

# University of Pretoria Yearbook 2024

## MEng *Microelectronic Engineering* (12250192)

**Department** Electrical, Electronic and Computer Engineering

**Minimum duration of study** 1 year

**Total credits** 180

**NQF level** 09

### Programme information

Refer also to G30-G41.

The degree is conferred on the basis of a dissertation and examination on the field of study of the dissertation and/or divisions of the field of study as required by the relevant head of department.

### Admission requirements

1. Relevant BEng/BScEng degree (4-year) (NQF level 8) or equivalent with a cumulative weighted average of at least 65% **or** Relevant BEngHons degree (or equivalent) with a cumulative weighted average of at least 65%

**Note:** As determined by the supervisor the MEng student may be required to complete Hons level module(s) for Non-degree Purposes as part of the MEng degree programme.

**Transitional measures:** Students who are currently registered for BEngHons but have not completed the degree, for example part-time students or on leave of absence, can upgrade to MEng if they meet the entrance requirements.

### Examinations and pass requirements

The stipulations of the relevant Faculty regulations are applicable.

Refer also to G36-G37.

The average mark awarded by all the examiners is the final mark, with the pass mark being at least 50%.

#### Upgrading from a master's to a doctoral degree

1. This EBIT faculty regulation should be read in addition to G41.
2. Upgrading from a master's to a doctoral degree can only be considered for exceptional students.
3. Application for upgrading can only be submitted after at least one year of study for the master's degree, but no later than two years.
4. The application for the upgrading must include the following:
  - A letter from the candidate requesting the upgrade which includes a brief motivation.
  - A progress report prepared by the candidate and supported by the supervisor on the work completed to date for the master's degree. The report must provide proof that the results obtained thus far are of such standard

and scientific importance that it justifies its converting to a doctoral degree.

- All details regarding presentations during conferences and accepted publication(s) in internationally accredited and high impact journals must be provided in full.
- 5. A detailed explanation by the candidate of the intended doctoral project with an indication of the objectives of the project, methodology and the outcomes he or she intends to achieve with the project.
- 6. A recommendation of the supervisor with specific comment on the ability of the applicant as potential doctoral candidate as well as on the expediency and feasibility of the upgrading.
- 7. A report from at least one external referent. The supervisor should forward 2 nominations to the head of the relevant department for recommendation to the DD Research and Postgraduate studies who will appoint one referent.
- 8. A minimum of one journal article, where the candidate is the first author, in a high-impact accredited journal with an explanation by the supervisor with respect to the specific contribution made by the candidate.
- 9. A recommendation by the head of department.

## Research information

A student must by means of a dissertation or mini-dissertation prove that he or she is capable of planning, instituting and executing a scientific investigation. Conferment of the degree may be made subject to compliance with the stipulations of this regulation.

One article has to be submitted to an accredited journal on submission of a research master's dissertation. At the latest, just before the department submits the final mark of a dissertation, a student should submit proof of submission of an article issued by an accredited journal, to the head of the department, for his/her recommendation to the dean. The submitted article should be based on the research that the student has conducted for the dissertation and should have been approved by the supervisor. The affiliations of both the student and supervisor should be listed as the University of Pretoria.

Refer also to G40.

With the exception of an honorary degree, a degree will be conferred on a student only if the student has complied with all the requirements for the particular degree and has reached the level of competence prescribed for the degree, and on condition that no one is entitled to any privileges pertaining to a degree before the degree has been conferred on him or her at a graduation ceremony.

## Pass with distinction

A student passes with distinction if an average mark of at least 75% is obtained for the dissertation (and the examination on the dissertation, where applicable).

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## Curriculum: Final year

**Minimum credits: 180**

### Core modules

Dissertation: Micro-electronic engineering 890 (EEY 890) - Credits: 180.00

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#### General Academic Regulations and Student Rules

The [General Academic Regulations \(G Regulations\)](#) and [General Student Rules](#) apply to all faculties and registered students of the University, as well as all prospective students who have accepted an offer of a place at the University of Pretoria. On registering for a programme, the student bears the responsibility of ensuring that they familiarise themselves with the General Academic Regulations applicable to their registration, as well as the relevant faculty-specific and programme-specific regulations and information as stipulated in the relevant yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression, or basis for an exception to any of the aforementioned regulations. The G Regulations are updated annually and may be amended after the publication of this information.

#### Regulations, degree requirements and information

The faculty regulations, information on and requirements for the degrees published here are subject to change and may be amended after the publication of this information.

#### University of Pretoria Programme Qualification Mix (PQM) verification project

The higher education sector has undergone an extensive alignment to the Higher Education Qualification Sub-Framework (HEQSF) across all institutions in South Africa. In order to comply with the HEQSF, all institutions are legally required to participate in a national initiative led by regulatory bodies such as the Department of Higher Education and Training (DHET), the Council on Higher Education (CHE), and the South African Qualifications Authority (SAQA). The University of Pretoria is presently engaged in an ongoing effort to align its qualifications and programmes with the HEQSF criteria. Current and prospective students should take note that changes to UP qualification and programme names, may occur as a result of the HEQSF initiative. Students are advised to contact their faculties if they have any questions.