

Mathematics - Survival Guide

Everything you need to know to succeed in your degree

All the questions you are afraid to ask - answered here!



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Welcome Message



**Professor Karen
Blackmore**

HEAD OF
SCHOOL

Welcome to the School of Computer and Information Sciences!

Beginning your university studies in mathematics is an exciting step into a field that underpins scientific discovery, technological innovation, and logical problem-solving across many areas of society. Mathematics will challenge you to think deeply, reason carefully, and approach complex problems with curiosity and persistence.

Throughout your studies, you will learn a range of quantitative, analytical, and problem-solving skills, but more importantly, you will become an independent learner, able to critically assess how and what to learn to be successful in your career. This is the power of higher education. At times the work may feel demanding, but it is through these challenges that confidence, resilience, and genuine understanding are built.

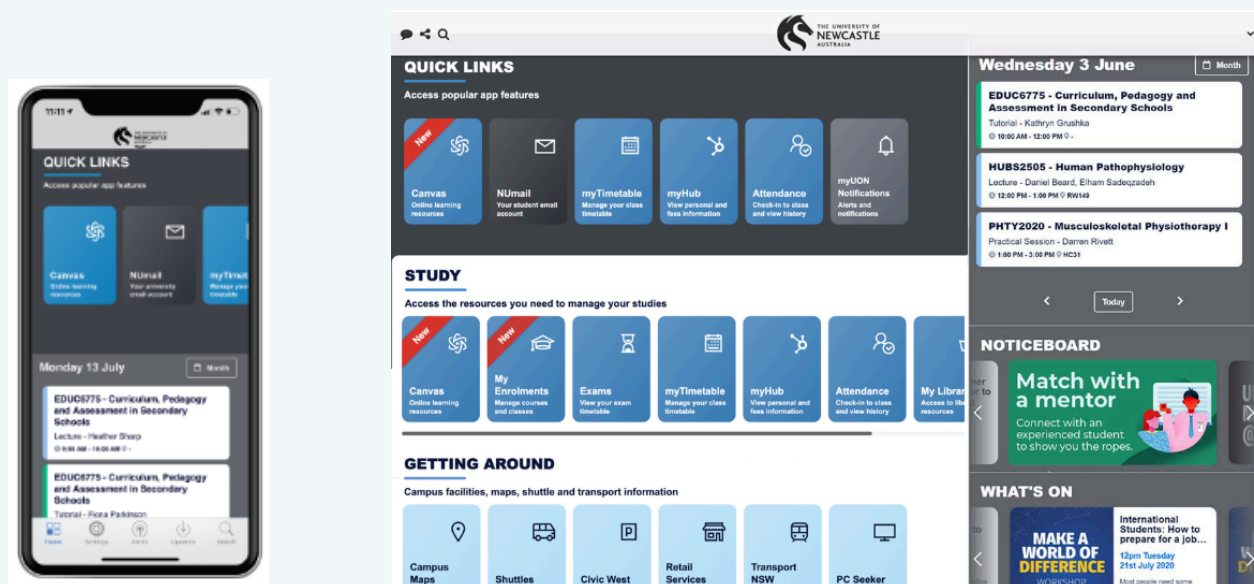
Make the most of the support and resources available to you, engage with the academics, and your peers. The habits and ways of thinking you develop here will stay with you long after graduation, opening doors to diverse and rewarding pathways. We're delighted to welcome you to our School community and look forward to seeing you grow into confident and capable problem-solvers.

What is the MyUni app used for?

✓ What is the myUni App?

myUni is the University of Newcastle's personalised student app and online portal, designed with students to make university life easier to navigate. It brings all your key systems and information together in one place, so you can focus on your studies and making the most of your time at uni. You can view your class timetable and calendar, get directions to classes, customise your homepage with quick links, and access essential study tools like Canvas, myTimetable, myHub, the Library, and your digital student ID.

Beyond study, myUni helps you stay connected and supported. You'll find campus maps, transport info, support services, career resources, software tools like email and Microsoft 365, and updates on events and important notices. myUni is available both as a mobile app (iOS and Android) and as a web portal, making it easy to access everything you need—anytime, anywhere.



✓ How can I access the myUni App?

Download the myUni: University of Newcastle mobile app available on iOS and Android from the app stores OR access via a web browser at <https://myuon.newcastle.edu.au/>



How do I get around Campus?

1

Use the Online Maps

Scan the QR Code (or click [here](#) if you are viewing this online) to see the online Map for the Callaghan Campus



2

Use these free Apps to find your way around

There are two main apps that are useful for getting around campus - just add in a building number and they will guide you to the room:

1. LostOnCampus
2. MazeMap

4

Need to get to NuSpace?

The NUspace Shuttle is a free inter-campus service that runs Monday to Friday from 7:10am – 10:15pm between Callaghan and Newcastle City campuses.

There is free wi-fi on the shuttle and you can simply swipe your Student Card to ride on this shuttle. You can also track the Shuttle and its timetable in the myUni App

3

Shuttle Buses (Callaghan)

This Shuttle Bus, also called a Security Shuttle, runs around the Callaghan Campus Monday-Friday on the following routes:

1. Station route
2. Campus route
3. Night Shuttle

Scan the QR Code below (or click [here](#) if you are viewing this online) for more information.



5

How do I pay for Parking at Callaghan?

If you are visiting for the longer term, you can purchase a vPermit or you can download the CelloPark app to manage your parking digitally.

Scan the QR Code below (or click [here](#) if you are viewing this online) for more information.)



When and where are my Classes?

When are my classes?

Your class timetable is visible in the myUni app by tapping the timetable tile. If you aren't already logged in to the app, you will be prompted to do so.

Where are my classes?

For directions to your class location please select the specific class you are seeking directions for in your timetable tile. Under "Location", towards the right, you will see a Map Pin symbol.

Once you click the symbol you will be taken to MazeMap which will show the location of your class. You can then click "Directions" if you would like to have your route mapped from your current location.

Can I change the times/days I attend class?

Not generally, the timetable is set centrally and Course Coordinators have no control over when their classes are run. Often there will be multiple labs, workshop, or tutorial sessions available every week, but you must attend the session you are enrolled in (especially in first year).

Sometimes, if there are spaces in labs, workshop, or tutorial sessions you can swap your day/time but ONLY if there is a space in which to enroll.

Lecture times/days cannot be changed.



When and where are my Exams?

While exams can be held at any time during the teaching period of your course, formal exams are held during the formal examination period, which is at the end of each term.

Exams run from Monday to Saturday in the morning and afternoon and from Monday to Thursday in the evening.

What's my Exam Timetable?

Your exam timetable will be available approximately four weeks before the exam period commences – simply click on the exam timetable button in myHub. Information about the venue for your exams will be available on the same link approximately one week before the exam period.

Exams are conducted at all University campuses and students are expected to sit all examinations at the site of their enrolment, except for:

- a) a course offered at Newcastle City Precinct where the examination will be held at Callaghan campus; or
- b) a course offered at Gosford where the examination will be held at Ourimbah campus; or
- c) Online courses where other provisions may be made.

Need more information?

Please click this [link](#) or if viewing this as a physical copy please scan the QR code below:



What is Canvas? How do I access Canvas?

1. What's Canvas?

Canvas is the University's Learning Management System (LMS). It provides a consistent, user-friendly space for accessing course materials and supporting linear learning. When you enroll in a course, its content becomes available in Canvas, where you can engage in online learning, collaboration, and communication with staff and fellow students. You'll have full access to your current courses and read-only access to completed ones.

2. How do I access Canvas?

You can access Canvas via:

1. The myUni App just look for the Canvas logo (see image to the right of this text) OR
2. Going to <https://canvas.newcastle.edu.au/>



3. Help! I cannot see a course in my Canvas

This normally means one of two things:

1. The Course Coordinator hasn't released the site yet but as soon as its published you will be able to see it OR
2. The site is being withheld due to unpaid fees, check with the appropriate people to get your access restored

Always make sure you have enrolled in the course, otherwise you wont be able to see it on Canvas. If you're unsure of which course to enroll in please contact your Program Advisor (see Important Contacts in this booklet).

4. This is my first time using Canvas

There are many resources available to first time users of Canvas. Start by having a look at this resource (there are some helpful videos in this site too):

- <https://community.instructure.com/en/kb/articles/661192-student-getting-started-resources>



Student Email accounts

When you enrol you are automatically given access to NUmail, our student email service, which is hosted by Microsoft Office 365.

Official University correspondence will be sent to this account, so be sure to check your NUmail regularly.

Important: You should contact the university teaching and administrative staffs from your official student email, otherwise they might not reply to your email due to privacy concerns.

Sign into your email account

Your email account, or mailbox, is a combination of your student number (a unique seven-digit number allocated to you by the University, preceded by the letter c) and the email system domain name (uon.edu.au) - c1234567@uon.edu.au

You are also given an email alias, which is an email address that points to your mailbox, usually in the format Firstname.Lastname@uon.edu.au. This is often an easier way of giving people your email address.

Email addressed to you in either of the following formats will be delivered to your NUmail inbox:

- Firstname.Lastname@uon.edu.au
- c1234567@uon.edu.au

Email sent from your NUmail account will be in the format:

- Firstname Lastname <firstname.lastname@uon.edu.au>

Need more information?

Scan the QR Code below or click this [link](#)



How can I get in contact with my teachers?

Sometimes we have questions that we need answered or we just want to discuss an assessment item or some course materials with our Academics (teachers).

Generally speaking our courses will have:

1. A Course Coordinator - who is responsible for the course
2. A Lecturer - who delivers the lecture content
3. A Lab Demonstrator, Workshop Lead, or Tutorial Lead - who delivers content in our labs, workshops, and tutorials.
4. Markers - people who will mark our assignments

Sometimes, one academic is the Course Coordinator and does all of these roles, other times these roles are split between multiple people.

Check your Canvas Site (under Course Contacts on the home page of the course) to find their name and contact information.

Via the Canvas Site

Normally on Canvas there are two ways to find the academics information:

1. On the main home page of the course, select Course Contacts and you will be able to find the information there OR
2. In the Week 1 slides (or house keeping slides) lecturers often add the contact information for students

Important: You should contact the university teaching and administrative staff from your official student email, otherwise they might not reply to your email due to privacy concerns.



Via the University Website

All University of Newcastle Staff who are not employed on a Casual basis will have a Staff Profile. You can generally search for your Academics by either:

1. Googling UoN and the academics name OR
2. Searching [here](#) on our SCIS website (scan the QR Code if you are reading a physical copy of this booklet).



I need an extension – how do I get one?

Sometimes, we aren't always able to get our assignment done on time because some sort of adverse circumstance has occurred.

✓ Acceptable reasons for an Adverse Circumstances application are:

- Health grounds
- Compassionate grounds
- Hardship
- Trauma
- Cultural days or Sorry Business
- Unavoidable commitments

✗ Adverse Circumstances do not include:

- Misreading the Course Outline or examination timetable.
- Usual work commitments.
- Travel plans.
- Being unaware of the assumed knowledge requirements for your course.
- An inability to meet the inherent requirement for the program or course.
- Having too many assignments due at the same time

How do I apply for an Extension?

In Canvas there is an 'Assessment Extensions' Section, here you can request an extension, but it must meet the above criteria and have supporting documentation.

Supporting Documentation

Allowable documentation may include:

- a letter or medical certificate from an accepted health professional, which should include the date(s) that health grounds have impacted on your studies.
- a letter from a Counselling Service or a Student Support Advisor.
- a Reasonable Adjustment Plan (RAP) issued by AccessAbility which provides for the requested outcome.
- a letter attesting to the relevant circumstances from an appropriate authority, such as a police officer, fire officer, cultural or religious official, or an employer or supervisor.
- a funeral notice – either hard copy or digital.
- evidence of duties as a student reservist or cadet, a volunteer or an elite sportsperson.
- evidence of religious responsibilities.
- evidence of jury duty or other court ordered appearance.
- a Statutory Declaration attesting to the relevant circumstances, witnessed by an authorised official such as a JP.
- supporting documentation provided by Student Wellbeing (please note this can be used once per semester only).



What is Mandatory Attendance? How does it work?

✓ What is Mandatory Attendance?

For all first year courses (1000 level courses) an 80% attendance is required at all learning sessions, with the exception of whole-class lectures, for all students.

Usually this is recorded in the labs, workshops, or tutorials, check with your Course Coordinator if you are unsure on when the attendance is recorded.

✓ How do I record my attendance?

You will need to log in to the myUni app or website and select the 'Attendance Check-In' tile. You will have 5 minutes before the start of class and 45 minutes before the end of class to check in.

Attendance Check-In Requirements

- Enable location services on your device to check in.
- If you miss the check-in window, speak to your teaching staff—they may be able to assist in some cases.
- You can check in on a laptop, desktop, tablet, or another student's device, but you must use your own myUni login.
- You must be physically in the classroom to check in, and no one can check in for you.
- Only your attendance and location at the time of check-in are recorded.
- You can only check in to the class you're allocated to in My Timetable. If you need to swap classes long-term, update your allocation.

✓ What happens if I was in class but the app says I wasn't in class?

Please contact your Course Coordinator as soon as possible.

If you miss a class with a compulsory attendance requirement due to adverse circumstances, you can submit an Adverse Circumstances application at any point in the term.

You can view your attendance history in the myUni app.



What do the Course Numbers mean?

Numbers/ Codes

The first number at the front of your Course Code is an indicator of when you should take the course. For example:

- MATH**1**510: Discrete Mathematics - this is a **first** year course
- MATH**2**242: Complex Analysis - this is a **second** year course
- MATH**3**120: Algebra - this is a **third** year course

These numbers act as a pathway to ensure you aren't completing a course before you're ready, so pay careful attention to these! If you are in your first year, all your courses should begin with a 1, if you are in your second year they should begin with a 2 and so on.

Name

This is the formal name of the course and tells you what the course is about - for further information on the course, see the Course Handbook for your degree.

Not sure which course to enroll in?

The process can be confusing so never hesitate to reach out to the following sources:

- Student Hubs
- Program Convenors: these are people who are in charge of the Program you are enrolled in - see important Contacts on p.19 for their contact information
- Program Advisors: these are the people who will help guide you through the course selection process - see important Contacts on p.19 for their contact information
- Course and Program Handbooks
- Program Planner



What's Assumed Knowledge? Why is it important?

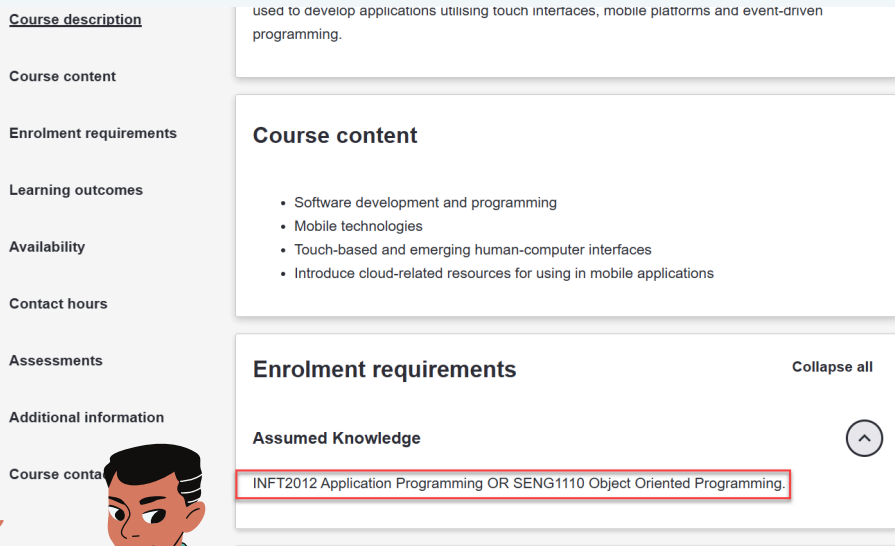
✓ What is Assumed Knowledge?

Understanding assumed knowledge is extremely important, as it forms the basis for advanced learning. Ignoring assumed knowledge will introduce unnecessary stress and difficulty into your studies. It may lead to poor performance in assessments and ultimately course failure. Failing a course will result in losing the course fees, a significant financial investment. Ensure you have consulted the program planner and/or program advisor to ensure that you selected appropriate courses for this term.

✓ How can I see the assumed knowledge for my course?

Each course that you take will appear in the online Course Handbook, here the Assumed Knowledge will be outlined.

In the example below we can see an example for a second year course INFT2051 - Mobile Application Programming (which can be found [here](#) or to view this, you can scan the QR code below).



used to develop applications utilising touch interfaces, mobile platforms and event-driven programming.

Course content

- Software development and programming
- Mobile technologies
- Touch-based and emerging human-computer interfaces
- Introduce cloud-related resources for using in mobile applications

Enrolment requirements Collapse all

Assumed Knowledge

INFT2012 Application Programming OR SENG1110 Object Oriented Programming.



**Scan me to see the
Course Handbook
Example shown here**



You can see that the Enrollment Requirements/Assumed Knowledge for this course is INFT2012 OR SENG1110.

This means that you need to have completed either INFT2012 OR SENG1110 before you can enroll in the course. Completing one of these courses will equip you with the skills needed to pass INFT2051.

Without doing the assumed knowledge, students often struggle with the courses they enroll in so it is very important to pay attention to the assumed knowledge requirements of the course.

Where are my Final Grades/Marks?

Where can I find my Final Marks/Grades?

You can view your final results in myHub. Results from all the Course Assessment items will be incorporated in your final result.

Results will be available on the [Fully Graded Date](#).

To access your final results, please follow the below instructions:

- Log into myUni
- Select the myHub icon/tile
- Select 'Academic Records' tile and you will be taken to the 'View My Grades' page
- Select the term you wish to view
- Your grades will appear for the applicable term (provided it is on or after Fully Graded Date for that term).

What do the Grades Mean?

Have a look at the next page for a deeper dive into the meaning of the Grades



What does my Final Grade/Mark Mean?

✓ What do the Grades Mean?

There are a range of Grades that can be awarded, this includes a Grade based on your Academic Performance in line with the Course Learning Outcomes/Assessments.

The grade you are awarded depends upon the overall mark you received and where this mark falls on the Grading System see the table below:

Letter Grade	Grade Name	Scored Between
HD	High Distinction	85-100
D	Distinction	75-84
C	Credit	65-74
P	Pass	50-64
UP	Ungraded Pass	---
FF	Fail	0-49





Sometimes there are other Grades that have to be awarded temporarily, see the table below:

Letter Grade	Grade Name	What this means
I	Incomplete	There is something outstanding in the course that is required to be completed before your Grade can be released
S	Special Consideration	You may need to complete a supplementary assessment before your Grade can be released
NA	Grade Not Applicable	This course is ungraded meaning there is no Final Grade
"_"	Grade or Score not applicable	This course is ungraded meaning there is no Final Grade
IP	Incomplete Placement	You have not completed a placement, you will need to do so before your Grade can be released
WS	Withdrawn Special Consideration	You have Withdrawn from this course after Census Date

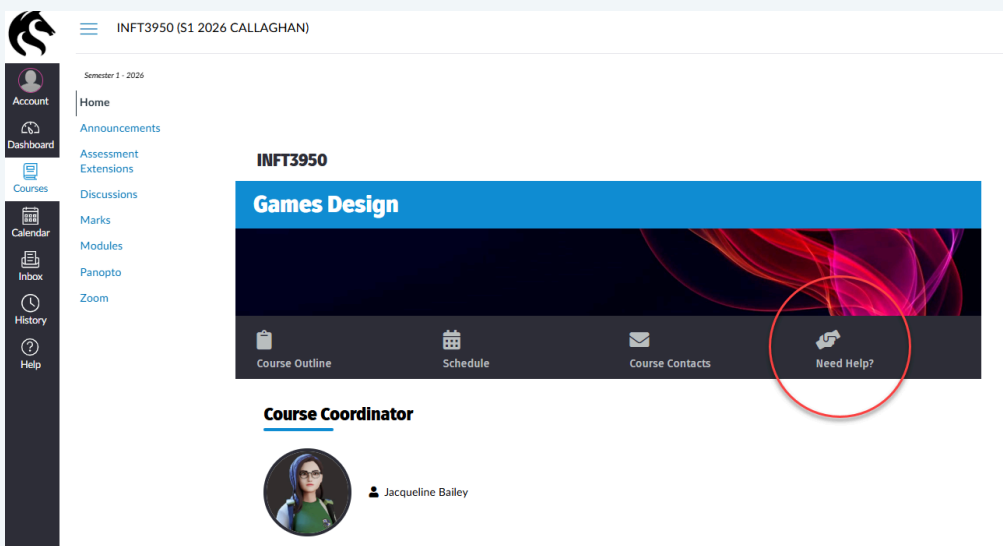


What support services are available to me?

UoN has many support services available to our students please see the following:

Type of Support	Useful For	Link	QR Code
Academic Support	Help with your academic journey and skills development	https://www.newcastle.edu.au/current-students/support/academic	
Personal Support	Student well-being and help	https://www.newcastle.edu.au/current-students/support/personal	
IT Support	Help with all your UoN IT needs	https://www.newcastle.edu.au/current-students/support/it	
Student Support Home Page	Finding help in various areas	https://www.newcastle.edu.au/current-students/support	

There are also support services embedded in your Canvas Site



The screenshot shows the Canvas LMS interface for a course titled 'INFT3950 (S1 2026 CALLAGHAN)'. On the left is a dark sidebar with navigation icons and labels: Account, Dashboard, Courses, Calendar, Inbox, History, and Help. The main content area has a header for 'INFT3950' and a section for 'Games Design'. Below this, there are four buttons: 'Course Outline', 'Schedule', 'Course Contacts', and 'Need Help?'. The 'Need Help?' button is circled in red. Below the buttons, it says 'Course Coordinator' followed by a profile picture and the name 'Jacqueline Bailey'.

Important Contacts List

Below is a list of important contacts that will be useful for you to get started in your degrees:

Name	Role	When to Contact	Best Contact
Prof Florian Breuer	Program Convenor for the Bachelor of Mathematics and Bachelor of Mathematics (advanced)		florian.breuer@newcastle.edu.au
Danielle Barry	Program Advisor for the Bachelor of Mathematics and Bachelor of Mathematics (advanced)	When you need advice on course enrollment or progression	programadvice@newcastle.edu.au
The School Office	Administration		CESE-SCIS-Admin@newcastle.edu.au
IT Support	Technology Support	When you need help UoN related technology and/or systems	https://www.newcastle.edu.au/current-students/support/it

Free Software for students

A number of software packages and programs are available for you to download to your devices for free while you are a student here. These include anti-virus software, as well as programs that may be helpful for your course.

What software can I get?

There are lots of software downloads students can access, here is a short list of some of the software available:

- Office365 (Word, PowerPoint, Excel etc.)
- EndNote
- SPSS
- MATLAB
- JMP
- SMART Notebook
- Zoom

Where can I access this software?

The software can be accessed at: <https://www.newcastle.edu.au/current-students/support/it/software-and-tools>



Bachelor of Mathematics - What courses should I take in my first year?

Entry Points: You start with either MATH1002 or MATH1110, depending on your background.

If you completed the NSW HSC in the past 2 years, achieving band 5 or higher in Maths Advanced, or completed Maths Extension 1 or 2, then you should start with MATH1110.

If you have a background equivalent to the above, you can write the Maths Placement Test (MPT). If you score at least 10/20 in the MPT, then you should start with MATH1110.

In all other cases, start with MATH1002.

Programming Course: Pick one of:

ENGG1003 - Introduction to Engineering Programming with Python

INFT1004 - Introduction to Programming

SENG1110 - Object Oriented Programming

Bachelor of Mathematics (MATH1110 entry)

Semester 1				Semester 2			
MATH1110 Mathematics for Engineering, Science & Technology 1	STAT1100 Data Communication and Modelling	Programming course	Elective	MATH1120 Mathematics for Engineering, Science & Technology 2	MATH1800 Mathematical Modelling	STAT1300 Fundamentals of Statistics	Elective

Bachelor of Mathematics (MATH1002 entry)

Semester 1			Midyear	Semester 2			
MATH1002 Foundational Studies in Mathematics	STAT1100 Data Communication and Modelling	Programming course	MATH1110 Mathematics for Engineering, Science & Technology 1	MATH1120 Mathematics for Engineering, Science & Technology 2	MATH1800 Mathematical Modelling	STAT1300 Fundamentals of Statistics	Elective

Core Courses

Programming Course

Bachelor of Mathematics (Advanced) - What courses should I take in my first year?

Entry Points: You start with either MATH1110 or MATH1120, depending on your background.

If you completed the NSW HSC with Maths Extension 1 or 2, then you should start with MATH1120.

Otherwise, start with MATH1110.

Programming Course: Pick one of:

ENGG1003 - Introduction to Engineering Programming with Python

INFT1004 - Introduction to Programming

SENG1110 - Object Oriented Programming

Bachelor of Mathematics (Advanced) (MATH1110 entry)

Semester 1			
MATH1110 Mathematics for Engineering, Science & Technology 1	STAT1100 Data Communication and Modelling	Programming course	Elective

Semester 2			
MATH1120 Mathematics for Engineering, Science & Technology 2	MATH1510 Discrete Mathematics	MATH1800 Mathematical Modelling	STAT1300 Fundamentals of Statistics

Bachelor of Mathematics (Advanced) (MATH1120 entry)

Semester 1			
MATH1120 Mathematics for Engineering, Science & Technology 2	STAT1100 Data Communication and Modelling	Programming course	Elective

Semester 2			
MATH2310 Calculus of Science and Engineering	MATH1510 Discrete Mathematics	MATH1800 Mathematical Modelling	STAT1300 Fundamentals of Statistics

Core Courses

Programming Course

Bachelor of Mathematics / Bachelor of Science – What courses should I take in my first year?

Entry Points: You start with either MATH1002 or MATH1110, depending on your background.

If you completed the NSW HSC in the past 2 years, achieving band 5 or higher in Maths Advanced, or completed Maths Extension 1 or 2, then you should start with MATH1110.

If you have a background equivalent to the above, you can write the Maths Placement Test (MPT). If you score at least 10/20 in the MPT, then you should start with MATH1110.

In all other cases, start with MATH1002.

Bachelor of Mathematics / Bachelor of Science (MATH1110 entry)

Semester 1				Semester 2			
MATH1110 Mathematics for Engineering, Science & Technology 1	STAT1100 Data Communication and Modelling	SCIE1002 Multidisciplinary Laboratories	Elective	MATH1120 Mathematics for Engineering, Science & Technology 2	MATH1800 Mathematical Modelling	STAT1300 Fundamentals of Statistics	Elective*

Bachelor of Mathematics / Bachelor of Science (MATH1002 entry)

Semester 1			Midyear	Semester 2			
MATH1002 Foundational Studies in Mathematics	STAT1100 Data Communication and Modelling	SCIE1002 Multidisciplinary Laboratories	MATH1110 Mathematics for Engineering, Science & Technology 1	MATH1120 Mathematics for Engineering, Science & Technology 2	MATH1800 Mathematical Modelling	STAT1300 Fundamentals of Statistics	Elective*

*take PHYS1210 in Semester 2 if you're doing a Physics major in the B Science

Core Courses

Programming Course

