

## BSc (Hons) MATHEMATICS AND STATISTICS - COURSE DISTRIBUTION PER SEMESTER

A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
<b>Year 1 A' Semester</b>								
1.	Compulsory	Discrete Mathematics	MA1611	4	1 hour	13	52	---
2.	Compulsory	From Geometry into Algebra	MA1612	4	1 hour	13	52	---
3.	Compulsory	Functions, Vectors and Calculus	MA1831	3	1 hour	13	39	---
4.	Compulsory	Introduction to Probability and Statistics	MA1861	3	1 hour	13	39	---
5.	Compulsory	English Language I	EF1705	4	1 hour	13	52	10
<b>Year 1 B' Semester</b>								
6.	Compulsory	Discrete Mathematics	MA1611	4	1 hour	13	52	10
7.	Compulsory	From Geometry into Algebra	MA1612	4	1 hour	13	52	10
8.	Compulsory	Functions, Vectors and Calculus	MA1831	3	1 hour	13	39	10
9.	Compulsory	Introduction to Probability and Statistics	MA1861	3	1 hour	13	39	10
10.	Compulsory	English Language II	EF1705	4	1 hour	13	52	10

A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
<b>Year 2 A' Semester</b>								
11.	Optional	History of Mathematics	MA1613	3	1 hour	13	39	---
12.	Optional	Academic Writing	EF1498	2	1 hour	13	26	---
13.	Optional	Study and Research Skills	CO1808	3	1 hour	13	39	---
14.	Compulsory	Introduction to Algebra and Linear Algebra	MA1811	3	1 hour	13	39	---
15.	Compulsory	Real Analysis	MA1821	3	1 hour	13	39	---
16.	Compulsory	Mechanics	AP1842	3	1 hour	13	39	---
17.	Compulsory	Computational Mathematics	MA1851	3	1 hour	13	39	---
18.	Compulsory	Theory of Probability and Statistics	MA1871	4	1 hour	13	52	---
<b>Year 2 B' Semester</b>								
19.	Optional	History of Mathematics	MA1613	3	1 hour	13	39	10
20.	Optional	Academic Writing	EF1498	2	1 hour	13	26	10
21.	Optional	Study and Research Skills	CO1808	3	1 hour	13	39	10

A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
22.	Compulsory	Introduction to Algebra and Linear Algebra	MA1811	3	1 hour	13	39	10
23.	Compulsory	Real Analysis	MA1821	3	1 hour	13	39	10
24.	Compulsory	Mechanics	AP1842	3	1 hour	13	39	10
25.	Compulsory	Computational Mathematics	MA1851	3	1 hour	13	39	10
26.	Compulsory	Theory of Probability and Statistics	MA1871	4	1 hour	13	52	10
<b>Year 3 A' Semester</b>								
27.	Optional	Algebraic Structures	MA2811	2	1 hour	13	26	---
28.	Optional	Cryptology	MA2812	2	1 hour	13	26	---
29.	Compulsory	Further Real Analysis	MA2821	2	1 hour	13	26	---
30.	Compulsory	Ordinary Differential Equations	MA2831	2	1 hour	13	26	---
31.	Optional	Vector Calculus	MA2832	2	1 hour	13	26	---
32.	Compulsory	Numerical Analysis	MA2852	2	1 hour	13	26	---
33.	Optional	Nonparametric Statistics	MA2871	3	1 hour	13	39	5

A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
34.	Compulsory	Linear Models	MA2873	3	1 hour	13	39	---
35.	Optional	University elective*	-	-	-	13	-	5/10
<b>Year 3 B' Semester</b>								
36.	Optional	Algebraic Structures	MA2811	2	1 hour	13	26	10
37.	Optional	Cryptology	MA2812	2	1 hour	13	26	10
38.	Compulsory	Further Real Analysis	MA2821	2	1 hour	13	26	10
39.	Compulsory	Ordinary Differential Equations	MA2831	2	1 hour	13	26	10
40.	Optional	Vector Calculus	MA2832	2	1 hour	13	26	10
41.	Compulsory	Numerical Analysis	MA2852	2	1 hour	13	26	10
42.	Optional	Survey Methodology	MA2872	3	1 hour	13	39	5
43.	Compulsory	Linear Models	MA2873	3	1 hour	13	39	10
44.	Optional	University elective*	-	-	-	13	-	5/10
<b>Year 4 A' Semester</b>								
45.	Optional	Fields and Galois Theory	MA3811	2	1 hour	13	26	---
46.	Compulsory	Complex Analysis	MA3821	2	1 hour	13	26	---

A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
47.	Optional	PDEs and Integral Transforms	MA3831	2	1 hour	13	26	---
48.	Compulsory	Stochastic Processes	MA3871	3	1 hour	13	39	---
49.	Compulsory	Computational Statistics and Data Analysis	MA3872	3	1 hour	13	39	---
50.	Optional	Time Series	MA3873	3	1 hour	13	39	---
51.	Optional	Multivariate Analysis	MA3874	3	1 hour	13	39	---
52.	Optional	Biostatistics and Epidemiology	MA3876	3	1 hour	13	39	5
53.	Optional	Financial Statistics	MA3878	3	1 hour	13	39	5
54.	Optional	Mathematics Project	MA3999	1	1 hour	8	8	---
55.	Optional	University elective*	-	-	-	13	-	5/10
<b>Year 4 B' Semester</b>								
56.	Optional	Fields and Galois Theory	MA3811	2	1 hour	13	26	10
57.	Compulsory	Complex Analysis	MA3821	2	1 hour	13	26	10
58.	Optional	PDEs and Integral Transforms	MA3831	2	1 hour	13	26	10
59.	Compulsory	Stochastic Processes	MA3871	3	1 hour	13	39	10

A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
60.	Compulsory	Computational Statistics and Data Analysis	MA3872	3	1 hour	13	39	10
61.	Optional	Time Series	MA3873	3	1 hour	13	39	10
62.	Optional	Multivariate Analysis	MA3874	3	1 hour	13	39	10
63.	Optional	Operational Research	MA3875	2	1 hour	13	26	10
64.	Optional	Actuarial Mathematics and Statistics	MA3877	3	1 hour	13	39	5
65.	Optional	Mathematics Project	MA3999	1	1 hour	8	8	10
66.	Optional	University elective*	-	-	-	13	-	5/10

*\*Students will have the option to select one university elective in Year 3 and one in their final year of studies (year 4). The university elective module can be either 5 ECTS or 10 ECTS.*