

University of Pretoria Yearbook 2024

BScHons *Mathematics of Finance* (02240276)

Department Mathematics and Applied Mathematics

Minimum duration of study 1 year

Total credits 135

NQF level 08

Admission requirements

1. Relevant bachelor's degree
2. At least 60% for all mathematics and applied mathematics modules at final-year level
3. A minimum of 60% for each of the following subjects/modules (or equivalent):
 - Real analysis at final-year level
 - Linear algebra at second-year level

Promotion to next study year

The progress of all honours candidates is monitored biannually by the postgraduate coordinator/head of department. A candidate's study may be terminated if the progress is unsatisfactory or if the candidate is unable to finish his/her studies during the prescribed period.



Curriculum: Final year

Minimum credits: 135

Core credits: 120

Elective credits: 15

Additional information:

- WTW 732 and WTW 762 are presented as weekly lectures together with some extra block lectures.
- Students must select either WTW 792 or WTW 795

Core modules

Functional analysis 710 (WTW 710) - Credits: 15.00

Mathematical models of financial engineering 732 (WTW 732) - Credits: 15.00

Numerical analysis 733 (WTW 733) - Credits: 15.00

Measure theory and probability 734 (WTW 734) - Credits: 15.00

Mathematical models of financial engineering 762 (WTW 762) - Credits: 15.00

Stochastic calculus 764 (WTW 764) - Credits: 15.00

Project 792 (WTW 792) - Credits: 30.00

Project 795 (WTW 795) - Credits: 30.00

Elective modules

Linear models 710 (LMO 710) - Credits: 15.00

Linear models 720 (LMO 720) - Credits: 15.00

Multivariate analysis 710 (MVA 710) - Credits: 15.00

Multivariate analysis 720 (MVA 720) - Credits: 15.00

Special topics 727 (WTW 727) - Credits: 15.00

Mathematical optimisation 750 (WTW 750) - Credits: 15.00

Finite element method 763 (WTW 763) - Credits: 15.00

Mathematical methods and models 772 (WTW 772) - Credits: 15.00

Partial differential equations of mathematical physics 776 (WTW 776) - Credits: 15.00

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.