

### 4.1.11 MCom (Mathematical Statistics)

*Please note:* An application has been submitted to externally change the title of this programme to Master of Commerce in Statistics and Data Science, abbreviated as MCom (Statistics and Data Science). This change will be implemented once the amended title has been approved by the Department of Higher Education and Training (DHET) and the Council on Higher Education (CHE), and the change has been registered by the South African Qualifications Authority (SAQA).

#### Admission requirements

- An honours degree with Mathematical Statistics as the major field of study, or Bachelor of Data Science (NQF level 8) with focal area Statistical Learning.

#### Selection

The number of students selected can be influenced by, for example, staff capacity and the availability of resources within the Department, as well as academic merit and University transformation objectives. As staff capacity and resources can fluctuate from year to year, the number of students selected can also differ from year to year.

If your background in mathematical statistics or data science is deemed insufficient after a case-by-case determination by the Department of Statistics and Actuarial Science, the Department may require an additional departmental assessment on mathematical statistics or data science topics. You may also be required to complete additional Stellenbosch University mathematical statistics or data science modules along with your MCom studies.

#### Application procedure and closing date

Apply at [www.sun.ac.za/pgstudies](http://www.sun.ac.za/pgstudies). For South African applicants, the closing date is **31 October** of the year before your intended studies, and for international applicants, it is **30 September**.

#### Duration and starting date of programme

**Duration:** Two years. You must complete the programme within four years. If not, you will have to repeat your modules.

**Starting date:** One and a half weeks before the other classes at the University begin.

#### Enquiries

Programme leader: Prof Sugnet Lubbe  
 Department of Statistics and Actuarial Science  
 Tel: 021 808 3024  
 E-mail: [slubbe@sun.ac.za](mailto:slubbe@sun.ac.za)  
 Website: [www.sun.ac.za/statistics](http://www.sun.ac.za/statistics)

#### Programme structure

You can choose between two possible options:

- **A Coursework and Assignment option** (Mathematical Statistics 889), consisting of a compulsory research assignment of 60 credits and elective modules to add up to at least 180 credits;
- **A Coursework and Thesis option** (Mathematical Statistics 879), consisting of a compulsory thesis and elective modules to add up to at least 180 credits.

#### Programme content

##### Programme modules

You must earn a total of at least 180 credits for one of the options in this programme.

Code	Module	Credits	Module Name	Semester
22853	889	180	Mathematical Statistics (Coursework and Assignment option)	Both
22853	879	180	Mathematical Statistics (Coursework and Thesis option)	Both

The modules for each option are listed below.

**Compulsory module for the Coursework and Assignment option (889) (60 credits)**

Code	Module	Credits	Module Name	Semester
14723	871	60	Research Assignment: Statistics and Data Science	Both

**Compulsory module for the Coursework and Thesis option (879) (90 credits)**

Code	Module	Credits	Module Name	Semester
14724	895	90	Thesis: Statistics and Data Science	Both

**Elective modules for both options (889 and 879)**

- For the Coursework and Assignment option, choose modules totalling at least 120 credits.
- For the Coursework and Thesis option, choose modules totalling at least 90 credits.

*Please note:*

Some of the modules listed below may not be offered in a specific year, depending on circumstances in the Department. Modules can also be offered in different semesters from what is listed below. Please contact the Department to find out which modules will be available.

Code	Module	Credits	Module Name	Semester
10524	819	15	Advanced Mathematical Statistics A	1
11173	849	15	Advanced Mathematical Statistics B	2
10512	815	15	Advanced Multivariate Statistical Analysis A	1
10513	845	15	Advanced Multivariate Statistical Analysis B	2
10523	818	15	Advanced Sampling Techniques	2
10694	811	15	Bootstrap and other Resampling Techniques A	1
10695	841	15	Bootstrap and other Resampling Techniques B	2
10441	813	15	Extreme Value Theory A	Both
10442	843	15	Extreme Value Theory B	Both
18130	822	15	Multi-dimensional Scaling A	1
11910	852	15	Multi-dimensional Scaling B	2
10703	812	15	Statistical Learning Theory A	Both
10704	842	15	Statistical Learning Theory B	Both

*Also take note of the following combinations and prerequisites:*

- Bootstrap and other Resampling Techniques A 811(15) is a prerequisite for Bootstrap and other Resampling Techniques B 841(15).
- Extreme Value Theory A 813(15) and Extreme Value Theory B 843(15) together form a year module.
- Multi-dimensional Scaling A 822(15) is a prerequisite for Multi-dimensional Scaling B 852(15).
- Statistical Learning Theory A 812(15) and Statistical Learning Theory B 842(15) together form a year module.

# Postgraduate Programmes

## 1. General information for all postgraduate programmes

The information in this section applies to most of the postgraduate programmes and is not repeated for each programme, so please read it through carefully. Exceptions and deviations are, however, indicated at the individual programmes.

### 1.1 Postgraduate programmes in the Faculty

The table below lists the postgraduate programmes up to master's level by the department, school or centre where they are offered. The campus or facility is indicated in italics where necessary. All departments, schools and centres also offer a PhD programme. For more on the PhD, see the doctoral section at the end of this chapter.

<b>Africa Centre for HIV/Aids Management</b>
PGDip (HIV/Aids Management)
MPhil (HIV/Aids Management)
<b>Centre for Sustainability Transitions (CST)</b>
PGDip (Sustainable Development)
MPhil (Sustainable Development)
<b>Department of Business Management</b>
PGDip (Marketing)
BComHons (Business Management)
MCom (Business Management)
<b>Department of Economics</b>
BComHons (Economics)
BComHons (Economics and Mathematical Statistics) [with the Department of Statistics and Actuarial Science]
MCom (Economics)
<b>Department of Industrial Psychology</b>
PGDip (Strategic Human Resource Management)
BComHons (Human Resource Management)
BComHons (Industrial Psychology)
MCom (Human Resource Management)
MCom (Industrial Psychology)
<b>Department of Logistics</b>
PGDip (Transport and Logistics)
BComHons (Logistics Management)
BComHons (Operations Research)
BComHons (Transport Economics)
MCom (Logistics Management)
MCom (Operations Research)
MCom (Transport Economics)
<b>Department of Statistics and Actuarial Science</b>
PGDip (Actuarial Science)
BComHons (Actuarial Science)
BComHons (Economics and Mathematical Statistics) [with the Department of Economics]
BComHons (Financial Risk Management)
BComHons (Mathematical Statistics)
BComHons (Statistics)
MCom (Actuarial Science)
MCom (Financial Risk Management)
MCom (Mathematical Statistics)
MCom (Statistics)

School of Accountancy
PGDip (Accounting)
BComHons (Management Accounting)
BAccHons
MCom (Computer Auditing)
MCom (Financial Accounting)
MCom (Management Accounting)
MCom (Taxation)
MAcc (Auditing)
MAcc (Financial Accounting)
MAcc (Taxation)
School of Public Leadership (SPL), <i>Bellville Park</i>
PGDip (Environmental Management) <i>Stellenbosch</i>
PGDip (Public Finance Management)
BComHons (Public and Development Management)
BPubAdminHons
MCom (Public and Development Management)
M (Public Administration)
MPhil (Environmental Management) <i>Stellenbosch</i>
Stellenbosch Business School, <i>Bellville Park</i>
PGDip (Business Management and Administration)
PGDip (Development Finance)
PGDip (Financial Planning)
PGDip (Futures Studies)
PGDip (Leadership Development)
PGDip (Project Management)
MPhil (Development Finance)
MPhil (Futures Studies)
MPhil (Management Coaching)
MBA

## 1.2 Undergraduate module requirements for postgraduate programmes

In Appendix C to this Yearbook part, you will find a table showing the minimum module requirements for admission to certain postgraduate programmes. Review this table to determine whether you meet the requirements for the postgraduate programme you wish to follow.

## 1.3 Selection

Every postgraduate programme in the Faculty is potentially a selection programme since the capacity of the relevant department determines the number of students that can be accommodated in each programme. This means that selection happens when more candidates apply than the department can accommodate in a specific programme. There are, however, also programmes where selection always happens, regardless of how many candidates apply. Departments may choose to list specific requirements and criteria at the relevant programme entries below or on their website or in the programme brochure.

## 1.4 Postgraduate assessment and examination

- Assessment is determined at modular level; therefore, consult the relevant module framework for more information.
- For the Faculty postgraduate assessment rules, you can consult the Faculty website at [www.sun.ac.za/ems](http://www.sun.ac.za/ems) and look under "Current students" and then "General information" to find the link "EMS Postgraduate Assessment Rules".
- For more information and the general rules on assessment, see Part 1 (General Rules) of the Yearbook, under "Assessments and Promotions".

- For the general specifications for assignments, theses, and dissertations, consult the section "Postgraduate Qualifications" in Part 1 (General Rules) of the Yearbook.
- For specific information relating to the assignment, thesis or dissertation for an individual programme, consult the programme administrator or leader or relevant programme documentation.

## **1.5 Pass requirements for postgraduate programmes**

The pass mark for postgraduate programmes is 50% and to pass with distinction you need 75%. More detailed information on pass requirements for individual programmes is available from the relevant programme administrator or leader.

## **1.6 Different campuses and facilities**

Some postgraduate programmes are presented by the Stellenbosch Business School or the School for Public Leadership, both of which are on the Bellville Park campus of the University. The School of Public Leadership also presents classes at the Sustainability Institute at Lynedoch. The place where a particular diploma programme will be presented, if not Stellenbosch campus, is indicated below for each individual Programme under "Programme structure".

## Disclaimer:

The content above comes from the 2024 Economic and Management Sciences Yearbook. Make sure to consult the full **Economic and Management Sciences Yearbook** to see this extract in context and to check if there have been any changes. Take special note of additional information in the yearbook under section **1. General information for all postgraduate programmes.**