



University of Pretoria Yearbook 2021

BEngHons Electronic Engineering (12240092)

Department Electrical, Electronic and Computer 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 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

Students may take modules to the value of 32 credits from other fields of specialisation or from other departments, with approval of the Coordinator: Postgraduate Studies.

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

Additional 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.
- **EIN 732** is a compulsory module.
- With permission from the department EIN 732 may be substituted with **EPT 732 OR EPT 733**.

Core modules

Intelligent systems 732 (EAI 732) - Credits: 32.00

Advanced topics in intelligent systems 733 (EAI 733) - Credits: 32.00

Biosignals and systems 732 (EBB 732) - Credits: 32.00

Bioelectricity and electronics 732 (EBE 732) - Credits: 32.00

Bioelectromagnetism and modelling 732 (EBI 732) - Credits: 32.00

Optimal control 780 (EBO 780) - Credits: 32.00

Energy management 732 (EES 732) - Credits: 32.00

Introduction to research 732 (EIN 732) - Credits: 32.00

Wireless sensor networks 732 (EKS 732) - Credits: 32.00

Electronic defence - electronic countermeasures 780 (ELB 780) - Credits: 32.00

Electronic defence - electronic support 781 (ELB 781) - Credits: 32.00

Antenna theory 780 (EMA 780) - Credits: 32.00

Multivariable control systems 732 (EMB 732) - Credits: 32.00

Analogue electronic design 732 (EME 732) - Credits: 32.00

Communication electronics 732 (EMK 732) - Credits: 32.00

Microwave theory 780 (EMM 780) - Credits: 32.00

Energy optimisation 732 (ENO 732) - Credits: 32.00

Research project: Theory 732 (EPT 732) - Credits: 32.00

Research project: Design and laboratory 733 (EPT 733) - Credits: 32.00

Digital communications 732 (ETD 732) - Credits: 32.00

Telecommunication systems engineering 732 (ETT 732) - Credits: 32.00

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.