

# Bachelor of Mathematics and Finance

Specialisation Code: MF01

To qualify for the award of the degree of Bachelor of Mathematics and Finance a student must satisfactorily complete at least 192 credit points from the Mathematics and Finance Schedule, including

1. at least 168 credit points for MATH, STAT, INFO, ACCY, FIN, ECON, MGMT subjects, including
  - (a) at least 72 credit points of MATH, STAT and INFO subjects,
  - (b) at least 72 credit points of ACCY, FIN, ECON and MGMT subjects,
2. no more than 66 credit points of 100 level subjects,
3. one of the subjects CSCI114 or BUSS111,
4. not in addition to the above, each of the subjects
 

ACCY100	FIN 221	FIN 322
ACCY102	FIN 223	FIN 323
ECON101	MATH201	ECON331
ECON111	MATH202	MATH317
MATH111	MATH203	STAT332
MATH187	STAT231	
MATH188	STAT232	
5. **for Non-Honours**, in *addition* to the above, at least a further 30 credit points for 300 and /or 400 level subjects from the List of Electives, including
  - (a) at least 12 credit points of MATH, STAT and INFO subjects,
  - (b) at least 12 credit points of ACCY/FIN subjects,
6. **for Honours**, in *addition* to the above, at least a further 42 credit points for 300 and /or 400 level subjects from the List of Electives, including
  - (a) the subject INFO401,
  - (b) at least 12 credit points of MATH, STAT and INFO subjects including MATH471 or STAT471,
  - (c) at least 12 credit points of ACCY/FIN subjects including ACCY407,
  - (d) a total of at least 36 credit points of 400 level subjects,
7. all other subjects from the List of Electives.

## **Recommended Program** (This is a suggested plan only.)

Year 1		Year 2	
ACCY100	ACCY102	FIN 221	FIN 223
ECON111	MATH111	MATH201	MATH202
MATH187	MATH188	STAT231	STAT232
STAT131* ↔	BUSS111/CSCI114	ECON101 ↔	Elective

\*Not compulsory, but highly recommended.

Year 3		Year 4	
FIN 323	FIN 322	<i>Non-Honours</i>	<i>Honours</i>
MATH203	ECON331	48 credit points	ACCY407
MATH317	STAT332	of Electives	INFO401
Elective	Elective		30 credit points of Electives

See over for List of Electives.

**List of Electives** (See the Calendar for Prerequisite details)

		<i>Credit Points</i>	<i>Session</i>			<i>Credit Points</i>	<i>Session</i>
ACCY201	Financial Accounting 2B	6	2	MATH121	Discrete Mathematics	6	1
ACCY200	Financial Accounting 2A	6	1	MATH204	Complex Variables and Group Theory	6	2
ACCY407	Empirical Research Methods	6	1	MATH222	Continuous and Finite Mathematics	6	1
FIN 226	Financial Markets and Institutions	6	2	MATH302	Differential Equations 3	6	2
FIN251	Introduction to Financial Planning	6		MATH305	Partial Differential Equations	6	1
FIN 320	Risk and Insurance	6	2	MATH321	Numerical Analysis	6	2
FIN 324	Financial Statement Analysis	6	1	MATH322	Algebra	6	1
FIN 325	Banking Management	6	1	MATH323	Topology and Chaos	6	2
FIN 328	Retirement and Estate Planning	6		MATH 325	Wavelets	6	1
FIN329	Real estate Planning	6		MATH371	Special Topics in Industrial & Applied Maths	6	
FIN 351	International Finance	6	2	MATH372	Special Topics in Mathematical Analysis	6	
FIN 353	Global Electronic Finance	6		MATH471	Honours Topics in Maths A	6	
FIN 359	Selected Issues in Finance	6		MATH472	Honours Topics in Maths B	6	
FIN 422	Advanced Investment Analysis	6	1				
FIN 423	Advanced Portfolio Management	6	2				
FIN 424	Advanced Financial Statement Analysis	6	1	INFO 411	Data Mining & Knowledge Discovery	6	
FIN 425	Banking Theory and Practice	6	1	INFO 412	Mathematics for Cryptography	6	1
FIN 426	Advanced Corporate Finance	6	1	INFO 413	Information Theory	6	2
FIN428	Multinational Financial Management	6		BUSS212	Database Management Systems	6	2
FIN 487	Special Topics in Finance	6					
ECON215	Microeconomic Theory & Policy	6	1&2	CSCI103	Algorithms and Problem Solving	6	1&2
ECON216	International Economics	6	2	CSCI124	Applied Programming	6	2
ECON221	Econometrics	6		CSCI204	Object Programming and Frameworks	6	1&2
ECON301	Monetary Economics	6	1	CSCI235	Databases	6	2
ECON305	Economic Policy	6	2				
ECON307	International Monetary Economics	6	2	IACT201	Info Tech and Citizen's Rights	6	1
ECON322	Mathematical Economics	6					
ECON327	Advanced Econometrics	6		LAW100	Law in Society	6	1
MGMT308	Intro to Management for Professionals	6	1	LAW210	Contract Law	6	2
STAT131	Understanding Variation and Uncertainty	6	1&2				
STAT304	Applied Probability and Financial Risk	6	2				
STAT333	Statistical Inference & Multivariate Analysis	6	1				
STAT335	Sample Surveys & Experimental Design	6	1				
STAT471	Honours Topics in Stats A	6					
STAT472	Honours Topics in Stats B	6					
STAT373	Special Topics in Probability & Stats	6					