

PRE-2019 COMMENCER STUDY PLAN

3014School of Mathematical Sciences

Semester 1 Start

Bachelor of Mathematical Sciences Bachelor of Mathematical Sciences (Advanced) Bachelor of Mathematical & Computer Sciences Honour Degree of Bachelor of Mathematical Sciences Bachelor of Mathematical & Computer Sciences (Honours) – Computer Science Project Bachelor of Mathematical & Computer Sciences (Honours) – Mathematical Sciences Project

Semester 2 Start

Bachelor of Mathematical Sciences Bachelor of Mathematical Sciences (Advanced) Bachelor of Mathematical & Computer Sciences Bachelor of Mathematical Sciences (Honours) Bachelor of Mathematical & Computer Sciences (Honours) Bachelor of Mathematical & Computer Sciences (Honours) – Computer Science Project Bachelor of Mathematical & Computer Sciences (Honours) – Mathematical Sciences Project



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			:	BACHELOR OF MATHI	EM	ATICAL SCIENCES		
	S1	MATHS 1011 Mathematics IA		COMP SCI 1012 Scientific Computing ENG 1002 Programming (Matlab and C)		Level I Elective -*	Level I or II or III Elective -*	
YEAR 1	S2	MATHS 1012 Mathematics IB		MATHS 1008 Mathematics for Information Technology I MATHS 1004 Mathematics For Data Science 1		STATS 1005 Statistical Analysis & Modeling I -	Level I or II or III Elective -*	
YEAR 2	S1	MATHS 2101 Multivariable & Complex Calculus II -		MATHS 2102 Differential Equations II -		MATHS 2103 Probability & Statistics II -	Level I or II or III Elective -*	
	S2	MATHS 2100 Real Analysis II -		STATS 2107 Statistical Modelling and Inference II		Level II Elective -*	Level II Elective -*	
VEAD 2	S1	MATHS 3025 Professional Practice III		Level III Applied Mathematics, Pure Mathematics or Statistics Elective		Level III Applied Mathematics, Pure Mathematics or Statistics Elective	Level III Elective -*	
YEAR 3	S2	Level III Applied Mathematics, Pure Mathematics or Statistics Elective		Level III Applied Mathematics, Pure Mathematics or Statistics Elective		Level III Applied Mathematics, Pure Mathematics or Statistics Elective	Level III Applied Mathematics, Pure Mathematics or Statistics Elective	

	CHOOSE FROM THE FOLLOWING ELECTIVES										
Applied Mathematics Courses	APP MTH 2105 Optimisation and Operations Research II		APP MTH 3001 Applied Probability III		APP MTH 3002 Fluid Mechanics III		APP MTH 3014 Optimisation III				
	APP MTH 3016 Random Processes III		APP MTH 3020 Stochastic Decision Theory III		APP MTH 3021 Modelling with Ordinary Differential Equations III		APP MTH 3022 Optimal Functions and Nanomechanics III				
	APP MTH 3023 Partial Differential Equations and Waves III										
Mathematical Sciences Courses	MATHS 2104 Numerical Methods II		MATHS 3012 Financial Modelling: Tools & Techniques III								



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	PURE MTH 2106 Algebra II	PURE MTH 3002 Topology and Analysis III	PURE MTH 3003 Number Theory III	PURE MTH 3007 Groups and Rings III	
Pure Mathematics Courses	PURE MTH 3009 Integration and Analysis III	PURE MTH 3018 Coding & Cryptology III	PURE MTH 3019 Complex Analysis III	PURE MTH 3021 Logic & Computability	
	PURE MTH 3022 Geometry of Surfaces III	PURE MTH 3023 Fields and Modules III	PURE MTH 3024 Finite Geometry III		
Statistics	STATS 3001 Statistics Modelling III	STATS 3003 Sampling Theory and Practice III	STATS 3005 Time Series III		
Courses	STATS 3006 Mathematical Statistics III	STATS 3008 Biostatistics III			

*Note: Electives may be chosen from courses offered by the School of Mathematical Sciences, School of Computer Sciences or other courses offered by the University of Adelaide. Students will need to satisfy any specified course eligibility requirements. The following electives do not satisfy the program rules for this program: ECON 1008, ECON 1010, ECON 2503 & ECON 2504 cannot be presented as electives toward the BMaSC.

How to choose an elective course in your area of interest? Please refer to the steps via the link: <u>https://ecms.adelaide.edu.au/study-with-us/student-support/enrolment</u>

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		BACHE	LO	R OF MATHEMATICA	LS	CIENCES- Semester 2	2 Sta	art	
YEAR 1	S2	MATHS 1011 Mathematics IA		MATHS 1008 Mathematics for Information Technology I MATHS 1004 Mathematics For Data Science 1		STATS 1005 Statistical Analysis & Modeling I -		Level I or II or III Elective -*	
	S1	MATHS 1012 Mathematics IB		COMP SCI 1012 Scientific Computing - ENG 1002 Programming (Matlab and C)		Level I or II or III Elective -*		Level I or II or III Elective -*	
YEAR 2	S2	MATHS 2100 Real Analysis II -		STATS 2107 Statistical Modelling and Inference II		Level II Elective -*		Level II Elective -*	
VEAD 2	S1	MATHS 2101 Multivariable & Complex Calculus II		MATHS 2102 Differential Equations II -		MATHS 2103 Probability & Statistics II -		MATHS 3025 Professional Practice III	
YEAR 3	S2	Level III Applied Mathematics, Pure Mathematics or Statistics Elective		Level III Applied Mathematics, Pure Mathematics or Statistics Elective		Level III Applied Mathematics, Pure Mathematics or Statistics Elective -		Level II Elective -*	
YEAR 4	S1	Level III Applied Mathematics, Pure Mathematics or Statistics Elective		Level III Applied Mathematics, Pure Mathematics or Statistics Elective		Level III Applied Mathematics, Pure Mathematics or Statistics Elective -		Level III Elective -*	
	S 2								

	CHOOSE FROM THE FOLLOWING ELECTIVES										
Applied Mathematics Courses	APP MTH 2105 Optimisation and Operations Research II		APP MTH 3001 Applied Probability III		APP MTH 3002 Fluid Mechanics III		APP MTH 3014 Optimisation III				
	APP MTH 3016 Random Processes III		APP MTH 3020 Stochastic Decision Theory III		APP MTH 3021 Modelling with Ordinary Differential Equations III		APP MTH 3022 Optimal Functions and Nanomechanics III				
	APP MTH 3023 Partial Differential Equations and Waves III										



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Mathematical Sciences Courses	MATHS 2104 Numerical Methods II	MATHS 3012 Financial Modelling: Tools & Techniques III			
	PURE MTH 2106 Algebra II	PURE MTH 3002 Topology and Analysis III	PURE MTH 3003 Number Theory III	PURE MTH 3007 Groups and Rings III	
Pure Mathematics Courses	PURE MTH 3009 Integration and Analysis III	PURE MTH 3018 Coding & Cryptology III	PURE MTH 3019 Complex Analysis III	PURE MTH 3021 Logic & Computability	
	PURE MTH 3022 Geometry of Surfaces III	PURE MTH 3023 Fields and Modules III	PURE MTH 3024 Finite Geometry III		
	STATS 3008 Biostatistics III	STATS 3001 Statistics Modelling III	STATS 3003 Sampling Theory and Practice III	STATS 3005 Time Series III	
	STATS 3006 Mathematical Statistics III				

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PRE-2019 COMMENCER STUDY PLAN

		BAC	HEL	OR OF MATHEMATIC	CAL	SCIENCES (ADVANCE	ED)		
YEAR 1	S1	MATHS 1011 Mathematics IA		COMP SCI 1012 Scientific Computing - ENG 1002 Programming (Matlab and C)		MATHS 1015 Advanced Mathematical Perspectives I		Level I or II or III Elective -*	
	S2	MATHS 1012 Mathematics IB		STATS 1005 Statistical Analysis & Modelling I -		MATHS 1008 Mathematics for Information Technology I MATHS 1004 Mathematics For Data Science 1		Level I or II or III Elective -*	
	S1	MATHS 2101 Multivariable & Complex Calculus II -		MATHS 2102 Differential Equations II -		MATHS 2103 Probability & Statistics II -		Level II Elective -*	
YEAR Z	S2	MATHS 2100 Real Analysis II -		MATHS 2203 Advanced Mathematical Perspectives II		STATS 2107 Statistical Modelling and Inference II -		Level II Elective -*	
VEAD 2	S1	MATHS 3025 Professional Practice III		Level III Mathematical Sciences Elective -		Level III Mathematical Sciences Elective -		Level III Mathematical Sciences Elective -	
YEAR 3	S2	Level III Mathematical Sciences Elective -		MATHS 3020 Advanced Mathematical Perspectives III		Level III Elective -		Level III Elective -	

	CHOOSE FROM THE FOLLOWING ELECTIVES										
Applied Mathematics Courses	APP MTH 2105 Optimisation and Operations Research II		APP MTH 3001 Applied Probability III		APP MTH 3002 Fluid Mechanics III	APP MTH 3014 Optimisation III					
	APP MTH 3016 Random Processes III		APP MTH 3020 Stochastic Decision Theory III		APP MTH 3021 Modelling with Ordinary Differential Equations III	APP MTH 3022 Optimal Functions and Nanomechanics III					
	APP MTH 3023 Partial Differential Equations and Waves III					Γ					
Mathematical Sciences Courses	MATHS 2104 Numerical Methods II		MATHS 3012 Financial Modelling: Tools & Techniques III								



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	PURE MTH 2106 Algebra II	PURE MTH 3002 Topology and Analysis III	PURE MTH 3003 Number Theory III	PURE MTH 3007 Groups and Rings III	
Pure Mathematics Courses	PURE MTH 3009 Integration and Analysis III	PURE MTH 3018 Coding & Cryptology III	PURE MTH 3019 Complex Analysis III	PURE MTH 3021 Logic & Computability	
	PURE MTH 3022 Geometry of Surfaces III	PURE MTH 3023 Fields and Modules III	PURE MTH 3024 Finite Geometry III		
Statistics Courses	STATS 3008 Biostatistics III	STATS 3001 Statistics Modelling III	STATS 3003 Sampling Theory and Practice III	STATS 3005 Time Series III	
	STATS 3006 Mathematical Statistics III				

*Note: Electives may be chosen from courses offered by the School of Mathematical Sciences, School of Computer Sciences or other courses offered by the University of Adelaide. Students will need to satisfy any specified course eligibility requirements. The following electives do not satisfy the program rules for this program: ECON 1008, ECON 1010, ECON 2503 & ECON 2504 cannot be presented as electives toward the BMaSc (Adv).

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PRE-2019 COMMENCER STUDY PLAN

	BACHELOR OF MATHEMATICS SCIENCES (ADVANCED) – Semester 2 Start											
YEAR 1	5 2	MATHS 1011 Mathematics IA		STATS 1005 Statistical Analysis & Modelling I -		MATHS 1008 Mathematics for Information Technology I MATHS 1004 Mathematics For Data Science 1		Level I or II or III Elective -*				
VEAD 2	S 1	MATHS 1012 Mathematics IB		COMP SCI 1012 Scientific Computing ENG 1002 Programming (Matlab and C)		MATHS 1015 Advanced Mathematical Perspectives I		Level I or II or III Elective -*				
TEAR 2	S 2	MATHS 2100 Real Analysis II -		STATS 2107 Statistical Modelling and Inference II -		MATHS 2203 Advanced Mathematical Perspectives II		Level II Elective -*				
V545.2	S 1	MATHS 2101 Multivariable & Complex Calculus II -		MATHS 2102 Differential Equations II -		MATHS 2103 Probability & Statistics II -		Level II Elective -*				
YEAR 3	S 2	Level III Applied Mathematics, Pure Mathematics or Statistics Elective		Level III Applied Mathematics, Pure Mathematics or Statistics Elective		Level II or III Elective -		MATHS 3020 Advanced Mathematical Perspectives III				
YEAR 4	S 1	MATHS 3025 Professional Practice III		Level III Applied Mathematics, Pure Mathematics or Statistics Elective		Level III Applied Mathematics, Pure Mathematics or Statistics Elective -		Level III Applied Mathematics, Pure Mathematics or Statistics Elective				
TLAN 4	S 2											

		CHOOSE FROM THE FOLL	OWIN	IG ELECTIVES		
	APP MTH 2105 Optimisation and Operations Research II	APP MTH 3001 Applied Probability III		APP MTH 3002 Fluid Mechanics III	APP MTH 3014 Optimisation III	
Applied Mathematics Courses	APP MTH 3016 Random Processes III	APP MTH 3020 Stochastic Decision Theory III		APP MTH 3021 Modelling with Ordinary Differential Equations III	APP MTH 3022 Optimal Functions and Nanomechanics III	
	APP MTH 3023 Partial Differential Equations and Waves III					



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Mathematical Sciences Courses	MATHS 2104 Numerical Methods II	MATHS 3012 Financial Modelling: Tools & Techniques III			
	PURE MTH 2106 Algebra II	PURE MTH 3002 Topology and Analysis III	PURE MTH 3003 Number Theory III	PURE MTH 3007 Groups and Rings III	
Pure Mathematics Courses	PURE MTH 3009 Integration and Analysis III	PURE MTH 3018 Coding & Cryptology III	PURE MTH 3019 Complex Analysis III	PURE MTH 3021 Logic & Computability	
	PURE MTH 3022 Geometry of Surfaces III	PURE MTH 3023 Fields and Modules III	PURE MTH 3024 Finite Geometry III		
		STATS 3001 Statistics Modelling III	STATS 3003 Sampling Theory and Practice III	STATS 3005 Time Series III	
	STATS 3006 Mathematical Statistics III	STATS 3008 Biostatistics III			

*Note: Electives may be chosen from courses offered by the School of Mathematical Sciences, School of Computer Sciences or other courses offered by the University of Adelaide. Students will need to satisfy any specified course eligibility requirements. The following electives do not satisfy the program rules for this program: ECON 1008, ECON 1010, ECON 2503 & ECON 2504 cannot be presented as electives toward the BMaSc (Adv).

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		BACHEL	OF	OF MATHEMATICAL	AN	ND COMPUTER SCIENC	ES	S	
VEAD 4	S1	MATHS 1011 Mathematics IA -#		COMP SCI 1012 Scientific Computing ENG 1002 Programming (Matlab and C)		Level I Elective -*		Level I or II or III Elective -*	
YEAR I	S2	MATHS 1012 Mathematics IB		Level I Mathematical Sciences or Computer Science Elective -		Level I Elective -*		Level I or II or III Elective -*	
YFAR 2	S1	Level II Elective -* [Level II Elective -*		Level II Elective -*		Level I or II or III Elective -*	
TEAR 2	S2	Level II Mathematical Sciences or Computer Science Elective - [Level II Mathematical Sciences or Computer Science Elective -		Level II Mathematical Sciences or Computer Science Elective -		Level II Mathematical Sciences or Computer Science Elective -	
VEAD 2	S1	MATHS 3025 Professional Practice III [Level III Elective -*		Level III Elective -*		Level III Elective -*	
YEAR 3	S2	Level III Mathematical Sciences or Computer Science Elective - [Level III Mathematical Sciences or Computer Science Elective -		Level III Mathematical Sciences or Computer Science Elective -		Level III Mathematical Sciences or Computer Science Elective -	

		CHOOSE FROM THE FOLI	lowii	NG ELECTIVES		
Applied Mathematics Courses	APP MTH 2105 Optimisation and Operations Research II	APP MTH 3001 Applied Probability III		APP MTH 3002 Fluid Mechanics III	APP MTH 3014 Optimisation III	
	APP MTH 3016 Random Processes III	APP MTH 3020 Stochastic Decision Theory III		APP MTH 3021 Modelling with Ordinary Differential Equations III	APP MTH 3022 Optimal Functions and Nanomechanics III	
	APP MTH 3023 Partial Differential Equations and Waves III					
Mathematical Sciences Courses	MATHS 2104 Numerical Methods II	MATHS 3012 Financial Modelling: Tools & Techniques III		MATHS 1008 Mathematics for Information Technology I MATHS 1004 Mathematics For Data Science 1	MATHS 1013 Mathematics IM	



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	MATHS 2100 Real Analysis II	MATHS 2101 Multivariable & Complex Calculus II	MATHS 2102 Differential Equations	MATHS 2103 Probability & Statistics II	
	PURE MTH 2106 Algebra II	PURE MTH 3002 Topology and Analysis III	PURE MTH 3003 Number Theory III	PURE MTH 3007 Groups and Rings III	
Pure Mathematics Courses	PURE MTH 3009 Integration and Analysis III	PURE MTH 3018 Coding & Cryptology III	PURE MTH 3019 Complex Analysis III	PURE MTH 3021 Logic & Computability	
	PURE MTH 3022 Geometry of Surfaces III	PURE MTH 3023 Fields and Modules III	PURE MTH 3024 Finite Geometry III		
Statistics	STATS 2107 Statistical Modelling and Inference II	STATS 3001 Statistics Modelling III	STATS 3003 Sampling Theory and Practice III	STATS 3005 Time Series III	
Courses	STATS 3006 Mathematical Statistics III	STATS 3008 Biostatistics III	STATS 1005 Statistical Analysis & Modelling I		
	COMP SCI 1010 Puzzle Based Learning		COMP SCI 1102 Object Oriented Programming	COMP SCI 1103 Algorithm Design & Data Structures	
	COMP SCI 1106 Introduction to Software Engineering	COMP SCI 2000 Computer Systems	COMP SCI 2005 Systems Programming	COMP SCI 2201 Algorithm & Data Structure Analysis	
Computer	COMP SCI 2203 Problem Solving & Software Development	COMP SCI 2204 Advanced Programming Paradigms	COMP SCI 3001 Computer Network & Applications	COMP SCI 3004 Operation Systems	
Sciences Courses	COMP SCI 3005 Computer Architecture	COMP SCI 3006 Software Engineering & Project	COMP SCI 3007 Artificial Intelligence	COMP SCI 3012 Distributed Systems	
	COMP SCI 3013 Event Driven Computing		COMP SCI 3016 Computational Cognitive Science	COMP SCI 3301 Advanced Algorithms	
	COMP SCI 3302 Information Security Professional Practice	COMP SCI 3305 Parallel and Distributed Computing	COMP SCI 2207 Web & Database Computing		

FACULTY OF ENGINEERING, COMPUTER AND MATHEMATICAL SCIENCES PRE-2019 COMMENCER STUDY PLAN



Students who have not passed SACE Stage 2 Specialist Maths are required to enrol in MATHS 1013 Mathematics IM as a prerequisite to enrolling in MATHS 1011 Mathematics IA. Students may manage their enrolment by enrolling in MATHS 1013 Mathematics IM in semester I, followed by MATHS 1011 Mathematics IA in semester 2, and MATHS 1012 Mathematics IB in summer school.

*Electives may be chosen from courses offered by the School of Mathematical Sciences, School of Computer Sciences or other courses offered by the University of Adelaide. The program rules require students to present at least 36 units of Mathematical and Computer Science Elective of which at least 12 units are at Level III. Students will need to satisfy any specified course eligibility requirements. The following electives do not satisfy the program rules for this program:

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Note: MATHS 3025 Professional Practice III has replaced MATHS 3015 Communication Skills III.

At least 36 units of Mathematical and Computer Sciences courses of which at least 12 units are at Level III. MATHS 3025 Professional Practice III is not considered a Mathematical Sciences course for the purpose of this clause



PRE-2019 COMMENCER STUDY PLAN

		BACHELOR OF	MA	THEMATICAL & COM	PU	ITER SCIENCES– Sem	este	er 2 Start	
YEAR 1	S2	MATHS 1011 Mathematics IA -#		Level I Mathematical Sciences or Computer Science Elective -		Level I Elective -*		Level I or II or III Elective -*	
	S1	MATHS 1012 Mathematics IB		COMP SCI 1012 Scientific Computing -ENG 1002 Programming (Matlab and C)		Level I Elective -*		Level I or II or III Elective -*	
YEAR 2	S2	Level II Mathematical Sciences or Computer Science Elective -		Level II Mathematical Sciences or Computer Science Elective -		Level II Mathematical Sciences or Computer Science Elective -		Level II Mathematical Sciences or Computer Science Elective -	
VEADO	S1	Level II Elective -*		Level II Elective -*		Level II Elective -*		Level I or II or III Elective -*	
YEAR 3	S2	Level III Mathematical Sciences or Computer Science Elective -		Level III Mathematical Sciences or Computer Science Elective -		Level III Mathematical Sciences or Computer Science Elective -		Level III Mathematical Sciences or Computer Science Elective -	
YEAR 4	S1	MATHS 3025 Professional Practice III		Level III Elective -*		Level III Elective -*		Level III Elective -*	
	S2								

	CHOOSE FROM THE FOLLOWING ELECTIVES										
	APP MTH 2105 Optimisation and Operations Research II		APP MTH 3001 Applied Probability III		APP MTH 3002 Fluid Mechanics III		APP MTH 3014 Optimisation III				
Applied Mathematics Courses	APP MTH 3016 Random Processes III		APP MTH 3020 Stochastic Decision Theory III		APP MTH 3021 Modelling with Ordinary Differential Equations III		APP MTH 3022 Optimal Functions and Nanomechanics III				
	APP MTH 3023 Partial Differential Equations and Waves III										



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Mathematical Sciences	MATHS 2104 Numerical Methods II	MATHS 3012 Financial Modelling: Tools & Techniques III	MATHS 1008 Mathematics for Information Technology I MATHS 1004 Mathematics For Data Science 1	MATHS 1013 Mathematics IM	
Courses	MATHS 2100 Real Analysis II	MATHS 2101 Multivariable & Complex Calculus II	MATHS 2102 Differential Equations II	MATHS 2103 Probability & Statistics II	
	PURE MTH 2106 Algebra II	PURE MTH 3002 Topology and Analysis III	PURE MTH 3003 Number Theory III	PURE MTH 3007 Groups and Rings III	
Pure Mathematics Courses	PURE MTH 3009 Integration and Analysis III	PURE MTH 3018 Coding & Cryptology III	PURE MTH 3019 Complex Analysis III	PURE MTH 3021 Logic & Computability	
	PURE MTH 3022 Geometry of Surfaces III	PURE MTH 3023 Fields and Modules III	PURE MTH 3024 Finite Geometry III		
Statistics	STATS 2107 Statistical Modelling and Inference II	STATS 3001 Statistics Modelling III	STATS 3003 Sampling Theory and Practice III	STATS 3005 Time Series III	
Statistics Courses	STATS 3006 Mathematical Statistics III	STATS 3008 Biostatistics III	STATS 1005 Statistical Analysis & Modelling I		
	COMP SCI 1010 Puzzle Based Learning		COMP SCI 1102 Object Oriented Programming	COMP SCI 1103 Algorithm Design & Data Structures	
	COMP SCI 1106 Introduction to Software Engineering	COMP SCI 2000 Computer Systems	COMP SCI 2005 Systems Programming	COMP SCI 2201 Algorithm & Data Structure Analysis	
Computer Sciences Courses	COMP SCI 2203 Problem Solving & Software Development	COMP SCI 2204 Advanced Programming Paradigms	COMP SCI 3001 Computer Network & Applications	COMP SCI 3004 Operation Systems	
	COMP SCI 3005 Computer Architecture	COMP SCI 3006 Software Engineering & Project	COMP SCI 3007 Artificial Intelligence	COMP SCI 3012 Distributed Systems	
	COMP SCI 3013 Event Driven Computing		COMP SCI 3016 Computational Cognitive Science	COMP SCI 3301 Advanced Algorithms	



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COMP SCI 3302 Information Security	COMP SCI 3305 Parallel and	COMP SCI 2207 Web & Database		
Professional Practice	Distributed Computing	Computing		

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	HONOURS DEGREE OF BACHELOR OF MATHEMATICAL SCIENCES										
VEAR 1	S1	MATHS 4005A Honours Project in Mathematical Sciences A -		MATHS 4005B Honours Project in Mathematical Sciences B		Mathematical Sciences Honours Group A Elective -		Mathematical Sciences Honours Group A Elective -			
TEAR I	52	MATHS 4005C Honours Project in Mathematical Sciences C -		Mathematical Sciences Honours Group A Elective		Mathematical Sciences Honours Group A or B Elective -		Mathematical Sciences Honours Group A or B or C Elective -			

	CHOOSE FROM THE FOLLOWING ELECTIVES										
	APP MTH 4046 Applied Mathematics Topic A - Honours -		APP MTH 4047 Applied Mathematics Topic B - Honours		APP MTH 4048 Applied Mathematics Topic C - Honours		APP MTH 4049 Applied Mathematics Topic D - Honours				
GROUP A	APP MTH 4051 Applied Mathematics Topic E - Honours -		APP MTH 4052 Applied Mathematics Topic F - Honours		PURE MTH 4012 Pure Mathematics Topic B - Honours -		PURE MTH 4013 Pure Mathematics Topic D - Honours -				
	PURE MTH 4038 Pure Mathematics Topic A - Honours -		PURE MTH 4066 Pure Mathematics Topic E - Honours -		STATS 4013 Statistics Topic A - Honours -		STATS 4014 Statistics Topic B - Honours -				
	STATS 4008 Statistics Topic D - Hons										
	PURE MTH 4102 Topology and Analysis - Honours		APP MTH 4102 Fluid Mechanics - Honours -		APP MTH 4114 Optimisation - Honours -		PURE MTH 4107 Groups and Rings - Honours				
	APP MTH 4101 Applied Probability - Honours -		APP MTH 4121 Modelling with Ordinary Differential Equations - Honours		PURE MTH 4119 Complex Analysis - Honours -		STATS 4101 Statistical Modelling - Honours -				
GROUP B	APP MTH 4116 Random Processes - Honours		APP MTH 4120 Stochastic Decision Theory - Honours -		APP MTH 4122 Optimal Functions and Nanomechanics - Honours		APP MTH 4123 Partial Differential Equations and Waves - Honours				
ELECTIVES	MATHS 4112 Financial Modelling: Tools & Techniques - Honours		PURE MTH 4109 Integration and Analysis - Honours		PURE MTH 4122 Geometry of Surfaces - Honours		PURE MTH 4123 Fields and Modules - Honours				
	PURE MTH 4124 Finite Geometry - Honours		STATS 4103 Sampling Theory and Practice - Honours		STATS 4105 Time Series - Honours		STATS 4108 Biostatistics - Honours				
	STATS 4106 Mathematical Statistics – Honours -										



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GROUP C	APP MTH 4110EX AMSI Applied	APP MTH 4111EX AMSI Applied	PURE MTH 4110EX AMSI Pure	PURE MTH 4111EX AMSI Pure
ELECTIVES	Mathematics Topic A - Honours	Mathematics Topic B - Honours	Mathematics Topic A - Honours	Mathematics Topic B - Honours
	STATS 4110EX AMSI Statistics Topic A - Honours	STATS 4111EX AMSI Statistics Topic B - Honours		

Note: Courses to the value of 15 units must be completed from the list of Electives, out of which 9 units must be taken from Group A, 6 units may be taken from Group B and 3 units may be taken from Group C.

Applied Mathematics, Pure Mathematics or Statistics major requirements

In order to acquire a major in Applied Mathematics, Pure Mathematics or Statistics students must complete 9 units of electives in the discipline including 6 units from Group A.



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		HONOURS DEGREE	E OF	BACHELOR OF MA	THE	MATICAL SCIENCES -	- Se	mester 2 Start	
	S1								
YEAR 1	S2	MATHS 4005A Honours Project in Mathematical Sciences A -		MATHS 4005B Honours Project in Mathematical Sciences B		Mathematical Sciences Honours Group A Elective -		Mathematical Sciences Honours Group A Elective -	
YEAR 2	S1	MATHS 4005C Honours Project in Mathematical Sciences C -		Mathematical Sciences Honours Group A Elective		Mathematical Sciences Honours Group A or B Elective -		Mathematical Sciences Honours Group A or B or C Elective -	

	CHOOSE FROM THE FOLLOWING ELECTIVES											
	APP MTH 4046 Applied Mathematics Topic A - Honours -		APP MTH 4047 Applied Mathematics Topic B - Honours		APP MTH 4048 Applied Mathematics Topic C - Honours		APP MTH 4049 Applied Mathematics Topic D - Honours -					
GROUP A	APP MTH 4051 Applied Mathematics Topic E - Honours -		APP MTH 4052 Applied Mathematics Topic F - Honours		PURE MTH 4012 Pure Mathematics Topic B - Honours -		PURE MTH 4013 Pure Mathematics Topic D - Honours -					
ELECTIVES	PURE MTH 4038 Pure Mathematics Topic A - Honours -		PURE MTH 4066 Pure Mathematics Topic E - Honours		STATS 4013 Statistics Topic A - Honours -		STATS 4014 Statistics Topic B -Honours					
	STATS 4008 Statistics Topic D - Hons											
	PURE MTH 4102 Topology and Analysis - Honours		APP MTH 4102 Fluid Mechanics - Honours -		APP MTH 4114 Optimisation - Honours -		PURE MTH 4107 Groups and Rings - Honours -					
GROUP B	APP MTH 4101 Applied Probability - Honours -		APP MTH 4121 Modelling with Ordinary Differential Equations - Honours		PURE MTH 4119 Complex Analysis - Honours -		STATS 4101 Statistical Modelling - Honours -					
ELECTIVES	APP MTH 4116 Random Processes - Honours		APP MTH 4120 Stochastic Decision Theory - Honours		APP MTH 4122 Optimal Functions and Nanomechanics - Honours		APP MTH 4123 Partial Differential Equations and Waves - Honours					
	MATHS 4112 Financial Modelling: Tools & Techniques - Honours		PURE MTH 4109 Integration and Analysis - Honours		PURE MTH 4122 Geometry of Surfaces - Honours		PURE MTH 4123 Fields and Modules - Honours -					



PRE-2019 COMMENCER STUDY PLAN

	PURE MTH 4124 Finite Geometry - Honours	STATS 4103 Sampling Theory and Practice - Honours -	STATS 4105 Time Series - Honours	STATS 4108 Biostatistics - Honours
	STATS 4106 Mathematical Statistics – Honours -			
GROUP C ELECTIVES	APP MTH 4110EX AMSI Applied Mathematics Topic A - Honours	APP MTH 4111EX AMSI Applied Mathematics Topic B - Honours	PURE MTH 4110EX AMSI Pure Mathematics Topic A - Honours	PURE MTH 4111EX AMSI Pure Mathematics Topic B - Honours -
	STATS 4110EX AMSI Statistics Topic A - Honours -	STATS 4111EX AMSI Statistics Topic B - Honours -		

Note: Courses to the value of 15 units must be completed from the list of Electives, out of which 9 units must be taken from Group A, 6 units may be taken from Group B and 3 units may be taken from Group C.

Applied Mathematics, Pure Mathematics or Statistics major requirements

In order to acquire a major in Applied Mathematics, Pure Mathematics or Statistics students must complete 9 units of electives in the discipline including 6 units from Group A.



PRE-2019 COMMENCER STUDY PLAN

This study plan should be used to guide enrolment for the current academic year. Some students may need to modify their enrolment based on previous study (e.g. students granted advanced standing/credit, students repeating previously failed courses).

HONOURS DEGREE OF BACHELOR OF MATHEMATICAL AND COMPUTER SCIENCES – Computer Science

		FIU	ヒしし			
YEAR 1	S1	COMP SCI 4015A Computer Science Honours Research Project Part A (6 units)		Computer Science Honours Elective	Computer Science Honours Elective	
	S2	Computer Science Honours Research Project Part B (6 units)		Computer Science Honours Elective	Computer Science Honours Elective	

CHOOSE FROM THE FOLLOWING COMPUTER SCIENCE ELECTIVES									
COMP SCI 4100 Software Architecture - Honours -	COMP SCI 4105 Adaptive Business Intelligence - Honours -		COMP SCI 4109 Modern Heuristic Methods - Honours		COMP SCI 4110 Special Topics in Computer Science A - Honours				
	COMP SCI 4123 Software Process Improvement - Honours -		COMP SCI 4177 Solving Engineering Models – Honours -		COMP SCI 4191 Commercialising IT Research – Honours -				
COMP SCI 4192 Mobile & Wireless Systems – Honours -	COMP SCI 4194 Distributed Databases & Data Mining – Honours -		COMP SCI 4806 Secure Programming - Honours -		COMP SCI 4807 Advanced Algorithms – Honours				
COMP SCI 4112 Special Topics in Computer Science B - Honours	COMP SCI 4141 Language Translators - Honours -								
COMP SCI 4803 Mining Big Data - Honours -	COMP SCI 4195 Evolutionary Computation - Honours -				COMP SCI 4802 Introduction to Geometric Algorithms - Honours				



PRE-2019 COMMENCER STUDY PLAN

This study plan should be used to guide enrolment for the current academic year. Some students may need to modify their enrolment based on previous study (e.g. students granted advanced standing/credit, students repeating previously failed courses).

HONOURS DEGREE OF BACHELOR OF MATHEMATICAL AND COMPUTER SCIENCES – Computer Science Project – Semester 2 Start

	S1					
YEAR 1	S2	COMP SCI 4015A Computer Science Honours Research (6 units)	h Project Part A	Computer Science Honours Elective	Computer Science Honours Elective	
YEAR 2	S1	Computer Science Honours Research Project Part B (6	units)	Computer Science Honours Elective	Computer Science Honours Elective	

CHOOSE FROM THE FOLLOWING COMPUTER SCIENCE ELECTIVES										
	COMP SCI 4100 Software Architecture - Honours -		COMP SCI 4105 Adaptive Business Intelligence - Honours -		COMP SCI 4109 Modern Heuristic Methods - Honours		COMP SCI 4110 Special Topics in Computer Science A - Honours			
			COMP SCI 4123 Software Process Improvement - Honours -		COMP SCI 4177 Solving Engineering Models – Honours -		COMP SCI 4191 Commercialising IT Research – Honours -			
	COMP SCI 4192 Mobile & Wireless Systems – Honours -		COMP SCI 4194 Distributed Databases & Data Mining – Honours -		COMP SCI 4806 Secure Programming - Honours -		COMP SCI 4807 Advanced Algorithms – Honours			
	COMP SCI 4112 Special Topics in Computer Science B - Honours		COMP SCI 4141 Language Translators - Honours -							
	COMP SCI 4803 Mining Big Data - Honours -		COMP SCI 4195 Evolutionary Computation - Honours -				COMP SCI 4802 Introduction to Geometric Algorithms - Honours			



PRE-2019 COMMENCER STUDY PLAN

This study plan should be used to guide enrolment for the current academic year. Some students may need to modify their enrolment based on previous study (e.g. students granted advanced standing/credit, students repeating previously failed courses).

HONOURS DEGREE OF BACHELOR OF MATHEMATICAL AND COMPUTER SCIENCES– Mathematical Sciences

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			Project		
YEAR 1	S1	MATHS 4005A Honours Project in Mathematical Sciences A -	MATHS 4005B Honours Project in Mathematical Sciences B -	Mathematical Sciences	Mathematical Sciences Honours Elective)
	S2	MATHS 4005C Honours Project in Athematical Sciences C -	Mathematical Sciences Honours	Mathematical Sciences	Mathematical Sciences Honours Elective

	CHOOSE FROM THE FOLLOWING MATHEMATICAL SCIENCES ELECTIVES									
GROUP A ELECTIVES	APP MTH 4046 Applied Mathematics Topic A - Honours -		APP MTH 4047 Applied Mathematics Topic B - Honours		APP MTH 4048 Applied Mathematics Topic C - Honours -		APP MTH 4049 Applied Mathematics Topic D - Honours -			
	APP MTH 4051 Applied Mathematics Topic E - Honours -		APP MTH 4052 Applied Mathematics Topic F - Honours		PURE MTH 4012 Pure Mathematics Topic B - Honours -		PURE MTH 4013 Pure Mathematics Topic D - Honours -			
	PURE MTH 4038 Pure Mathematics Topic A - Honours -		PURE MTH 4066 Pure Mathematics Topic E - Honours		STATS 4013 Statistics Topic A - Honours -		STATS 4014 Statistics Topic B -Honours			
	STATS 4008 Statistics Topic D - Hons									
	PURE MTH 4102 Topology and Analysis - Honours		APP MTH 4102 Fluid Mechanics - Honours -		APP MTH 4114 Optimisation - Honours -		PURE MTH 4107 Groups and Rings - Honours			
	APP MTH 4101 Applied Probability - Honours -		APP MTH 4121 Modelling with Ordinary Differential Equations - Honours -		PURE MTH 4119 Complex Analysis - Honours -		STATS 4101 Statistical Modelling -Honours			
GROUP B ELECTIVES	APP MTH 4116 Random Processes - Honours		APP MTH 4120 Stochastic Decision Theory - Honours		APP MTH 4122 Optimal Functions and Nanomechanics - Honours		APP MTH 4123 Partial Differential Equations and Waves - Honours -			
	MATHS 4112 Financial Modelling: Tools & Techniques - Honours -		PURE MTH 4109 Integration and Analysis - Honours -		PURE MTH 4122 Geometry of Surfaces - Honours		PURE MTH 4123 Fields and Modules - Honours -			



PRE-2019 COMMENCER STUDY PLAN

	PURE MTH 4124 Finite Geometry - Honours	STATS 4103 Sampling Theory and Practice - Honours -	STATS 4105 Time Series - Honours -	STATS 4108 Biostatistics - Honours	
	STATS 4106 Mathematical Statistics – Honours -		[
GROUP C ELECTIVES	APP MTH 4110EX AMSI Applied Mathematics Topic A - Honours -	APP MTH 4111EX AMSI Applied Mathematics Topic B - Honours	PURE MTH 4110EX AMSI Pure Mathematics Topic A - [Honours -	PURE MTH 4111EX AMSI Pure Mathematics Topic B - Honours -	
	STATS 4110EX AMSI Statistics Topic A - Honours -	STATS 4111EX AMSI Statistics Topic B - Honours -	[

Applied Mathematics, Pure Mathematics or Statistics major requirements

In order to acquire a major in Applied Mathematics, Pure Mathematics or Statistics students must complete 9 units of electives in the discipline including 6 units from Group A.

Mathematical Sciences major requirements

A student who chooses a Mathematical Sciences project and does not qualify for a discipline major, will receive a major in Mathematical Sciences.



PRE-2019 COMMENCER STUDY PLAN

This study plan should be used to guide enrolment for the current academic year. Some students may need to modify their enrolment based on previous study (e.g. students granted advanced standing/credit, students repeating previously failed courses).

HONOURS DEGREE OF BACHELOR OF MATHEMATICAL AND COMPUTER SCIENCES – Mathematical Sciences Project – Semester 2 Start

	S1				
YEAR 1		MATHS 4005A Honours Project in	MATHS 4005B Honours Project in	Mathematical Sciences	Mathematical Sciences Honours Elective
	S2	Mathematical Sciences	Mathematical Sciences B -	Honours Elective -)
		-			
		MATHS 4005C Honours Project in	Mathematical Sciences Honours	Mathematical Sciences	Mathematical Sciences Honours Elective
YEAR 2	S1	Mathematical Sciences C -		Honours Elective -	

		CHOOSE FROM THE FOLLOWING MATHEN	IATIC	AL SCIENCES ELECTIVES		
GROUP A ELECTIVES	APP MTH 4046 Applied Mathematics Topic A - Honours	APP MTH 4047 Applied Mathematics Topic B - Honours -		APP MTH 4048 Applied Mathematics Topic C - Honours	APP MTH 4049 Applied Mathematics Topic D - Honours -	
	APP MTH 4051 Applied Mathematics Topic E - Honours	APP MTH 4052 Applied Mathematics Topic F - Honours -		PURE MTH 4012 Pure Mathematics Topic B - Honours	PURE MTH 4013 Pure Mathematics Topic D - Honours -	
	PURE MTH 4038 Pure Mathematics Topic A - Honours -	PURE MTH 4066 Pure Mathematics Topic E - Honours -		STATS 4013 Statistics Topic A - Honours -	STATS 4014 Statistics Topic B -Honours	
	STATS 4008 Statistics Topic D - Hons -					
	PURE MTH 4102 Topology and Analysis - Honours	APP MTH 4102 Fluid Mechanics - Honours		APP MTH 4114 Optimisation - Honours -	PURE MTH 4107 Groups and Rings - Honours	
	APP MTH 4101 Applied Probability - Honours -	APP MTH 4121 Modelling with Ordinary Differential Equations - Honours -		PURE MTH 4119 Complex Analysis - Honours -	STATS 4101 Statistical Modelling - Honours -	
GROUP B ELECTIVES	APP MTH 4116 Random Processes - Honours	APP MTH 4120 Stochastic Decision Theory - Honours -		APP MTH 4122 Optimal Functions and Nanomechanics - Honours -	APP MTH 4123 Partial Differential Equations and Waves - Honours	
	MATHS 4112 Financial Modelling: Tools & Techniques - Honours	PURE MTH 4109 Integration and Analysis - Honours -		PURE MTH 4122 Geometry of Surfaces - Honours	PURE MTH 4123 Fields and Modules - Honours -	



PRE-2019 COMMENCER STUDY PLAN

	PURE MTH 4124 Finite Geometry - Honours	STATS 4103 Sampling Theory and Practice - Honours -	STATS 4105 Time Series - Honours -	STATS 4108 Biostatistics - Honours	
	STATS 4106 Mathematical Statistics – Honours -				
GROUP C	APP MTH 4110EX AMSI Applied Mathematics Topic A - Honours	APP MTH 4111EX AMSI Applied Mathematics Topic B - Honours -	PURE MTH 4110EX AMSI Pure Mathematics Topic A - Honours	PURE MTH 4111EX AMSI Pure Mathematics Topic B - Honours	
	STATS 4110EX AMSI Statistics Topic A - Honours -	STATS 4111EX AMSI Statistics Topic B - Honours -			

Applied Mathematics, Pure Mathematics or Statistics major requirements

In order to acquire a major in Applied Mathematics, Pure Mathematics or Statistics students must complete 9 units of electives in the discipline including 6 units from Group A.

Mathematical Sciences major requirements

A student who chooses a Mathematical Sciences project and does not qualify for a discipline major, will receive a major in Mathematical Sciences.