



# University of Pretoria Yearbook 2021

## BEngHons Metallurgical Engineering (12240063)

**Department** Materials Science and Metallurgical Engineering

**Minimum duration of study** 1 year

**Total credits** 120

**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 degree awarded by the University of Pretoria **or** equivalent degree **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. An entrance examination may be required
3. Comprehensive intellectual CV

### Other programme-specific information

A limited number of appropriate modules from other departments are allowed.

### 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).



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## Curriculum: Final year

### Minimum credits: 120

NLO 700 is a compulsory module

### Core modules

Electrometallurgy 700 (NEL 700) - Credits: 30.00

Fabrication engineering 700 (NFE 700) - Credits: 30.00

Physical metallurgy 700 (NFM 700) - Credits: 30.00

Heat treatment 700 (NHB 700) - Credits: 30.00

Hydrometallurgy 700 (NHM 700) - Credits: 30.00

Corrosion 700 (NKR 700) - Credits: 30.00

Research project 700 (NLO 700) - Credits: 30.00

Mechanical metallurgy 700 (NMM 700) - Credits: 30.00

Minerals processing 700 (NMP 700) - Credits: 30.00

Applied theory of sampling for minerals processing 701 (NMP 701) - Credits: 30.00

Metallurgical analysis 700 (NPA 700) - Credits: 16.00

Pyrometallurgy 700 (NPM 700) - Credits: 30.00

Welding metallurgy 700 (NSW 700) - Credits: 30.00

Refractory materials 700 (NVM 700) - Credits: 30.00

Welding processes 700 (NWP 700) - Credits: 30.00

Design of welded structures 701 (NWP 701) - Credits: 30.00

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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.