

BACHELOR OF SCIENCE IN MATHEMATICS AND STATISTICAL SCIENCES (3031)

B.145 ADMISSION

Unless Senate decides otherwise, a student shall be required to meet the following criteria to be enrolled for the **Bachelor of Science in Mathematics and Statistical Sciences Degree - BSc (Mathematics and Statistical Sciences)**:

B.145.1 Minimum admission requirements for applicants who matriculated from 2008

- (a) The National Senior Certificate for Bachelor's Degree study with a score of no fewer than 27 points calculated according to the University's approved points system, as well as the following specific subject requirements:
- Level 4 (50-59%) in English (Home or First Additional Language), and
 - Level 3 (40-49%) in another Language (Home or First Additional Language), and
 - Level 3 (40-49%) in Mathematics, and
 - Level 3 (40-49%) in Physical Sciences, or
 - Level 3 (40-49%) in Life Sciences, or
 - Level 4 (50-59%) in Information Technology

B.145.2 Minimum admission requirements for applicants who matriculated before 2008

- (a) Senate, upon recommendation of the faculty, may admit an applicant with a full Matriculation Exemption with Mathematics and either Science or Biology at Higher Grade with an E-symbol or Standard Grade with a D-symbol.

OR

- (b) A qualification or level of competence which the Senate of the University has deemed to be equivalent to the requirements stipulated in (a) above.

B.145.3 Alternative admission

Alternative admission requirements for applicants in terms of Recognition of Prior Learning (RPL)

An applicant who completed the NSC in 2008 or thereafter, but has not obtained an endorsement, shall be considered for alternative admission after the age of 23. Such an applicant shall be required to complete an RPL portfolio development course and submit to a process where relevant learning and/or experience shall be assessed.

An applicant who is 23 years or older and does not have a matriculation certificate or NSC, but who may have obtained other qualifications or experience that may be deemed to be equivalent to admission criteria for the particular study programmes shall also be required to complete an RPL portfolio development course or an RPL portfolio process as agreed upon, and to submit to a process where such learning, qualification, and/or experience shall be assessed.

B.146 SELECTION

Final selection shall be based on an applicant meeting the criteria as determined by the Faculty.

B.147 DURATION

Unless Senate decides otherwise, the duration of the degree is four years.

B.148 CURRICULUM

Mathematics Stream

B.148.1 Level 1

Module Name	Module Code	Credits
Compulsory (select all modules)		
Introduction to Science 153	ISC153	30
Mathematics 151(SF)	MAM151	15
Physics 151(SF)	PHY151	15
	Sub-total	60

B.148.2 Level 2

Module Name	Module Code	Credits
Compulsory (select all modules)		
Mathematics 152 (SF)	MAM152	15
Statistics 111	STA111	15
Statistics 121	STA121	15
Electives (select one module)		
Mathematics 112	APM112	15
Applied Mathematics 123	APM123	15
Physics 152 (SF)	PHY152	15
	Sub-total	60

B.148.3 Level 3

Module Name	Module Code	Credits
Compulsory (select both modules)		
Mathematics 211	MAT211	20
Mathematics 221	MAT221	20
	Sub-total	40
Electives (select four modules)		
Mathematics 212	MAT212	20
Mathematics 232	MAT232	20
Physics 212	PHY212	20
Physics 217	PHY217	20
Physics 222	PHY222	20
Physics 227	PHY227	20
Statistics 211	STA211	20
Statistics 221	STA221	20
	Sub-total	80
	Total	120

B.148.4 Level 4

Module Name	Module Code	Credits
Compulsory (select all groups)		
Group 1		

Mathematics 311	MAT311	30
Group 2 (select one module)		
Mathematics 312	MAT312	30
Mathematics 321	MAT321	30
Mathematics 322	MAT322	30
	Sub-total	60
Electives (select two modules)		
Mathematics 312 (only if not selected in the compulsory list)	MAT312	30
Mathematics 321 (only if not selected in the compulsory list)	MAT321	30
Mathematics 322 (only if not selected in the compulsory list)	MAT322	30
Statistics 331	STA331	30
Statistics 332	STA332	30
	Sub-total	60
	Total	120
	FINAL TOTAL	360

Statistics Stream

B.148.5 Level 1

Module Name	Module Code	Credits
Compulsory (select all modules)		
Mathematics 151(SF)	MAM151	15
Introduction to Science 153	ISC153	30
Statistics 151 (SF)	STA151	15
	Sub-total	60

B.148.6 Level 2

Module Name	Module Code	Credits
Compulsory (select all modules)		
Mathematics 152 (SF)	MAM152	15
Statistics 121	STA121	15
Electives (select 30 credits)		
Mathematics 112	APM112	15
Applied Mathematics 123	APM123	15
Computer Science 101	COS101	30
	Sub-total	60

B.148.7 Level 3

Module Name	Module Code	Credits
Compulsory (select both modules)		
Statistics 211	STA211	20
Statistics 221	STA221	20
	Sub-total	40
Electives (select four modules)		
Computer Science 211	CSC211	20
Computer Science 212	CSC212	20
Mathematics 211 (pre-requisite for Honours in Statistics)	MAT211	20
Mathematics 212	MAT212	20

Mathematics 221 (pre-requisite for Honours in Statistics)	MAT221	20
Mathematics 232	MAT232	20
	Sub-total	80
	Total	120

B.148.8 Level 4

Module Name	Module Code	Credits
Compulsory (select both modules)		
Statistics 331 (pre-requisite for Honours in Statistics)	STA331	30
Statistics 332 (pre-requisite for Honours in Statistics)	STA332	30
	Sub-total	60

Electives (select one group)

Group 1 (select two modules)

Mathematics 311	MAT311	30
Mathematics 312	MAT312	30
Mathematics 321	MAT321	30
Mathematics 322	MAT322	30

Group 2 (select both modules)

Computer Science 311	CSC311	30
Computer Science 312	CSC312	30
	Sub-total	60
	Total	120

FINAL TOTAL 360

B.149 ASSESSMENT

Assessment is governed by Rule A.5 as stipulated in the General Calendar: General Information Part 1 in addition to the following:

B.149.1 Sub-minimum requirement

A sub-minimum of 40% is required in the practical part for modules which include a practical component.

B.149.2 Weighting of practical component

B.149.2.1 The percentage of the total marks allocated to the practical examination where it forms part of the theory evaluation shall not exceed 50%.

B.149.2.2 For the purpose of promotion, the practical component shall not be credited independently of the theory component of a particular module.

B.149.3 Final mark

Except where otherwise indicated, the final mark shall be obtained by means of a system of continuous evaluation, which will differ from module to module, combined with examinations, as indicated in the University's Assessment Policy.

B.149.4 Re-evaluation of practical modules

No re-evaluation will be allowed for practical components that are evaluated on a continuous basis.

B.150 PROMOTION RULES

Unless Senate decides otherwise and subject to Rule A.3.2.3 or as provided for in the Faculty rules:

B.150.1 Level 1

A student shall promote to Level 2 of study on obtaining 45 credits and when all pre-requisites for Level 2 modules have been met.

B.150.2 Level 2

A student shall promote to Level 3 of study on obtaining 90 credits at Level 2 and when all pre-requisites for Level 3 modules have been met.

B.150.3 Level 3

A student shall promote to Level 4 of study on obtaining 200 credits and when all Level 1 and 2 modules have been passed.

B.151 ADVANCE REGISTRATION

B.151.1 Notwithstanding the above, in consultation with the faculty a student who has not obtained sufficient credits to promote may register for modules at the next level, provided all pre-requisites for the next level module have been met and no timetable clashes occur as a result of this registration.

B.151.2 Level 1

A student who has passed 2 of the 3 modules at Level 1 of study may be allowed to register for a maximum of 30 credits or one year-long module at Level 2.

B.151.3 Level 2

A student who has obtained 30 credits at Level 2 of study may be allowed to register for a maximum of 40 credits at Level 3 and completing all modules at Level 1. Total credits registered may not exceed 90.

B.151.4 Level 3

A student who has obtained 80 credits at Level 3 of study may be allowed to register for a maximum of 60 credits at Level 4 and completing all modules at Levels 1 and 2. Total credits registered may not exceed 90.

Please Note: A student must complete all Level 1 and 2 modules before registering for Level 4 modules.

B.152 RENEWAL OF REGISTRATION

B.152.1 Renewal of registration shall be governed by Rule A.3.2.3, as stipulated in the University Calendar: General Information Part 1 or as provided for in the faculty rules as contained in this Calendar

B.152.2 Unless Senate decides otherwise, a student who is academically refused in terms of

Rule A.3.2.3 may apply in writing to the Dean for renewal of registration if s/he can provide evidence of extenuating circumstances which impacted on his/her academic performance, and can show that these circumstances have changed to the extent that success upon re-registration can reasonably be expected.

Please Note: This rule may only be invoked once in the entire duration of the degree programme.

B.153 SPECIAL REQUIREMENTS FOR THE PROGRAMME

B.153.1 Modules from other Faculties

B.153.1.1 A maximum of 30 credits in modules from other faculties shall be permitted, except for Computer Science students who shall be allowed to take Information Systems as a module in his/her programme.

B.153.1.2 At least 100 of the total number of credits obtained at Levels 2 and 3 of study shall be from the same programme.

B.153.2 Restriction on choice of modules

The following limitations apply to modules that can be credited towards obtaining a degree or certificate. Credit shall not be granted for:

B.153.2.1 Chemistry: (CHE114 and CHE124) **or** (CHE116 and CHM126).

B.153.2.2 Physics: (PHY111 and PHY121) **or** (PHY116 and PHY126) **or** (PHY112 and PHY113 and PHY116) **or** (PHY151 and PHY152).

B.153.2.3 Mathematics: MAT105 **or** MAM115 **or** (MAT103 and MAT104) **or** (MAM151 and MAM152).

B.153.2.4 Statistics: STA111 **or** STA125 **or** STA151 **or** BUS131 **or** BUS132 **or** STA141 **or** STA142.

B.153.2.5 A student may not claim credits for modules passed prior to 1999.

B.154. Endorsed Degree

B.154.1 In order to obtain an “endorsed degree” a student must obtain at least 240 credits in the compulsory modules of the degree.

B.154.2 A student who does not fulfil this criterion may be awarded a BSc degree (not endorsed) provided s/he has completed 130 credits in a major module (i.e. at Levels 1, 2 and 3 of study) and has accumulated a total of 360 credits, with at least 120 credits at each year level.