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# University of Pretoria Yearbook 2016

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## MSc Applied Mathematics (02250171)

**Duration of study** 1 year

**Total credits** 180

### Programme information

The programme compilation consists of two master's coursework modules of 30 credits each (the choice of modules to be decided by the Head of Department in consultation with the postgraduate coordinator) as well as a dissertation (120 credits).

Full details of the compilation of the curriculum are available in the departmental postgraduate brochure at: <http://www.up.ac.za/math/postgrad>

The MSc degree is conferred on the grounds of a dissertation and such additional postgraduate coursework as may be prescribed.

### Renewal of registration

As long as progress is satisfactory, renewal of the registration of a master's student will be accepted for the second year of the study. Registration for a third and subsequent years will only take place when the Student Administration of the Faculty receives a written motivation that is supported by the head of department and Postgraduate Studies Committee.

### General

Candidates are required to familiarise themselves with the General Regulations regarding the maximum period of registration and the requirements on the submission of a draft article for publication.

### Admission requirements

An appropriate BScHons degree with a minimum of 60% for all modules at honours level. In the selection procedure the candidate's complete undergraduate and honours academic record will be considered. In particular it is strongly recommended that the following modules be included on honours level: Measure and integration theory Functional analysis Partial differential equations and Numerical analysis.

Admission is also subject to the availability of a suitable supervisor for the study.

### Promotion to next study year

The progress of all master's candidates is monitored biannually by the supervisor and the postgraduate coordinator. 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.

Subject to exceptions approved by the dean, on recommendation of the head of department, and where applicable, a student may not enter for the master's examination in the same module more than twice.



## Pass with distinction

The MSc degree is conferred with distinction to candidates who obtain a final average mark of at least 75% and a mark of at least 75% for the dissertation/mini-dissertation from each of the members of the examination panel. Where a member of the examination panel awards a mark of less than 75% for the dissertation/mini-dissertation, that member of the examination panel must offer, in writing, support for his/her decision, or indicate in writing that he/she supports the examination committee's decision to confer the degree with distinction.



## Curriculum: Year 1

**Minimum credits: 180**

### Core modules

Dissertation: Applied mathematics 890 (TWS 890) - Credits: 120.00

### Elective modules

Sobolev spaces 880 (WTW 880) - Credits: 30.00

Abstract analysis 881 (WTW 881) - Credits: 30.00

Advanced measure theory 884 (WTW 884) - Credits: 30.00

Dynamical systems 887 (WTW 887) - Credits: 30.00

Special topics in mathematics 888 (WTW 888) - Credits: 30.00

Finite element analysis 863 (WTW 863) - Credits: 30.00



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## Curriculum: Final year

**Minimum credits: 180**

### Core modules

Dissertation: Applied mathematics 890 (TWS 890) - Credits: 120.00

### Elective modules

Sobolev spaces 880 (WTW 880) - Credits: 30.00

Abstract analysis 881 (WTW 881) - Credits: 30.00

Advanced measure theory 884 (WTW 884) - Credits: 30.00

Dynamical systems 887 (WTW 887) - Credits: 30.00

Special topics in mathematics 888 (WTW 888) - Credits: 30.00

Finite element analysis 863 (WTW 863) - Credits: 30.00

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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.