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# University of Pretoria Yearbook 2020

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## MSc Advanced Data Analytics (Coursework) (02250194)

**Minimum duration of study** 2 years

**Total credits** 180

**NQF level** 09

### Programme information

Details of compilation of curriculum are available from the Head of the Department of Statistics as well as from the departmental postgraduate brochure.

A candidate must compile his/her curriculum in consultation with the head of department or his representative. Refer to the Departmental website for further information.

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 relevant 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

- A relevant honours degree in Mathematical Statistics is required. A relevant degree must cover compatible content of required degrees at the University of Pretoria.
- For the MSc (Mathematical Statistics) an average mark of at least 65% or more in BScHons (Mathematical Statistics) module, with a minimum of 65% for the research component. Students from other accredited institutions must comply with the same requirements based on equivalent models at their institutions. In addition, students from other accredited institutions must also pass an entrance evaluation.
- Student numbers are limited to a maximum of 26, collectively over all master's programmes in the Department of Statistics.
- Historical performance during prior studies will also be considered in selecting students. Specific attention will be given to modules repeated and duration of study.
- The proposed research of applicants should be in line with the research focus of the department.



- The head of department, in consultation with the departmental postgraduate selection committee reserves the right to prescribe additional modules.
- Applications must include full academic transcripts from undergraduate to current level. SAQA evaluation documentation is required for international applications and on request for students with qualifications from South African institutions.

## Other programme-specific information

As long as progress is satisfactory, renewal of registration of a master's student will be accepted for a second year of study in the case of a full-time student. Renewal of registration for a third and subsequent years for a full-time student will only take place when Student Administration of the Faculty receives a written motivation (the required form can be obtained from the relevant head of department) that is supported by the head of department and Postgraduate Studies Committee. (Also see the General Regulations.)

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## 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 relevant 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.



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## Curriculum: Year 1

All master's students in Statistics/Mathematical Statistics should enrol for STK 899 which is a compulsory but non-credit-bearing module. The satisfactory completion of this module is a prerequisite for embarking on the research component of the degree programme.

Students should choose any four (4) of the elective modules in the list, to the maximum of 80 credits.

### Fundamental modules

Research orientation 899 (STK 899) - Credits: 0.00

### Elective modules

Statistical and machine learning 880 (MVA 880) - Credits: 20.00

Capita selecta: Statistics 880 (STK 880) - Credits: 20.00

Analysis of time series 880 (TRA 880) - Credits: 20.00

Data science: analytics and visualisation 880 (TRG 880) - Credits: 20.00

Cyber analytics 802 (WST 802) - Credits: 20.00



## Curriculum: Final year

### Fundamental modules

Research orientation 899 (STK 899) - Credits: 0.00

### Core modules

Mini-dissertation: Mathematical statistics 895 (WST 895) - Credits: 100.00

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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.