

# University of Pretoria Yearbook 2021

## BEngHons Mining Engineering (12240072)

**Department** Mining Engineering

**Minimum duration of study** 1 year

**Total credits** 128

**NQF level** 08

### Programme information

The curriculum is determined in consultation with the relevant heads of departments. A student is required to pass modules to the value of at least 128 credits.

The degree is awarded on the basis of examinations only.

### Admission requirements

1. BEng (Mining) degree awarded by the University of Pretoria **or** relevant four-year bachelor's degree in engineering that the Engineering Council of South Africa (ECSA) regards as acceptable for registration as a candidate engineer and for eventual registration as a professional engineer
2. A weighted average of at least 60%
3. At least 2 years mining work experience
4. An entrance examination may be required
5. Comprehensive intellectual CV

### Other programme-specific information

A limited number of appropriate modules from other departments are allowed, i.e. 64 credits.

### Examinations and pass requirements

- i. The examination in each module for which a student is registered, takes place during the normal examination period after the conclusion of lectures (i.e. October/November or May/June).
- ii. A student registered for the honours degree must complete his or her studies within two years (full-time), or within three years (part-time) after first registration for the degree: Provided that the Dean, on recommendation of the relevant head of department, may approve a stipulated limited extension of this period.
- iii. A student must obtain at least 50% in an examination for each module where no semester or year mark is required. A module may only be repeated once.
- iv. In modules where semester or year marks are awarded, a minimum examination mark of 40% and a final mark of 50% is required.

v. No supplementary or special examinations are granted at postgraduate level.

## Pass with distinction

A student passes with distinction if he or she obtains a weighted average of at least 75% in the first 128 credits for which he or she has registered (excluding modules which were discontinued timeously). The degree is not awarded with distinction if a student fails any one module (excluding modules which were discontinued timeously).



## Curriculum: Final year

**Minimum credits: 128**

PSS 700 compulsory module / verpligte module

### Core modules

#### Financial mine valuation 780 (PFZ 780)

<b>Module credits</b>	16.00
<b>NQF Level</b>	08
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	Self study
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Mining Engineering
<b>Period of presentation</b>	Semester 1 or Semester 2

#### Airflow and fans 711 (PKB 711)

<b>Module credits</b>	16.00
<b>NQF Level</b>	08
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	Self study
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Mining Engineering
<b>Period of presentation</b>	Semester 1 or Semester 2

#### Heat and refrigeration 712 (PKB 712)

<b>Module credits</b>	16.00
<b>NQF Level</b>	08
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	Self study
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Mining Engineering
<b>Period of presentation</b>	Semester 1 or Semester 2

#### Advanced design: Mining 780 (PMZ 780)

<b>Module credits</b>	16.00
<b>NQF Level</b>	08



<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	Self study
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Mining Engineering
<b>Period of presentation</b>	Semester 1 or Semester 2

### Open-pit mining 783 (POY 783)

<b>Module credits</b>	16.00
<b>NQF Level</b>	08
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	Self study
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Mining Engineering
<b>Period of presentation</b>	Semester 1 or Semester 2

### Advanced explosive engineering 785 (PRX 785)

<b>Module credits</b>	16.00
<b>NQF Level</b>	08
<b>Prerequisites</b>	No prerequisites.
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Mining Engineering
<b>Period of presentation</b>	Semester 1 or Semester 2

#### Module content

Types of commercial explosives. Properties of explosives. Explosive initiating systems, application of explosives in rock breaking; Surface and underground blast designs and specialised blast designs; the effects of geology on blast results. Fragmentation, blasting and environmental control. Blast assessment. Ethics and regulatory compliance. Safety in blasting.

### Research project 700 (PSS 700)

<b>Module credits</b>	32.00
<b>NQF Level</b>	08
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	Self study
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Mining Engineering
<b>Period of presentation</b>	Year



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## Module content

\*This is a compulsory research module.

### Strata control: Hard-rock mining 786 (PSZ 786)

<b>Module credits</b>	16.00
<b>NQF Level</b>	08
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	Self study
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Mining Engineering
<b>Period of presentation</b>	Semester 1 or Semester 2

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The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.