



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).



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

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.