management principles related to engineering economy in the engineering product development process.*

Engineering Systems Management | *The application of systems engineering principles in the development of engineering systems.*

Project Management | *Technology management principles related to project management in the engineering product development process.*

Product Development and Marketing | *Technology management principles related to the engineering product development process.*

Reliability Management | *Technology management principles related to the reliability management in the engineering product life-cycle from development through operation to phase-out and disposal.*

The lecturers teaching the modules are all industry experts with Engineering Management experience. The lecturers relate the theory to the students by using case studies, problems from industry to enable students to integrate the knowledge to real-life problems.

Research based Master's Engineering Management

| Duration: 1 year full-time or 2 years part-time

Research based Doctoral Engineering Management

| Duration: 2 years full-time or 3 years part-time

Prof JHC Pretorius (Head of School)

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