University of Pretoria Yearbook 2023

BEngHons (Water Resources Engineering) (12240162)

Department	Civil Engineering
Minimum duration of study	1 year
Total credits	128
NQF level	08

Programme information

Refer also to G16-G29.

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** 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. A weighted average of at least 60% for the final year of the BEng degree
3. An entrance examination may be required
4. Comprehensive intellectual CV

Examinations and pass requirements

Refer also to G18 and G26.

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. G18(1) applies with the understanding that under exceptional circumstances an extension of a maximum of three years may be approved: provided that the Dean, on reccommendation 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% (not rounded) 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). The degree must be completed within the prescribed study period.

General 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 (HEQF) 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.

Curriculum: Final year

Minimum credits: 128

Additional information
Please note that not all modules are presented every year.

Core modules

- Select at least **72 credits** from the Core modules
- SSC 780 is a **compulsory** module
- Students select either SHC 798 **OR** SIK 790, not both

Elective modules

- Select electives from the following modules: SGC 794, SHC 793, SHC 796 and SSI 790

OR

- Electives can be selected from the following modules presented by the Department of Chemical Engineering: CEM 780, WAI 780, WBW 780, WCW 780 and WQB 780

Core modules

Flood hydrology 792 (SHC 792) - Credits: 24.00
Free surface flow 794 (SHC 794) - Credits: 24.00
Pipe flow 795 (SHC 795) - Credits: 24.00
Applied statistical methods and optimisation 798 (SHC 798) - Credits: 24.00
Pump systems 785 (SHW 785) - Credits: 24.00
Numerical methods and finite element applications for Civil Engineers 790 (SIK 790) - Credits: 24.00
Civil research 780 (SSC 780) - Credits: 32.00

Elective modules

Principles of environmental engineering 780 (CEM 780) - Credits: 32.00
Concrete technology 794 (SGC 794) - Credits: 24.00
Hydraulic design 793 (SHC 793) - Credits: 24.00
Water resource analysis and management 796 (SHC 796) - Credits: 24.00
Infrastructure management 790 (SSI 790) - Credits: 24.00
Industrial waste engineering 780 (WAI 780) - Credits: 32.00
Biological water treatment 780 (WBW 780) - Credits: 32.00
Chemical water treatment 780 (WCW 780) - Credits: 32.00
Water quality management and research 780 (WQB 780) - Credits: 32.00

Regulations and rules
The regulations and rules for the degrees published here are subject to change and may be amended after the publication of this information.

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.

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