MATHEMATICS – MAJOR (SCIENCE) – BACHELOR OF SCIENCE (HONOURS)

MATH-M-BSH

Subject: Administered by the Department of Mathematics and Statistics.
Plan: Consists of 60.00 units as described below.
Program: The Plan, alone, or in combination with a Minor in another subject, and with sufficient electives to total 120.00 units, will lead to a Bachelor of Science (Honours) Degree.

Code	Title	Units
1. Core		
A. Complete the following:		
MATH 110	Linear Algebra	6.00
MATH 120	Differential and Integral Calculus	6.00
B. Complete the following:		
MATH 210	Rings and Fields	3.00
MATH 231	Differential Equations	3.00
MATH 280	Advanced Calculus	3.00
MATH 281	Introduction to Real Analysis	3.00
C. Complete the following:		
STAT 268	Statistics and Probability I	3.00
STAT 269	Statistics and Probability II	3.00
2. Option		
A. Complete 24.00 units from the following:		**24.00**
BIOM at the 300-level or above		
MATH at the 300-level or above		
STAT at the 300-level or above		
B. Complete 6.00 units from the following:		**6.00**
BIOM at the 400-level or above		
MATH at the 400-level or above		
STAT at the 400-level or above		
Electives		
Elective Courses		60.00
Total Units		**120.00**

3. Notes

A. In planning their program, students should keep in mind that some of the 300- and 400-level courses listed are not offered every year and that many 400-level courses may be taken in third year.

B. Graduate courses at the 800-level are available to fourth-year students with an excellent record who obtain permission of the Department and of the School of Graduate Studies and Research.

C. Students should select some of their 300-level and 400-level courses to be focused in one area of mathematics or statistics. The following is a list of suggested areas and some of the courses that belong to those areas:

i. ***Actuarial Focus***
COMM 211, COMM 221, ECON 110, ECON 111, ECON 112, ECON 212, MATH 272, MATH 337, MATH 384, MATH 385, MATH 434, STAT 353, STAT 361, STAT 455, STAT 462, STAT 463, STAT 464, STAT 465.

ii. ***Biomathematics Focus***
BIOM 300, MATH 337, MATH 339, MATH 427, MATH 434, STAT 455.

iii. ***Business Focus***
MATH 337, MATH 384, MATH 401, MATH 434, STAT 353, STAT 361, STAT 455, STAT 463, STAT 464, STAT 465.

iv. ***Communications Focus***
MATH 328, MATH 406, MATH 418, MATH 474,MATH 477, STAT 455.

v. ***Discrete Mathematics and Optimization Focus***
MATH 401, MATH 402, MATH 406, MATH 434, STAT 353.

vi. ***Dynamic Processes Focus***
MATH 326, MATH 328, MATH 427, STAT 353.

vii. ***Probability Focus***
MATH 328, MATH 474, STAT 353, STAT 455, STAT 463.

viii. ***Pure Mathematics Focus***
MATH 310, MATH 326, MATH 328, MATH 341, MATH 401, MATH 413, MATH 414, MATH 421.

ix. ***Statistics Focus***
STAT 361, STAT 456, STAT 457, STAT 462, STAT 463, STAT 464, STAT 465, STAT 466, STAT 471, STAT 473, STAT 486.

x. ***Teaching Focus***
MATH 311, MATH 381, MATH 382, MATH 386, MATH 387.

D. A maximum of 6.00 units from courses offered by other Faculties and Schools may be counted toward the program and/or Plan requirements. This includes courses in BMED,

COMM, GLPH, HSCI, LAW, NURS, and courses in the Faculty of Engineering and Applied Science.