THE UNIVERSITY of ADELAIDE

Faculty of Engineering, Computer and Mathematical Sciences 2019 Study Plan

Bachelor of Mathematical and Computer Sciences - Semester 2 Start (Data and Decision Sciences Major - for students without Specialist Mathematics)

Year 1				
S1				
S2	ENG 1002 Programming (Matlab and C) ☐	MATHS 1004 Mathematics for Data Science ☐	STATS 1000 Statistical Practice I ☐	Level I Elective* ☐
Year 2				
S1	COMP SCI 1102 Object Oriented Programming ☐	MATHS 2103 Probability & Statistics II ☐	Level I Elective* ☐	Level I or II or III Elective* ☐
S2	COMP SCI 2103 Algorithm Design & Data Structures ☐	STATS 2107 Statistical Modelling and Inference II ☐	APP MTH 2105 Optimisation and Operations Research II ☐	Level I or II or III Elective* ☐
Year 3				
S1	COMP SCI 2201 Algorithm & Data Structure Analysis ☐	Level II or III Elective* ☐	Level I or II or III Elective* ☐	Level I or II or III Elective* ☐
S2	Capstone Project (see table) ☐	Data and Decision Sciences Major Elective# ☐	Data and Decision Sciences Major Elective# ☐	Level III Elective* ☐
Year 4				
S1	MATHS 3025 Professional Practice III ☐	Data and Decision Sciences Major Elective# ☐	Data and Decision Sciences Major Elective# ☐	Level III Elective* ☐

*Please note the following:

- 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.

#Choose four Data And Decision Sciences Major electives from:

- APP MTH 3124 Decision Science III (available from 2021)
- COMP SCI 3306 Mining Big Data
- STATS 3001 Statistical Modelling III
- STATS 3022 Data Science III
- STATS 3023 Computational Bayesian Statistics III

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
www.ecms.adelaide.edu.au

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Capstone Project Table

CHOOSE ONE OF THE FOLLOWING CAPSTONE PROJECT COURSES			
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) ☐	MATHS 3021 Capstone Project in Mathematical Sciences III ☐		

Electives Tables

CHOOSE FROM THE FOLLOWING MATHEMATICS ELECTIVES			
APP MTH 3124 Decision Science III **(available 2021)** ☐	MATHS 3026 Cryptography III ☐	STATS 3001 Statistical Modelling III ☐	STATS 3022 Data Science III **(available 2020)** ☐
STATS 3023 Computational Bayesian Statistics **(available 2020)** ☐			

CHOOSE FROM THE FOLLOWING COMPUTER SCIENCES ELECTIVES			
COMP SCI 1010 Puzzle Based Learning ☐	COMP SCI 1106 Introduction to Software Engineering ☐	COMP SCI 2000 Computer Systems ☐	COMP SCI 2005 Systems Programming ☐
COMP SCI 2203 Problem Solving & Software Development ☐	COMP SCI 2207 Web & Database Computing ☐	COMP SCI 3001 Computer Network & Applications ☐	COMP SCI 3004 Operation Systems ☐
COMP SCI 3005 Computer Architecture ☐	COMP SCI 3007 Artificial Intelligence ☐	COMP SCI 3012 Distributed Systems ☐	COMP SCI 3305 Parallel and Distributed Computing ☐
COMP SCI 3306 Mining Big Data ☐	COMP SCI 3307 Secure Programming ☐	COMP SCI 3308 Cybersecurity Fundamentals ☐	COMP SCI 3309 Cybersecurity A Practical Application ☐
COMP SCI 3314 Introduction to Statistical Machine Learning ☐	COMP SCI 3315 Computer Vision ☐	One of: • 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) ☐	