

University of Pretoria Yearbook 2021

BScHons Mathematics of Finance (02240276)

Department Mathematics and Applied Mathematics

Minimum duration of

study

1 year

Total credits

135

NQF level

80

Programme information

Renewal of registration

- i. Subject to exceptions approved by the Dean, on the recommendation of the relevant head of department, a student may not sit for an examination for the honours degree more than twice in the same module.
- ii. A student for an honours degree must complete his or her study, in the case of full-time students, within two years and, in the case of after-hours students, within three years of first registering for the degree. Under special circumstances, the Dean, on the recommendation of the relevant head of department, may give approval for a limited extension of this period.

In calculating marks, General Regulation G.12.2 applies.

Apart from the prescribed coursework, a research project is an integral part of the study.

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.

Pass with distinction

The BScHons degree is awarded with distinction to a candidate who obtains a weighted average of at least 75% in all the prescribed modules and a minimum of 65% in any one module.



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

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.