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# University of Pretoria Yearbook 2020

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## BEngHons Electronic Engineering (12240092)

**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

- A BEng degree awarded by the University of Pretoria (or equivalent); or a four-year bachelor's degree in engineering that ECSA regards as acceptable for registration as a candidate engineer and for eventual registration as a professional engineer.
- The departmental Postgraduate Committee reserves the right to make a thorough assessment of the applicant's academic transcript and CV, and to decide if the applicant is suitable for postgraduate studies. This assessment may include an oral or written entrance examination.

### 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).



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## Curriculum: Final year

### Minimum credits: 128

EIN 732 is a compulsory module. With permission from the department it may be substituted with:

EPT 732 OR

EPT 733

EIN 732 is 'n verpligte module. Met toestemming van die departement mag dit vervang word met:

EPT 732 OF

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

Computer networks 780 (ERN 780) - Credits: 32.00

Digital communications 732 (ETD 732) - Credits: 32.00

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

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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.