

# **BACHELOR OF SCIENCE HONOURS IN MATHEMATICAL SCIENCE** **(3736)**

## **B.244 ADMISSION**

Unless Senate decides otherwise and subject to Rule A.2.3, candidates will be required to meet the following criteria to be enrolled for the degree: **Bachelor of Science Honours - BScHons (Mathematical Science)**

**B.244.1** At least a 60% pass in third year level Mathematics or its equivalent at other universities and the approval of the departmental Post-Graduate committee is required for admission into the programme.

**B.244.2** If less than 60% was obtained in third year level Mathematics the candidate may be required to take an entry examination (test) or re-take one or more appropriate modules at third year level.

## **B.245 SELECTION**

As only a limited number of students can be admitted to the programme, applicants will be subject to a selection procedure.

## **B.246 DURATION**

Unless Senate decides otherwise the duration of the programme shall extend over one year's full-time study and two years part-time study.

## **B.247 CURRICULUM**

<b>Module Name</b>	<b>Alpha Code</b>	<b>Cred</b>
<b>Compulsory</b>		
Research Project 748	MAM748	30
<b>Electives (choose any 6 modules)</b>		
Ordinary Differential Equations 707	MAM707	15
Algebraic Number Theory 708	MAM708	15
Number Theory 709	MAM709	15
Graph Theory 710	MAM710	15
Partial Differential Equations 717	MAM717	15
Measure and Integration 727	MAM727	15
Computational Linear Algebra 728	MAM728	15
Mathematical Modelling in Epidemiology 730	MAM730	15
Design Theory 736	MAM736	15
Topology 737	MAM737	15
Functions of a Complex Variable 738	MAM738	15
Group Theory 739	MAM739	15
Introduction to Optimal control 740	MAM740	15
Coding Theory 747	MAM747	15
Rings and Modules 757	MAM757	15
Functional Analysis 767	MAM767	15
Numerical Analysis 777	MAM777	15
Galois Theory 787	MAM787	15
Cryptography 797	MAM797	15
Stochastic Calculus for Finance 714	COF714	15
Financial Engineering 716	COF716	15
	<b>Sub-Total</b>	<b>90</b>
	<b>TOTAL</b>	<b>120</b>

**B.247.1** A student may take up to an equivalent of two Honours modules, not exceeding 30 credits, from cognate or associate disciplines, provided they; have the permission from the Chairpersons of the said department (s) and the Chairperson of the Department of Mathematics and Applied Mathematics.

#### **B.248 ASSESSMENT**

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

#### **B.249 PROGRESS RULES**

##### **B.249.1 Full-time**

Unless Senate decides otherwise, a full-time student shall complete the programme in one year. A student who passed at least 60 credits may proceed with his/her studies to complete the programme the following year.

##### **B.249.2 Part-time**

Unless Senate decides otherwise, a part time student shall complete the programme in two consecutive years and accumulate at least 60 credits per annum to proceed with his or her studies. A student who accumulated 90 credits within two years may be allowed to proceed to the following year to complete the programme.

#### **B.250 RENEWAL OF REGISTRATION**

The renewal of registration will be governed by the Rule A.4, as stipulated in the University Calendar: General Information Part 1.

#### **B.251 SPECIAL REQUIREMENTS FOR THE PROGRAMME**

**B.251.1** Please note that not all modules will be offered in a specific year and modules may be offered in either semester.