

Bachelor of Mathematical and Computer Sciences - Semester 2 Start
(For students without Specialist Mathematics)

Year 1				
S1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S2	MATHS 1004 Mathematics for Data Science or MATHS 1013 Mathematics IM [^] <input type="checkbox"/>	ENG 1002 Programming (Matlab and C) <input type="checkbox"/>	Level I Elective# <input type="checkbox"/>	Level I or II or III Elective* <input type="checkbox"/>
Year 2				
S1	Level I Elective* <input type="checkbox"/>	Level I Elective* <input type="checkbox"/>	Level I Elective* <input type="checkbox"/>	Level I or II or III Elective* <input type="checkbox"/>
S2	Level II or III Elective* <input type="checkbox"/>	Level II or III Elective* <input type="checkbox"/>	Level II or III Elective* <input type="checkbox"/>	Level I or II or III Elective* <input type="checkbox"/>
Year 3				
S1	Level II or III Elective* <input type="checkbox"/>	Level II or III Elective* <input type="checkbox"/>	Level II or III Elective* <input type="checkbox"/>	Level I or II or III Elective* <input type="checkbox"/>
S2	Capstone Project (see table) <input type="checkbox"/>	Level III Mathematical or Computer Sciences Elective <input type="checkbox"/>	Level III Elective* <input type="checkbox"/>	Level III Elective* <input type="checkbox"/>
Year 4				
S1	Level III Mathematical or Computer Sciences Elective <input type="checkbox"/>	Level III Mathematical or Computer Sciences Elective <input type="checkbox"/>	MATHS 3025 Professional Practice III <input type="checkbox"/>	Level III Elective* <input type="checkbox"/>

*Please note the following:

- Students must present at least 36 units of Mathematical and Computer Science courses:
 - 9 units from: ENG 1002, MATHS 1004 & Capstone Project.
 - 9 units from: Level III Mathematical or Computer Science Electives.
 - 18 units from: Level I/II/III Mathematical or Computer Science Electives.
 - MATHS 3025 is not considered a Mathematical Sciences course for this purpose.
- Electives must include Broadening Electives to the value of 9 units that are not from the following: all COMP SCI, MATHS, PURE MTH, APP MATH & STATS courses, and ENG 1002.
- The following electives do not satisfy the program rules for this program: MATHS 1009, MATHS 1010, ECON 1008, ECON 1010, ECON 2503 & ECON 2504.

#Students wishing to take statistics courses at Level II/III should take a Level I Statistics course. STATS 1000 Statistical Practice I is strongly recommended.

Majors

Students may select to complete one of the following majors (see https://calendar.adelaide.edu.au/aprcw/2019/bscms_bscm%26cs for specific requirements):

- Artificial Intelligence
- Computer Science
- Cybersecurity
- Distributed Systems and Networking
- Data Science
- Data and Decision Sciences

[^]Students without Specialist Mathematics can access other majors in the BMaCompSc program by first completing MATHS 1013 Mathematics IM. However, such students should first contact a Course Advisor to develop a study plan suitable for their future goals.

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>

Further Information and Enrolment Advice

Faculty of Engineering, Computer and Mathematical Sciences
Email: askecms@adelaide.edu.au Web: www.ecms.adelaide.edu.au

Capstone Project Table

CHOOSE ONE OF THE FOLLOWING CAPSTONE PROJECT COURSES			
COMP SCI 3006 Software Engineering & Project <input type="checkbox"/>	COMP SCI 3310 Software Engineering & Project (Artificial Intelligence) <input type="checkbox"/>	COMP SCI 3311 Software Engineering & Project (Data Science) <input type="checkbox"/>	COMP SCI 3312 Software Engineering & Project (Cybersecurity) <input type="checkbox"/>
COMP SCI 3313 Software Engineering & Project (Distributed Systems & Networking) <input type="checkbox"/>	MATHS 3021 Capstone Project in Mathematical Sciences III <input type="checkbox"/>		

Electives Tables

CHOOSE FROM THE FOLLOWING APPLIED MATHEMATICS ELECTIVES			
APP MTH 2105 Optimisation and Operations Research II <input type="checkbox"/>	APP MTH 3001 Applied Probability III <input type="checkbox"/>	APP MTH 3002 Fluid Mechanics III <input type="checkbox"/>	APP MTH 3014 Optimisation III <input type="checkbox"/>
APP MTH 3016 Random Processes III <input type="checkbox"/>	APP MTH 3020 Stochastic Decision Theory III <input type="checkbox"/> (not available post 2019)	APP MTH 3021 Modelling with Ordinary Differential Equations III <input type="checkbox"/>	APP MTH 3022 Optimal Functions and Nanomechanics III <input type="checkbox"/> (not available post 2019)
APP MTH 3023 Partial Differential Equations and Waves III <input type="checkbox"/>	APP MTH 3124 Decision Science III <input type="checkbox"/> (available 2021)		
CHOOSE FROM THE FOLLOWING MATHEMATICS SCIENCES ELECTIVES			
MATHS 2100 Real Analysis II <input type="checkbox"/>	MATHS 2101 Multivariable & Complex Calculus II <input type="checkbox"/>	MATHS 2102 Differential Equations II <input type="checkbox"/>	MATHS 2103 Probability & Statistics II <input type="checkbox"/>
MATHS 2104 Numerical Methods II <input type="checkbox"/>	MATHS 3012 Financial Modelling: Tools & Techniques III <input type="checkbox"/>	MATHS 3026 Cryptography III <input type="checkbox"/>	
CHOOSE FROM THE FOLLOWING PURE MATHEMATICS ELECTIVES			
PURE MTH 2106 Algebra II <input type="checkbox"/>	PURE MTH 3002 Topology and Analysis III <input type="checkbox"/>	PURE MTH 3007 Groups and Rings III <input type="checkbox"/>	PURE MTH 3009 Integration and Analysis III <input type="checkbox"/>
PURE MTH 3019 Complex Analysis III <input type="checkbox"/>	PURE MTH 3023 Fields and Modules III <input type="checkbox"/>	PURE MTH 3024 Finite Geometry III <input type="checkbox"/>	

Electives Tables

CHOOSE FROM THE FOLLOWING STATISTICS ELECTIVES

One of: <ul style="list-style-type: none"> STATS 1000 Statistical Practice I <input type="checkbox"/> STATS 1005 Statistical Analysis & Modelling I <input type="checkbox"/> 	STATS 2107 Statistical Modelling and Inference II <input type="checkbox"/>	STATS 3001 Statistical Modelling III <input type="checkbox"/>	STATS 3005 Time Series III (not available post 2019) <input type="checkbox"/>
STATS 3006 Mathematical Statistics III <input type="checkbox"/>	STATS 3022 Data Science III (available 2020) <input type="checkbox"/>	STATS 3023 Computational Bayesian Statistics III (available 2020) <input type="checkbox"/>	

CHOOSE FROM THE FOLLOWING COMPUTER SCIENCES ELECTIVES

COMP SCI 1010 Puzzle Based Learning <input type="checkbox"/>	COMP SCI 1106 Introduction to Software Engineering <input type="checkbox"/>	COMP SCI 2000 Computer Systems <input type="checkbox"/>	COMP SCI 2005 Systems Programming <input type="checkbox"/>
COMP SCI 2203 Problem Solving & Software Development <input type="checkbox"/>	COMP SCI 2207 Web & Database Computing <input type="checkbox"/>	COMP SCI 3001 Computer Network & Applications <input type="checkbox"/>	COMP SCI 3004 Operation Systems <input type="checkbox"/>
COMP SCI 3005 Computer Architecture <input type="checkbox"/>	COMP SCI 3007 Artificial Intelligence <input type="checkbox"/>	COMP SCI 3012 Distributed Systems <input type="checkbox"/>	COMP SCI 3305 Parallel and Distributed Computing <input type="checkbox"/>
COMP SCI 3306 Mining Big Data <input type="checkbox"/>	COMP SCI 3307 Secure Programming <input type="checkbox"/>	COMP SCI 3308 Cybersecurity Fundamentals <input type="checkbox"/>	COMP SCI 3309 Cybersecurity A Practical Application <input type="checkbox"/>
COMP SCI 3314 Introduction to Statistical Machine Learning <input type="checkbox"/>	COMP SCI 3315 Computer Vision <input type="checkbox"/>	One of: <ul style="list-style-type: none"> COMP SCI 3006 Software Engineering & Project COMP SCI 3310 Software Engineering & Project (Artificial Intelligence) COMP SCI 3311 Software Engineering & Project (Data Science) COMP SCI 3312 Software Engineering & Project (Cybersecurity) COMP SCI 3313 Software Engineering & Project (Distributed Systems & Networking) <input type="checkbox"/>	