



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Engineering, Built Environment and Information Technology

Department of Mining Engineering

Postgraduate Brochure



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1. INTRODUCTION

The postgraduate degree programs in the Department are open to graduates holding a recognised degree in either engineering (BEng), science (BSc) or technology (BTech). The courses are intended for graduates who wish to enhance their skills in Mining Engineering, or for other professionals who wish to further their academic qualifications in aspects of Mining Engineering.

The courses offer subjects in a broad spectrum, covering introductory aspects of mining engineering, through to consolidation, skills enhancement and mining research-related projects, dissertations and theses. A number of courses may be taken from other engineering disciplines where the student requires specialist knowledge not available in the Mining program (subject to Department Head approval). Students should refer to the appropriate Departmental brochure for further details of these courses.



Tuition is organised as self-study modules to enable you to work and study full-or part-time at your own pace. Each course provides you with a full set of notes and/or lecture material. Lecturer contact sessions can be scheduled throughout the year when you can discuss course material on a one-to-one basis with the lecturer. Examinations are held on-campus, during **June - July** (for first semester courses) and **December - January** (for second semester courses). Subject to Department and Administration approval, examinations may also be held at any of the University's satellite campus.

A number of our modules will in the near future be in digital format, which provides you with greater flexibility in your learning. We are in the process of expanding the use of web- and CD-based education for your benefit and to stay at the cutting edge of education innovation. Thus, we hope to accommodate your work schedule with a flexible study program.

With all these study opportunities to increase your knowledge and skills in contributing to the growth of our industry, country and continent I look forward to welcoming you to the program.

Prof Ronny Welter-Youngman

Head: Department of Mining Engineering

2. ADMINISTRATION

a. Yearbooks

This information brochure should be read in conjunction with the following Yearbook of the (EBIT Faculty) University of Pretoria. Please follow the website link mentioned herewith: <http://www.up.ac.za/yearbooks/home>

b. Entry Requirements

Welcome to the postgraduate programme in the Department of Mining Engineering at the University of Pretoria. This brochure contains relevant information on the postgraduate courses offered on a full- and part-time basis.

The following postgraduate degrees are awarded in the School of Engineering (minimum/maximum duration in brackets):

Honours degrees: (minimum duration: one year / maximum three years)

- Bachelor of Engineering (Honours) - BEng(Hons) - for students who have obtained an accredited University engineering degree or equivalent. ([see programme information](#))
- Bachelor of Science (Honours) - BSc(Hons) Applied Science - for students who have obtained a relevant 3-year University degree, non-accredited engineering degree or a BTech degree. ([see programme information](#))

Master's degrees: (minimum duration: one year / maximum two years)

- Master of Engineering - MEng - for students who have obtained a BEng (Hons) University degree or equivalent ([see programme information](#))
- Master of Science - MSc Applied Science - for students who have obtained a BSc (Hons)(Applied Science) degree ([see programme information](#))

Doctorates: (minimum duration: one year / maximum three years)

- Doctor of Philosophy– PhD - for students who have obtained a relevant Master's degree ([see programme information](#))
- Doctor of Philosophy in Engineering - PhD(Eng) - for persons who have obtained a relevant Master's degree in engineering ([see programme information](#))

Irrespective of any comments contained in this brochure, the following will apply:

- [General Regulations, Rules & Glossary of Terms;](#)
- [Faculty of Engineering, Built Environment and Information Technology Yearbook](#)

Note that the academic status of degrees obtained at other universities, especially graduates from overseas Universities, need to be clarified with the Student Administration Offices. Refer also to the Regulations G.29-G.38 part 1, of the relevant year(s) of registration.

Although every attempt was made to ensure that this brochure is correct and up to date at the time of publishing, the Department reserves the right to make any changes without prior notice and without prejudice.

c. Application Process

If you are applying at the University of Pretoria for postgraduate studies, please submit a completed online application form before 31 October of each year for studies that commence the following year. [Click here to apply on-line](#).

Once your application has been submitted, you may however contact the Student Service Centre in writing at ssc@up.ac.za if you wish to add any additional information, or make any changes to your application.

Please note that application fees may apply. [Click here for the Postgraduate fee structure](#)

Note: All applications are approved by the Head of Department. Student Administration will be able to provide you proof of registration on condition that all financial obligations are met i.e. all outstanding course and registration fees are paid.

d. Relevant Contact Details

- **Honours Degree**

Enquiries:

Mr Joseph Makhasa
joseph.makhasa@up.ac.za

Applications:

Me Sibongile Mgiba
laurine.mgiba@up.ac.za

- **Masters & PhD Degree**

Enquiries & Applications:

Me Stefanie Steenberg
stefanie.steenberg@up.ac.za

- **Subject related matters**

Me Marietha Hicks
mining.postgrad@up.ac.za

e. Registration Process

The student's registration must be renewed annually until such time as the degree requirements have been complied with. Candidates who fail to renew their registration or who interrupt their studies are liable for the full tuition fees when the study is recommenced.

Postgraduate Fees

Refer to the [Postgraduate Fees](#), which gives details regarding tuition fees and payments.

3. Course Selection

The following modules are offered in the various programs. Note that the listing of a module on the approved application form does not constitute a guarantee that the module will be offered. Students should note that even if a module is listed, only those modules for which there is sufficient demand will be offered each year. Students must also confirm during registration that the modules are being offered and in which semester. NO semester changes will be accommodated.

Should a student decide during the academic year to discontinue any modules for which he/she enrolled, a form should be obtained from Student Administration (dawn.taljaard@up.ac.za), completed and submitted. Please NOTE that late cancellations will result in payment of full fees. Refer to University Calendar for details of latest date to cancel without penalties (<http://www.up.ac.za/calendars>).

To discontinue studies, a student should refer to the Student Service Centre (ssc@up.ac.za). Should a student wish to change module(s) after registration, he/she must complete the official "Change of Subject/Module" form (dawn.taljaard@up.ac.za) and submit to Head of Department for approval. The closing dates for these changes are also shown in the University Calendar.

All changes of student details must be communicated to the Head of Department AND updated using the Students on-line system.

4. Postgraduate Program

a. Honours Studies

Each module offered at Honours level is assigned a number of SAQA credits. Approximately 10 hours of study are required per SAQA credit. A total of 128 SAQA credits need to be obtained to complete the Honours degree. The modules described later in detail are either 16 or 32 SAQA credits per module.

All subjects lean towards distance learning and compulsory contact sessions could be scheduled if and where necessary per module. These sessions will be communicated timeously.

BEng(Hons)(Mining Engineering)(12240072) (64 credits)

A minimum of 32 credits should be accumulated per year and the programme should be completed within two years. A limited number of appropriate modules from other departments are allowed. Refer to individual Departments post-graduate brochures.

Please click here for all [module descriptions](#) for below modules

Year Module	Code	Credits
Research Project 700	PSS 700	32 [C]
Semester 1 Module		
Financial Mine Valuation	PFZ 780	16 [E]
Heat & Refrigeration	PKB 712	16 [E]
Semester 2 Module		
Advanced Design: Mining	PMZ 780	16 [E]
Slope Stability	PHS 781	16 [E]
Airflow & Fans	PKB 711	16 [E]
Strata Control	PSZ 786	16 [E]
Surface Mining	POY 783	16 [E]
Advanced Explosives Engineering	PRX 785	16 [E]

[C]: Modules are Core / Compulsory
[E]: Modules are Elective

BSc(Hons)Applied Science)(12243035) (128 credits)

A minimum of 32 credits should be accumulated per year and the programme should be completed within two years.

Year Module	Code	Credits
Research Project 700	PSS 700	32 [C]
Semester 1 Module		
Underground Mining Methods	PMY 701	32 [C]
Surface Mining	PMY 703	16 [C]
Basic Rock Mechanics	PSZ 703	16 [C]
Semester 2 Module		
Basic Mine Ventilation Engineering	PKB 701	16 [C]
Explosive Engineering	PRX 701	16 [C]

[C]: All Modules are Core / Compulsory

PMY 703 Basic Mining Methods is a pre-requisite for the second semester modules. Failing the module will result in exclusion from the rest of the programme

b. Masters Studies

Please click here for all [module descriptions](#) for below modules

MEng(Mining Engineering)(12250071)

Module	Code	Credits
Dissertation 890	PYI 890	128

MSc(Applied Science)(12253044)

Module	Code	Credits
Dissertation 891	PYI 891	128

c. Doctoral Studies

PhD Eng(Mining Engineering)(12263061)

Module	Code	Credits
Thesis 990	MYI 990	360

PhD(Mining)(12263191)

Module	Code	Credits
Thesis 990	MYL 990	360