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### Level I Mathematical Sciences Course

- Students must complete either *MATHS 1004 Mathematics for Data Science* or *MATHS 1012 Mathematics IB*, but may not present both towards their degree.
- To enrol in *MATHS 1012 Mathematics IB* students must first pass *MATHS 1011 Mathematics IA*, this is presented as a level I elective. Entry into *MATHS 1011 Mathematics IA* requires *SACE Stage 2 Specialist Mathematics*, or a pass in *MATHS 1013 Mathematics IM*.
- Students starting in semester 2 that choose to study *MATHS 1012 Mathematics IB*, will need to take either *MATHS 1011* or *MATHS 1013* in their first semester of study, and take *MATHS 1012* in a later semester.
- Students that wish to continue to study a major in Applied Mathematics, Mathematical Sciences, Pure Mathematics or Statistics will need to complete *MATHS 1012 Mathematics IB*.

### Electives

- Electives must include:
  - **Students must complete 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. *ENG 1002 Programming (Matlab and C)* is considered a Computer Science course.
  - **Broadening Electives** to the value of **9 units** that are not from the following subject areas: COMP SCI, MATHS, PURE MTH, APP MATH, STATS. *ENG 1002* does not count towards the Broadening electives requirement.
- Electives may be any University of Adelaide Undergraduate course for which the student meets the pre-requisites. Please check the availability, restriction and incompatible section on the course planner for elective choices.
- How to choose an elective course in your area of interest? Please refer to the steps via the link: <https://ecms.adelaide.edu.au/study-with-us/student-support/enrolment>

### Majors

- [Mathematical Sciences majors](#) to the value of 24 units may be taken in one of the following:
  - Applied Mathematics
  - Data and Decision Science
  - Mathematical Sciences
  - Pure Mathematics
  - Statistics
- [Mathematical Sciences double majors](#) to the value of 24 units may be taken in one of the following:
  - Applied Mathematics and Pure Mathematics
  - Applied Mathematics and Statistics
  - Pure Mathematics and Applied Mathematics
  - Pure Mathematics and Statistics
  - Statistics and Applied Mathematics
  - Statistics and Pure Mathematics
- *MATHS 3021 Capstone Project in Mathematical Sciences III* may be presented towards a double major in the discipline of the project.
- [Computer Science majors](#) to the value of 24 units may be taken in one of the following:
  - Artificial Intelligence
  - Computer Science
  - Cybersecurity
  - Data Science
  - Distributed Systems and Networking

### Minors

- A minor may be chosen from:
  - [Public Health](#)

### Courses Not Permitted

The following courses cannot be presented as electives:

- ECON 1008 Data Analytics I
- ECON 1010 Introduction to Mathematical Economics (Advanced) I
- ECON 2503 Intermediate Mathematical Economics II
- ECON 2504 Intermediate Econometrics II

### Links and Further Information

- [Course Planner](#) Information about University courses, including availability, class times, restrictions and prerequisites.
- [University Calendar](#) All academic program rules.
- **Contact Ask ECMS:** [askecms@adelaide.edu.au](mailto:askecms@adelaide.edu.au) • +61 8 8313 4148 • [www.ecms.adelaide.edu.au](http://www.ecms.adelaide.edu.au)

Faculty of Engineering, Computer and Mathematical Sciences  
2021 Study Plan – Semester 1 Start

## Bachelor of Mathematical and Computer Sciences Study Plan

Course		Units	Status
<b>Year 1</b>			
S1	<a href="#">ENG 1002 Programming (Matlab and C)</a>	3	
S1	# Level I/II/III Elective	3	
S1	# Level I/II/III Elective	3	
S1	^ Level I/II/III Elective	3	
S2	# Level I/II/III Elective	3	
S2	# Level I/II/III Elective	3	
S2	# Level I/II/III Elective	3	
S2	^ Level I Mathematical Sciences Course	3	
<b>Year 2</b>			
S1	# Level I/II/III Elective	3	
S1	# Level II/III Elective	3	
S1	# Level II/III Elective	3	
S1	# Level II/III Elective	3	
S2	# Level I/II/III Elective	3	
S2	# Level II/III Elective	3	
S2	# Level II/III Elective	3	
S2	# Level II/III Elective	3	
<b>Year 3</b>			
S1	<a href="#">MATHS 3025 Professional Practice III</a>	3	
S1	# Level III Elective	3	
S1	Level III Mathematical And Computer Sciences Elective	3	
S1	Level III Mathematical And Computer Sciences Elective	3	
S2	# Level III Elective	3	
S2	# Level III Elective	3	
S2	Capstone Course	3	
S2	Level III Mathematical And Computer Sciences Elective	3	

Core Course		Elective Course (see <a href="#">Elective Tables</a> )	
CM = Completed	CR = Credit Awarded	EN = Currently Enrolled	ENROL = Add to Enrolments

^ **Level I Mathematical Sciences Course:** Please refer to Level I Mathematical Sciences Course notes on [Program Notes](#) page.

# **Electives:**

- **Students must complete 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. *ENG 1002 Programming (Matlab and C)* is considered a Computer Science course.
- **Broadening Electives** to the value of **9 units** that are not from the following subject areas: COMP SCI, MATHS, PURE MTH, APP MATH, STATS. *ENG 1002* does not count towards the Broadening electives requirement.
- Please note that the ordering of electives is an example only, students are free to change the ordering of electives if required.
- For more information refer to the [Program Notes](#) page.

Available	Course	Units	Status
<b>Level I Mathematical Sciences Course Table</b>			
S2	<a href="#">MATHS 1004 Mathematics for Data Science I</a>	3	
SS S1 S2	<a href="#">MATHS 1012 Mathematics IB</a>	3	
<b>Capstone Course Table</b>			
S2	<a href="#">COMP SCI 3006 Software Engineering &amp; Project</a>	3	
S2	<a href="#">COMP SCI 3310 Software Engineering &amp; Project (Artificial Intelligence)</a>	3	
S2	<a href="#">COMP SCI 3311 Software Engineering &amp; Project (Data Science)</a>	3	
S2	<a href="#">COMP SCI 3312 Software Engineering &amp; Project (Cybersecurity)</a>	3	
S2	<a href="#">COMP SCI 3313 Software Engineering &amp; Project (Distributed Systems &amp; Networking)</a>	3	
S2	<a href="#">MATHS 3021 Capstone Project in Mathematical Sciences III</a>	3	

Available	Course	Units	Status
<b>Applied Mathematics Elective Table</b>			
N/A	<a href="#">APP MTH 2105 Optimisation and Operations Research II</a>	3	
N/A	<a href="#">APP MTH 3022 Optimal Functions and Nanomechanics III</a>	3	
N/A	<a href="#">APP MTH 3124 Decision Science III</a>	3	
S1	<a href="#">APP MTH 3001 Applied Probability III</a>	3	
S1	<a href="#">APP MTH 3002 Fluid Mechanics III</a>	3	
S1	<a href="#">APP MTH 3014 Optimisation III</a>	3	
S1	<a href="#">APP MTH 3021 Modelling with Ordinary Differential Equations III</a>	3	
S2	<a href="#">APP MTH 3016 Random Processes III</a>	3	
S2	<a href="#">APP MTH 3023 Partial Differential Equations and Waves III</a>	3	
<b>Mathematical Sciences Elective Table</b>			
S1	<a href="#">MATHS 2101 Multivariable &amp; Complex Calculus II</a>	3	
S1	<a href="#">MATHS 2102 Differential Equations II</a>	3	
S1	<a href="#">MATHS 2103 Probability &amp; Statistics II</a>	3	
S1 S2	<a href="#">MATHS 1011 Mathematics IA</a>	3	
S1 S2	<a href="#">MATHS 1013 Mathematics IM</a>	3	
S2	<a href="#">MATHS 2100 Real Analysis II</a>	3	
S2	<a href="#">MATHS 2104 Numerical Methods II</a>	3	
S2	<a href="#">MATHS 3012 Financial Modelling: Tools &amp; Techniques III</a>	3	
S2	<a href="#">MATHS 3021 Capstone Project in Mathematical Sciences III</a>	3	
S2	<a href="#">MATHS 3026 Cryptography III</a>	3	
SS S1 S2	<a href="#">MATHS 1012 Mathematics IB</a>	3	
<b>Pure Mathematics Elective Table</b>			
N/A	<a href="#">PURE MTH 3003 Number Theory III</a>	3	
N/A	<a href="#">PURE MTH 3009 Integration and Analysis III</a>	3	
N/A	<a href="#">PURE MTH 3018 Coding &amp; Cryptology III</a>	3	
N/A	<a href="#">PURE MTH 3021 Logic &amp; Computability</a>	3	
N/A	<a href="#">PURE MTH 3022 Geometry of Surfaces III</a>	3	
N/A	<a href="#">PURE MTH 3024 Finite Geometry III</a>	3	
S1	<a href="#">PURE MTH 2106 Algebra II</a>	3	
S1	<a href="#">PURE MTH 3002 Topology and Analysis III</a>	3	
S1	<a href="#">PURE MTH 3007 Groups and Rings III</a>	3	
S1	<a href="#">PURE MTH 3019 Complex Analysis III</a>	3	
S2	<a href="#">PURE MTH 3023 Fields and Modules III</a>	3	

## Bachelor of Mathematical and Computer Sciences

Statistics Elective Table			
N/A	<a href="#">STATS 3005 Time Series III</a>	3	
N/A	<a href="#">STATS 3008 Biostatistics III</a>	3	
S1	<a href="#">STATS 3001 Statistical Modelling III</a>	3	
S1	<a href="#">STATS 3006 Mathematical Statistics III</a>	3	
S1 S2	<a href="#">STATS 1000 Statistical Practice I</a>	3	
S1 S2	<a href="#">STATS 1004 Statistical Practice I (Life Sciences)</a>	3	
S2	<a href="#">STATS 1005 Statistical Analysis and Modelling I</a>	3	
S2	<a href="#">STATS 2107 Statistical Modelling and Inference II</a>	3	
S2	<a href="#">STATS 3022 Data Science III</a>	3	
S2	<a href="#">STATS 3023 Computational Bayesian Statistics III</a>	3	
Computer Science Elective Table			
N/A	<a href="#">COMP SCI 2204 Advanced Programming Paradigms</a>	3	
N/A	<a href="#">COMP SCI 3309 Cybersecurity A Practical Application</a>	3	
S1	<a href="#">COMP SCI 1010 Puzzle Based Learning</a>	3	
S1	<a href="#">COMP SCI 2005 Systems Programming</a>	3	
S1	<a href="#">COMP SCI 2207 Web &amp; Database Computing</a>	3	
S1	<a href="#">COMP SCI 3001 Computer Networks &amp; Applications</a>	3	
S1	<a href="#">COMP SCI 3005 Computer Architecture</a>	3	
S1	<a href="#">COMP SCI 3007 Artificial Intelligence</a>	3	
S1	<a href="#">COMP SCI 3305 Parallel and Distributed Computing</a>	3	
S1	<a href="#">COMP SCI 3306 Mining Big Data</a>	3	
S1	<a href="#">COMP SCI 3308 Cybersecurity Fundamentals</a>	3	
S1	<a href="#">COMP SCI 3315 Computer Vision</a>	3	
S1 S2	<a href="#">COMP SCI 1102 Object Oriented Programming</a>	3	
S1 S2	<a href="#">COMP SCI 2000 Computer Systems</a>	3	
S1 S2	<a href="#">COMP SCI 2103 Algorithm Design &amp; Data Structures</a>	3	
S1 S2	<a href="#">COMP SCI 2201 Algorithm &amp; Data Structure Analysis</a>	3	
S2	<a href="#">COMP SCI 1106 Introduction to Software Engineering</a>	3	
S2	<a href="#">COMP SCI 2203 Problem Solving &amp; Software Development</a>	3	
S2	<a href="#">COMP SCI 3004 Operating Systems</a>	3	
S2	<a href="#">COMP SCI 3006 Software Engineering &amp; Project</a>	3	
S2	<a href="#">COMP SCI 3012 Distributed Systems</a>	3	
S2	<a href="#">COMP SCI 3307 Secure Programming</a>	3	
S2	<a href="#">COMP SCI 3310 Software Engineering &amp; Project (Artificial Intelligence)</a>	3	
S2	<a href="#">COMP SCI 3311 Software Engineering &amp; Project (Data Science)</a>	3	
S2	<a href="#">COMP SCI 3312 Software Engineering &amp; Project (Cybersecurity)</a>	3	
S2	<a href="#">COMP SCI 3313 Software Engineering &amp; Project (Distributed Systems &amp; Networking)</a>	3	
S2	<a href="#">COMP SCI 3314 Introduction to Statistical Machine Learning</a>	3	
S2	<a href="#">COMP SCI 3316 Evolutionary Computation</a>	3	

### Applied Mathematics Major

Available	Course	Units	Status
	Courses to the value of 12 units from the following:		
N/A	<a href="#">APP MTH 3022 Optimal Functions and Nanomechanics III</a>	3	
N/A	<a href="#">APP MTH 3124 Decision Science III</a>	3	
S1	<a href="#">APP MTH 3001 Applied Probability III</a>	3	
S1	<a href="#">APP MTH 3002 Fluid Mechanics III</a>	3	
S1	<a href="#">APP MTH 3014 Optimisation III</a>	3	
S1	<a href="#">APP MTH 3021 Modelling with Ordinary Differential Equations III</a>	3	
S2	<a href="#">APP MTH 3016 Random Processes III</a>	3	
S2	<a href="#">APP MTH 3023 Partial Differential Equations and Waves III</a>	3	
	and Mathematical Sciences courses to the value of 12 units		

### Data and Decision Sciences Major

Available	Course	Units	Status
	All of the following courses must be completed:		
N/A	<a href="#">APP MTH 2105 Optimisation and Operations Research II</a>	3	
S1	<a href="#">MATHS 2103 Probability &amp; Statistics II</a>	3	
S1 S2	<a href="#">COMP SCI 2201 Algorithm &amp; Data Structure Analysis</a>	3	
S2	<a href="#">STATS 2107 Statistical Modelling and Inference II</a>	3	
0	and courses to the value of 12 units from the following:	0	
N/A	<a href="#">APP MTH 3124 Decision Science III</a>	3	
S1	<a href="#">APP MTH 3014 Optimisation III</a>	3	
S1	<a href="#">COMP SCI 3306 Mining Big Data</a>	3	
S1	<a href="#">STATS 3001 Statistical Modelling III</a>	3	
S2	<a href="#">STATS 3022 Data Science III</a>	3	
S2	<a href="#">STATS 3023 Computational Bayesian Statistics III</a>	3	

### Mathematical Sciences Major

Available	Course	Units	Status
	All of the following courses must be completed:		
SS S1 S2	<a href="#">MATHS 1012 Mathematics IB</a>	3	
	and Level III courses to the value of 12 units from Applied Mathematics, Pure Mathematics and Statistics Courses.		
	and Mathematical Science courses to the value of 9 units.		

### Pure Mathematics Major

Available	Course	Units	Status
	Courses to the value of 12 units from the following:		
N/A	<a href="#">PURE MTH 3003 Number Theory III</a>	3	
N/A	<a href="#">PURE MTH 3009 Integration and Analysis III</a>	3	
N/A	<a href="#">PURE MTH 3018 Coding &amp; Cryptology III</a>	3	
N/A	<a href="#">PURE MTH 3021 Logic &amp; Computability</a>	3	
N/A	<a href="#">PURE MTH 3022 Geometry of Surfaces III</a>	3	
N/A	<a href="#">PURE MTH 3024 Finite Geometry III</a>	3	
S1	<a href="#">PURE MTH 3002 Topology and Analysis III</a>	3	
S1	<a href="#">PURE MTH 3007 Groups and Rings III</a>	3	
S1	<a href="#">PURE MTH 3019 Complex Analysis III</a>	3	
S2	<a href="#">PURE MTH 3023 Fields and Modules III</a>	3	
	and Mathematical Sciences courses to the value of 12 units		

## Bachelor of Mathematical and Computer Sciences

### Statistics Major

Available	Course	Units	Status
	All of the following courses must be completed:		
S1	<a href="#">STATS 3001 Statistical Modelling III</a>	3	
S1	<a href="#">STATS 3006 Mathematical Statistics III</a>	3	
	and courses to the value of 6 units from the following:		
N/A	<a href="#">APP MTH 3124 Decision Science III</a>	3	
N/A	<a href="#">STATS 3005 Time Series III</a>	3	
N/A	<a href="#">STATS 3008 Biostatistics III</a>	3	
S1	<a href="#">APP MTH 3001 Applied Probability III</a>	3	
S2	<a href="#">APP MTH 3016 Random Processes III</a>	3	
S2	<a href="#">STATS 3022 Data Science III</a>	3	
S2	<a href="#">STATS 3023 Computational Bayesian Statistics III</a>	3	
	and Mathematical Sciences courses to the value of 12 units		



## Bachelor of Mathematical and Computer Sciences Mathematical Sciences Double Majors

### Applied Mathematics and Pure Mathematics Double Major

Available	Course	Units	Status
	Courses to the value of 12 units from the following:		
N/A	<a href="#">APP MTH 3022 Optimal Functions and Nanomechanics III</a>	3	
N/A	<a href="#">APP MTH 3124 Decision Science III</a>	3	
S1	<a href="#">APP MTH 3001 Applied Probability III</a>	3	
S1	<a href="#">APP MTH 3002 Fluid Mechanics III</a>	3	
S1	<a href="#">APP MTH 3014 Optimisation III</a>	3	
S1	<a href="#">APP MTH 3021 Modelling with Ordinary Differential Equations III</a>	3	
S2	<a href="#">APP MTH 3016 Random Processes III</a>	3	
S2	<a href="#">APP MTH 3023 Partial Differential Equations and Waves III</a>	3	
	plus courses to the value of 9 units from the following:		
N/A	<a href="#">PURE MTH 3003 Number Theory III</a>	3	
N/A	<a href="#">PURE MTH 3009 Integration and Analysis III</a>	3	
N/A	<a href="#">PURE MTH 3018 Coding &amp; Cryptology III</a>	3	
N/A	<a href="#">PURE MTH 3021 Logic &amp; Computability</a>	3	
N/A	<a href="#">PURE MTH 3022 Geometry of Surfaces III</a>	3	
N/A	<a href="#">PURE MTH 3024 Finite Geometry III</a>	3	
S1	<a href="#">PURE MTH 3002 Topology and Analysis III</a>	3	
S1	<a href="#">PURE MTH 3007 Groups and Rings III</a>	3	
S1	<a href="#">PURE MTH 3019 Complex Analysis III</a>	3	
S2	<a href="#">PURE MTH 3023 Fields and Modules III</a>	3	
	and Mathematical Sciences courses to the value of 3 units		

### Applied Mathematics and Statistics Double Major

Available	Course	Units	Status
	Courses to the value of 12 units from the following:		
N/A	<a href="#">APP MTH 3022 Optimal Functions and Nanomechanics III</a>	3	
N/A	<a href="#">APP MTH 3124 Decision Science III</a>	3	
S1	<a href="#">APP MTH 3001 Applied Probability III</a>	3	
S1	<a href="#">APP MTH 3002 Fluid Mechanics III</a>	3	
S1	<a href="#">APP MTH 3014 Optimisation III</a>	3	
S1	<a href="#">APP MTH 3021 Modelling with Ordinary Differential Equations III</a>	3	
S2	<a href="#">APP MTH 3016 Random Processes III</a>	3	
S2	<a href="#">APP MTH 3023 Partial Differential Equations and Waves III</a>	3	
	plus all of the following courses must be completed:		
S1	<a href="#">STATS 3001 Statistical Modelling III</a>	3	
S1	<a href="#">STATS 3006 Mathematical Statistics III</a>	3	
	and courses to the value of 3 units from the following:		
N/A	<a href="#">APP MTH 3124 Decision Science III</a>	3	
N/A	<a href="#">STATS 3005 Time Series III</a>	3	
N/A	<a href="#">STATS 3008 Biostatistics III</a>	3	
S1	<a href="#">APP MTH 3001 Applied Probability III</a>	3	
S2	<a href="#">APP MTH 3016 Random Processes III</a>	3	
S2	<a href="#">STATS 3022 Data Science III</a>	3	
S2	<a href="#">STATS 3023 Computational Bayesian Statistics III</a>	3	
	and Mathematical Sciences courses to the value of 3 units		

### Pure Mathematics and Applied Mathematics Double Major

Available	Course	Units	Status
	Courses to the value of 12 units from the following:		
N/A	<a href="#">PURE MTH 3003 Number Theory III</a>	3	
N/A	<a href="#">PURE MTH 3009 Integration and Analysis III</a>	3	
N/A	<a href="#">PURE MTH 3018 Coding &amp; Cryptology III</a>	3	
N/A	<a href="#">PURE MTH 3021 Logic &amp; Computability</a>	3	
N/A	<a href="#">PURE MTH 3022 Geometry of Surfaces III</a>	3	
N/A	<a href="#">PURE MTH 3024 Finite Geometry III</a>	3	
S1	<a href="#">PURE MTH 3002 Topology and Analysis III</a>	3	
S1	<a href="#">PURE MTH 3007 Groups and Rings III</a>	3	
S1	<a href="#">PURE MTH 3019 Complex Analysis III</a>	3	
S2	<a href="#">PURE MTH 3023 Fields and Modules III</a>	3	
	plus courses to the value of 9 units from the following:		
N/A	<a href="#">APP MTH 3022 Optimal Functions and Nanomechanics III</a>	3	
N/A	<a href="#">APP MTH 3124 Decision Science III</a>	3	
S1	<a href="#">APP MTH 3001 Applied Probability III</a>	3	
S1	<a href="#">APP MTH 3002 Fluid Mechanics III</a>	3	
S1	<a href="#">APP MTH 3014 Optimisation III</a>	3	
S1	<a href="#">APP MTH 3021 Modelling with Ordinary Differential Equations III</a>	3	
S2	<a href="#">APP MTH 3016 Random Processes III</a>	3	
S2	<a href="#">APP MTH 3023 Partial Differential Equations and Waves III</a>	3	
	and Mathematical Sciences courses to the value of 3 units		

### Pure Mathematics and Statistics Double Major

Available	Course	Units	Status
	Courses to the value of 12 units from the following:		
N/A	<a href="#">PURE MTH 3003 Number Theory III</a>	3	
N/A	<a href="#">PURE MTH 3009 Integration and Analysis III</a>	3	
N/A	<a href="#">PURE MTH 3018 Coding &amp; Cryptology III</a>	3	
N/A	<a href="#">PURE MTH 3021 Logic &amp; Computability</a>	3	
N/A	<a href="#">PURE MTH 3022 Geometry of Surfaces III</a>	3	
N/A	<a href="#">PURE MTH 3024 Finite Geometry III</a>	3	
S1	<a href="#">PURE MTH 3002 Topology and Analysis III</a>	3	
S1	<a href="#">PURE MTH 3007 Groups and Rings III</a>	3	
S1	<a href="#">PURE MTH 3019 Complex Analysis III</a>	3	
S2	<a href="#">PURE MTH 3023 Fields and Modules III</a>	3	
	plus all of the following courses must be completed:		
S1	<a href="#">STATS 3001 Statistical Modelling III</a>	3	
S1	<a href="#">STATS 3006 Mathematical Statistics III</a>	3	
	and courses to the value of 3 units from the following:		
N/A	<a href="#">APP MTH 3124 Decision Science III</a>	3	
N/A	<a href="#">STATS 3005 Time Series III</a>	3	
N/A	<a href="#">STATS 3008 Biostatistics III</a>	3	
S1	<a href="#">APP MTH 3001 Applied Probability III</a>	3	
S2	<a href="#">APP MTH 3016 Random Processes III</a>	3	
S2	<a href="#">STATS 3022 Data Science III</a>	3	
S2	<a href="#">STATS 3023 Computational Bayesian Statistics III</a>	3	
	and Mathematical Sciences courses to the value of 3 units		

### Statistics and Applied Mathematics Double Major

Available	Course	Units	Status
	All of the following courses must be completed:		
S1	<a href="#">STATS 3001 Statistical Modelling III</a>	3	
S1	<a href="#">STATS 3006 Mathematical Statistics III</a>	3	
	and courses to the value of 6 units from the following:		
N/A	<a href="#">APP MTH 3124 Decision Science III</a>	3	
N/A	<a href="#">STATS 3005 Time Series III</a>	3	
N/A	<a href="#">STATS 3008 Biostatistics III</a>	3	
S1	<a href="#">APP MTH 3001 Applied Probability III</a>	3	
S2	<a href="#">APP MTH 3016 Random Processes III</a>	3	
S2	<a href="#">STATS 3022 Data Science III</a>	3	
S2	<a href="#">STATS 3023 Computational Bayesian Statistics III</a>	3	
	plus courses to the value of 9 units from the following:		
N/A	<a href="#">APP MTH 3022 Optimal Functions and Nanomechanics III</a>	3	
N/A	<a href="#">APP MTH 3124 Decision Science III</a>	3	
S1	<a href="#">APP MTH 3001 Applied Probability III</a>	3	
S1	<a href="#">APP MTH 3002 Fluid Mechanics III</a>	3	
S1	<a href="#">APP MTH 3014 Optimisation III</a>	3	
S1	<a href="#">APP MTH 3021 Modelling with Ordinary Differential Equations III</a>	3	
S2	<a href="#">APP MTH 3016 Random Processes III</a>	3	
S2	<a href="#">APP MTH 3023 Partial Differential Equations and Waves III</a>	3	
	and Mathematical Sciences courses to the value of 3 units		

### Statistics and Pure Mathematics Double Major

Available	Course	Units	Status
	All of the following courses must be completed:		
S1	<a href="#">STATS 3001 Statistical Modelling III</a>	3	
S1	<a href="#">STATS 3006 Mathematical Statistics III</a>	3	
	and courses to the value of 6 units from the following:		
N/A	<a href="#">APP MTH 3124 Decision Science III</a>	3	
N/A	<a href="#">STATS 3005 Time Series III</a>	3	
N/A	<a href="#">STATS 3008 Biostatistics III</a>	3	
S1	<a href="#">APP MTH 3001 Applied Probability III</a>	3	
S2	<a href="#">APP MTH 3016 Random Processes III</a>	3	
S2	<a href="#">STATS 3022 Data Science III</a>	3	
S2	<a href="#">STATS 3023 Computational Bayesian Statistics III</a>	3	
	plus courses to the value of 9 units from the following:		
N/A	<a href="#">PURE MTH 3003 Number Theory III</a>	3	
N/A	<a href="#">PURE MTH 3009 Integration and Analysis III</a>	3	
N/A	<a href="#">PURE MTH 3018 Coding &amp; Cryptology III</a>	3	
N/A	<a href="#">PURE MTH 3021 Logic &amp; Computability</a>	3	
N/A	<a href="#">PURE MTH 3022 Geometry of Surfaces III</a>	3	
N/A	<a href="#">PURE MTH 3024 Finite Geometry III</a>	3	
S1	<a href="#">PURE MTH 3002 Topology and Analysis III</a>	3	
S1	<a href="#">PURE MTH 3007 Groups and Rings III</a>	3	
S1	<a href="#">PURE MTH 3019 Complex Analysis III</a>	3	
S2	<a href="#">PURE MTH 3023 Fields and Modules III</a>	3	
	and Mathematical Sciences courses to the value of 3 units		

### Artificial Intelligence Major

Available	Course	Units	Status
	All of the following courses must be completed:		
S1	<a href="#">COMP SCI 3007 Artificial Intelligence</a>	3	
S2	<a href="#">COMP SCI 3310 Software Engineering &amp; Project (Artificial Intelligence)</a>	3	
	and courses to the value of 6 units from the following:		
S2	<a href="#">COMP SCI 3314 Introduction to Statistical Machine Learning</a>	3	
S1	<a href="#">COMP SCI 3315 Computer Vision</a>	3	
S2	<a href="#">COMP SCI 3316 Evolutionary Computation</a>	3	
	and Computer Science courses to the value of 12 units		

### Computer Science Major

Available	Course	Units	Status
	All of the following courses must be completed:		
S1 S2	<a href="#">COMP SCI 2000 Computer Systems</a>	3	
S1 S2	<a href="#">COMP SCI 2201 Algorithm &amp; Data Structure Analysis</a>	3	
	and courses to the value of 3 units from the following:		
S2	<a href="#">COMP SCI 3006 Software Engineering &amp; Project</a>	3	
S2	<a href="#">COMP SCI 3310 Software Engineering &amp; Project (Artificial Intelligence)</a>	3	
S2	<a href="#">COMP SCI 3311 Software Engineering &amp; Project (Data Science)</a>	3	
S2	<a href="#">COMP SCI 3312 Software Engineering &amp; Project (Cybersecurity)</a>	3	
S2	<a href="#">COMP SCI 3313 Software Engineering &amp; Project (Distributed Systems &amp; Networking)</a>	3	
	and Level III Computer Science courses to the value of 9 units		
	and Computer Science courses to the value of 6 units		

### Cybersecurity Major

Available	Course	Units	Status
	All of the following courses must be completed:		
S2	<a href="#">COMP SCI 3307 Secure Programming</a>	3	
S1	<a href="#">COMP SCI 3308 Cybersecurity Fundamentals</a>	3	
S2	<a href="#">COMP SCI 3312 Software Engineering &amp; Project (Cybersecurity)</a>	3	
	and courses to the value of 3 units from the following:		
S1	<a href="#">COMP SCI 3001 Computer Networks &amp; Applications</a>	3	
N/A	<a href="#">COMP SCI 3309 Cybersecurity A Practical Application</a>	3	
S2	<a href="#">MATHS 3026 Cryptography III</a>	3	
	and Computer Science courses to the value of 12 units		

### Data Science Major

Available	Course	Units	Status
	All of the following courses must be completed:		
S1	<a href="#">COMP SCI 3306 Mining Big Data</a>	3	
S2	<a href="#">COMP SCI 3311 Software Engineering &amp; Project (Data Science)</a>	3	
S2	<a href="#">COMP SCI 3314 Introduction to Statistical Machine Learning</a>	3	
	and courses to the value of 3 units from the following:		
S1	<a href="#">COMP SCI 3305 Parallel and Distributed Computing</a>	3	
S1	<a href="#">STATS 3001 Statistical Modelling III</a>	3	
S1	<a href="#">STATS 3006 Mathematical Statistics III</a>	3	
	and Computer Science courses to the value of 12 units		

**Distributed Systems and Networking Major**

Available	Course	Units	Status
	All of the following courses must be completed:		
S1	<a href="#">COMP SCI 3001 Computer Networks &amp; Applications</a>	3	
S2	<a href="#">COMP SCI 3012 Distributed Systems</a>	3	
S2	<a href="#">COMP SCI 3313 Software Engineering &amp; Project (Distributed Systems &amp; Networking)</a>	3	
	and courses to the value of 3 units from the following:		
S2	<a href="#">COMP SCI 3004 Operating Systems</a>	3	
S1	<a href="#">COMP SCI 3305 Parallel and Distributed Computing</a>	3	
	and Computer Science courses to the value of 12 units		

Faculty of Engineering, Computer and Mathematical Sciences  
2021 Study Plan – Semester 1 Start  
**Bachelor of Mathematical and Computer Sciences**  
**Public Health Minor**

**Public Health Minor**

Available	Course	Units	Status
	All the following courses must be completed:		
S1 S2	<a href="#">PUB HLTH 1001 Health and Illness in Populations</a>	3	
S2	<a href="#">PUB HLTH 2007 Epidemiology for Health and Medical Sciences</a>	3	
	and courses to the value of 3 units may be taken from the following:		
S1	<a href="#">PUB HLTH 3009 Experimental Research Design and Analysis</a>	3	
S1	<a href="#">PUB HLTH 3010 Practical Epidemiology in Health Sciences</a>	3	
	and courses to the value of 6 units may be taken from the following:		
S2	<a href="#">PUB HLTH 1003 Communication for Health Sciences</a>	3	
S2	<a href="#">PUB HLTH 1004 Flies, drains &amp; Ebola: Human health &amp; environment</a>	3	
S2	<a href="#">PUB HLTH 1006 Saving lives or respecting rights? An introduction to health ethics</a>	3	
N/A	<a href="#">PUB HLTH 2008 Rural Australia: Health beyond the burbs</a>	3	
S2	<a href="#">PUB HLTH 2009 Introduction to Counselling Theory and Practice</a>	3	
S1	<a href="#">PUB HLTH 2200 Social Foundations of Health II</a>	3	
N/A	<a href="#">PUB HLTH 3006EX International Public Health Experience 2</a>	3	
WS	<a href="#">PUB HLTH 3007 Nutrition: Ideology, Individuals &amp; Industry</a>	3	
S2	<a href="#">PUB HLTH 3008 Reawakening Health Systems: People, Planning and Policy</a>	3	
S2	<a href="#">PUB HLTH 3011 Big Challenges in Public Health</a>	3	
WS	<a href="#">PUB HLTH 3122 International Health III</a>	3	
S1	<a href="#">PUB HLTH 3124 Health Promotion III</a>	3	