BComHons (Mathematical Statistics)

Admission requirements

• A bachelor's degree with an average mark of at least 65% for Mathematical Statistics 3.

Application procedure and closing date

Apply at <u>www.sun.ac.za/pgstudies</u>. 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 of programme and starting date

Duration: One year, full-time. You must complete the programme within three 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 coordinator: Prof Sugnet Lubbe Department of Statistics and Actuarial Science Tel: 021 808 3024 E-mail: <u>slubbe@sun.ac.za</u> Website: <u>www.sun.ac.za/statistics</u>

Programme content

Programme module

You must earn a total of at least 120 credits for this programme.

| Code | Module | Credits | Module Name | Semester |
|-------|--------|---------|-------------------------|----------|
| 22853 | 778 | 120 | Mathematical Statistics | Both |

Please note:

- Some of the modules listed below may not be offered in a specific year and some modules may also be offered in different semesters from the ones listed below, depending on circumstances in the Department. Please contact the Department.
- The research assignment is compulsory. You must complete it under supervision and submit it for examination.
- You can ask for permission to take a maximum of 12 credits from suitable postgraduate modules in other programmes.

| Code | Module | Credits | Module Name | Semester |
|-------|--------|---------|-------------------------------------|----------|
| 13074 | 723 | 6 | Introduction to R Programming | 1 |
| 10602 | 715 | 12 | Multivariate Statistical Analysis A | 1 |
| 10603 | 745 | 12 | Multivariate Statistical Analysis B | 2 |

Compulsory modules (36 credits)

| 11228 | 791 | 30 | Research Assignment: Mathematical Statistics | Both |
|-------|-----|----|--|------|
| 65250 | 718 | 12 | Stochastic Simulation | 1 |
| 10751 | 747 | 12 | Time Series Analysis | 2 |

Please note the following prerequisite:

Multivariate Statistical Analysis A 715(12) is a prerequisite for Multivariate Statistical Analysis B 745(12).

| Code | Module | Credits | Module Name | Semester |
|-------|--------|---------|---|----------|
| 10394 | 711 | 12 | Bayesian statistics | 1 |
| 10408 | 712 | 12 | Biostatistics | 1 |
| 11922 | 724 | 12 | Capita Selecta in Mathematical Statistics A | 1 |
| 11923 | 754 | 12 | Capita Selecta in Mathematical Statistics B | 2 |
| 58777 | 741 | 12 | Data Mining | 1 |
| 10440 | 713 | 12 | Experimental Design | 1 |
| 10705 | 742 | 12 | Sampling Techniques | 1 |
| 13360 | 771 | 12 | Statistical Learning Theory | 2 |
| 10636 | 746 | 12 | Survival Analysis | 2 |

Elective modules (at least 84 credits)

Please note following prerequisite:

Data Mining 741(12) is a prerequisite for Statistical Learning Theory 771.