

THE GUIDE TO INFORMATION TECHNOLOGY



>wired_

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Our advanced apologies to anyone who would like to be credited, and didn't.
If you feel like you have been misrepresented, please contact us and we will do our best
to fix the problem

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COLOPHON

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INTRODUCTION INTRODUCTION INTRODUCTION

DEAN'S WELCOME

Welcome to IT – an exciting future awaits

On behalf of the Faculty of IT, I would like to welcome you to Monash University and the ever-evolving, eye-opening field of technology.

We rank #1 in Australia and #52 globally for IT (Times Higher Education 2024).

That's because we give you the skills and experience that industries are hungry for, helping you grow from an ambitious student into a highly-employable professional.

In fact, 91% of employers in Australia alone have an IT skills gap (Australian Computing Society, 2023). What's more, technology is widely-applicable and cross-cutting – offering you a future in any sector such as medicine, finance, entertainment, tourism and law.

During your time with us, you'll learn from world-leading innovators across all integral areas such as AI, data science, cybersecurity and software engineering. People living our mission 'IT for social good' who are dedicated to your success.

You'll also have many opportunities through your course, community and Monash more broadly to gain real-world experience, forge connections and discover the big impact technology can make.

Joining WIRED Monash, our official student club, is one avenue to tap into initiatives for upskilling, socialising, networking and fun.

Think industry information nights, BBQs, student balls, hackathons, workshops and more.

As you stand at the precipice of this next chapter, remember that your time at Monash is what you make it. So pursue big ideas. Be guided by curiosity. And let technology help drive your ingenuity.

Once again welcome to IT at Monash – rated 5 stars for graduate employability (Good Universities Guide 2023) and a leader in work-integrated learning for more than three decades.

We're proud to have you here.
All the Best.



Professor Ann Nicholson
Dean, Faculty of Information
Technology
Monash University

PRESIDENT'S WELCOME

As the president of the Faculty of Information Technology Society (WIRED), I am excited to introduce the 2024 Monash IT Guide.

This guide aims to provide clear insights into various structures, practices, and information regarding your academic life that might otherwise be unprovided.

Over your first year, and even in subsequent years at Monash, we aim for this guide to be a place of reference throughout your time at Monash.

First of all, congratulations! Welcome to Monash University, whether it was your first choice or a backup. Monash is a fantastic place to be, with a vibrant club space and engaging academics.

The transition from high school to university is significant, and it can be overwhelming.

This guide, along with WIRED, aims to provide guidance, opportunities, and connections that will last. During your time at Monash, I hope to see you at some WIRED events!

Whether it's to enhance your knowledge about IT, hang out and make friends at our social events, or attend an industry event where you have the chance to network with professionals from Australia's top companies.

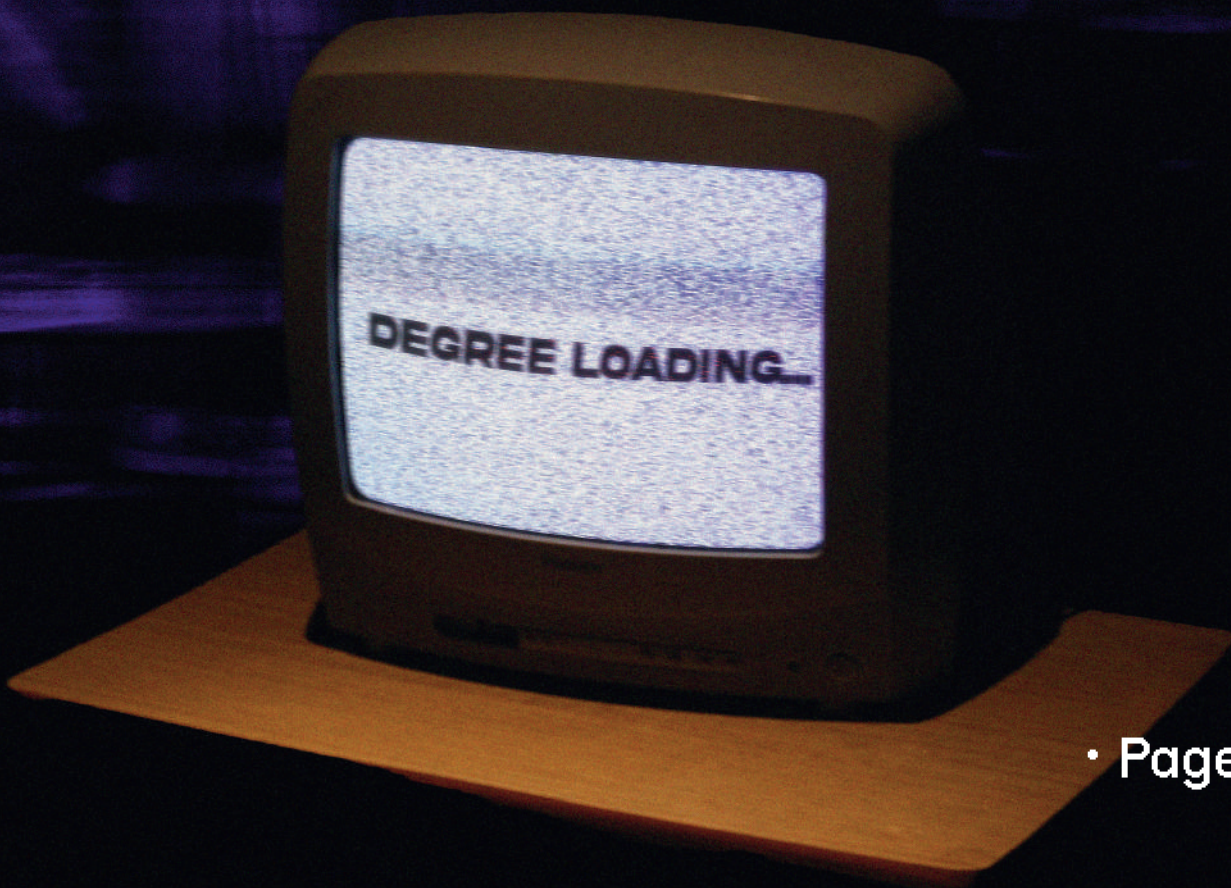
I hope you all find this guide to be engaging, informative, and key to your journey. I look forward to seeing you all around campus soon!

**Zakir Oulad Hadj Tolentino,
WIRED President,
Faculty of IT Society
Monash University**



WIRED Pres - Zakir .OHT,
Sams Tailor - Roshan .M
(pictured right to left)

**THE DEGREE
THE DEGREE
THE DEGREE**



INTRODUCING THE DEGREE

A degree is an academic qualification awarded to a student by a university upon a successful completion of a specific course of study.

Typical examples of a degree include Bachelor of Information Technology (undergraduate), or Master of Cybersecurity (graduate). Amongst many other reasons, it also serves as a tangible proof of your educational achievements, presenting valuable credentials to potential employers.

Monash University offers a wide range of degree options, including several predetermined double degrees (i.e. Bachelor of IT & Commerce).

Let's look at some degrees under the Faculty of IT!

THE BACHELOR OF IT

As you would know, the Information Technology ('IT') industry stands as one of the most rapidly developing sectors in Australia. Due to IT becoming an intrinsic aspect in our everyday lives, there are escalating demands for people equipped with technological skills.

At Monash University, studying the Bachelor of IT means you will be gaining necessary knowledge and skills to use IT effectively — as well as develop and manage its systems — and learn about the application of computer-based technologies and systems to meet societal needs.

You will be exposed to a broad range of disciplines in the field before choosing your area of interest. Below you will find a long and expansive list of majors and minors you may select during your studies:

Majors:

- Business Information Systems
- Cybersecurity
- Games and Immersive Media
- Software Development

Minors:

- 3D Modelling and Animation
- Business Information Systems
- Computer Science
- Cybersecurity
- Data Science
- Games and Immersive Media
- Games Design
- Games Development
- Mobile Apps Development
- Software Development
- Software Engineering
- Web Development

For more information about majors, minors and specialisations, please refer to **Page 13**

THE BACHELOR OF COMPSCI

Short for Computer Science, this Bachelor is offered at Monash University as a separate undergraduate degree as it involves a more theoretical and foundational focus to computing. In this 3-year program, you will delve into the intricacies of computational theory and its mathematical foundations, learning to design algorithms, data structures and practical programming skills to implement solutions.

Due to its 'specialised' nature, there are two specialisations you may choose to focus on:

Advance Computer Science, which involves learning about advanced aspects of computer science such as programming paradigms (i.e. object-oriented programming, parallel computing, etc.) and constructing, manipulating and analysing performance of complex algorithms and data-structures;

Data Science, which involves learning how to capture, manage and use huge volumes of data generated by businesses, organisations and science. It spans over several technical areas – such as programming and databases through modelling, visualisation and analysis – and also includes legal and ethical issues.

Both Data Science and Advanced Computer Science ('ACS') specialisations offer valuable skills for the Computer Science industry!

The digital world is ever-evolving, marked by the advancements of artificial intelligence, machine learning, etcetera, and the growing nature of the technology have significantly enhanced the speed and number of data being collected. Due to this, there is persistent demand for people skilled and knowledgeable in Data Science. This specialisation is highly valued in the digital industry as, for example, being able to transform data into information helps make important strategic decisions.

Likewise, skills and knowledge gained under the ACS specialisation is equally as remarkable. Although more challenging due to its focus on the technical aspects of programming, understanding algorithms, and etcetera, ACS will lead you to a more flexible path in your career because the skills and knowledge nurtured in this specialisation can be applied in programming, software and the wider digital landscape.

Furthermore, when selecting your specialisations, you may also choose other majors and minors — for example, Game Development — and enhance your learning experience.

COMPSCI VS SOFTWARE ENGINEERING

Bachelor of Software Engineering ('Software Eng') is managed by the Faculty of Engineering, rather than the Faculty of IT. The degree involves delving into engineering principles to systematically analyse, develop and improve software (like iOS, Android, Photoshop etc.) and digital systems, and ensure they run effectively, safely and securely.

Software Eng shares many similarities with CompSci, and can actually be somewhat seen as an extension. Many of the units listed under Software Eng, such as MAT1830 'Discrete mathematics for computer science', overlap with CompSci. In fact, almost all of the units required for Software Eng are run and managed by the Faculty of IT.

Where the two degrees differ are the foundational units you must study for Software Eng; you must complete engineering fundamentals and specialised units (i.e. Engineering methods, design, smart systems, etc.)

Hence, You **DO NOT** have to study Software Eng to pursue a career as a software engineer. CompSci students can learn almost all the knowledge and skills covered in Software Eng programs. In fact, CompSci graduates and Software Eng graduates often end up working in very similar positions.

DOUBLE DEGREES

Monash University offers one of the most extensive selections of double degrees in Australia, featuring over 140 unique combinations across all major study fields. This program allows you to study two degrees simultaneously and graduate with two separate qualifications.

Here are some predetermined double degrees combinations offered at Monash:

with the **BACHELOR OF IT:**

- Bachelor of Arts
- Bachelor of Business
- Bachelor of Commerce
- Bachelor of Criminology
- Bachelor of Design
- Bachelor of Engineering (Honours) *
- Bachelor of Fine Art
- Bachelor of Global Studies
- Bachelor of Laws (Honours) *
- Bachelor of Science

For more information about these Bachelor of IT double degrees, please refer to <https://www.monash.edu/study/courses/find-a-course/information-technology-c2000#double-degree-4>

with the **BACHELOR OF COMPSCI:**

- Bachelor of Commerce
- Bachelor of Laws (Honours) *
- Bachelor of Engineering (Honours) *
- Bachelor of Science
- Bachelor of Business and Commerce

For more information about these Bachelor of CS double degrees, please refer to <https://www.monash.edu/study/courses/find-a-course/computer-science-c2001#double-degree-4>

* for more about Honours, please refer to **Page 11**.

SHOULD YOU DO A DOUBLE DEGREE?

There are many advantages and disadvantages to studying a double degree program. If you find yourself contemplating between two degrees, or are interested in combining your single degree with IT, CompSci or etc., here are some things to consider:

PROS

- **Shorter length:** Studying a double degree allows you to finish two years earlier compared to pursuing each consecutively.
- **Diversified Skill-set:** Studying two different subjects means you gain two (or more) diverse skills and knowledge. This not only makes you more unique and employable, but also provides you with the flexibility to change or adapt according to your interests, strengths and weaknesses.
- **Dual Opportunities:** If you are uncertain about what to do in the future, a double degree is beneficial because you get to experience both fields. You will have the opportunity to get involved in twice as many projects and initiatives at university, and meet many different people.
- **A break from a subject:** Focusing on one particular area of study can sometimes be very exhausting and draining. Burnout, or even boredom, is a very common experience students face. Studying a double degree can actually be refreshing because you are learning two different subjects.
- **Developing industry:** It is obvious that technology is one of the fastest developing industries in the world, playing an intrinsic role in our everyday lives. Even if you pursue other professions like Law, Commerce, etc., having knowledge in CompSci / IT can complement your prowess as an individual and open up hidden pathways like, for example, Cybersecurity Lawyer.

CONS

- **Longer length:** Whilst it would be shorter than if you do two degrees consecutively, you do graduate later than your peers who do a single degree. A double degree with IT / CompSci takes around 4 to 5 years (depending on combination) with a full-time load.
- **Costly:** It is undeniable that since you are studying an extra degree, it will be more costly than if you studied one. Due to the extra units you

must complete, financial burdens should be considered.

- **Limited Focus:** While a double degree provides a broader skill-set, it may lack the depth of expertise that a single degree offers. Specifically, since you are dividing your attention between two degrees, you may not have as much time to focus on an area, compared to a student who does a single degree.
- **Importance of Experience:** Experience and familiarity is valued not just in the IT industry but also every field. Studying a double degree does not necessarily mean you are more employable than other single degree students. Demonstrating that you are capable in the workplace indicates to employers that you “know what you are doing”.

HOW DO I KNOW A DOUBLE DEGREE IS RIGHT FOR ME?

Contrary to expectations, a double degree is not an indication of your abilities. Studying a single degree (IT, CompSci, or otherwise) does not mean you are less skilled or less intelligent than a student who does a dual degree. A double degree is simply an opportunity for students to explore their interests and, amongst many other reasons, provide them some flexibility.

A double degree is an ideal choice for individuals seeking to develop a more rounded skill set, whether for personal enjoyment, academic or professional reasons. A double degree is most valuable when each degree complements the other. For example, a science degree with a specialisation in mathematics paired with a computer science degree can be particularly valuable and appealing to prospective employers. If you are keen on having strong foundations in both theory and practicality, a double degree can be a way to utilise that interest.

If you are struggling to choose between two degrees, enrolling in a double degree program allows you to experience both fields. It is worth noting, as mentioned elsewhere in this guide, that changing courses is a common experience. If you start with a single degree but are considering switching to a double degree, it's beneficial to use electives from the single degree that align with the interest areas of the proposed double degree. If these electives prove engaging and promising, you can later enrol in a double degree program and credit the electives towards the double degree. This means that enrolling in a double degree later on does not result in lost opportunities. At worst, you've simply enjoyed some interesting electives!

HONOURS (& MASTER THESIS)

Honours typically refers to a one-year program undertaken after completing a bachelor's degree. It involves a more in-depth study and often includes a thesis or a research project. Monash University offers a number of Honours programs across different disciplines which includes:

Undergraduate

Bachelor of Computer Science (Honours)

Bachelor of Computer Science Advanced (Honours) *

Bachelor of Science (Honours) in Computational Science

You need to apply to the **Faculty of Science** (<https://www.monash.edu/science/current-students/science-honours>) to enrol in this Honours course.

Bachelor of Software Engineering (Honours) *

Bachelor of Engineering is automatically under the Honours program

Postgraduate

Master of Artificial Intelligence

Master of Business Information Systems

Master of Data Science

Master of Information Technology

Master of Cybersecurity

Please note that to be eligible for the postgraduate research stream, students must fulfil a number of requirements. For more information, please refer to <https://www.monash.edu/it/current-students/enrolment/honours-and-minor-thesis>

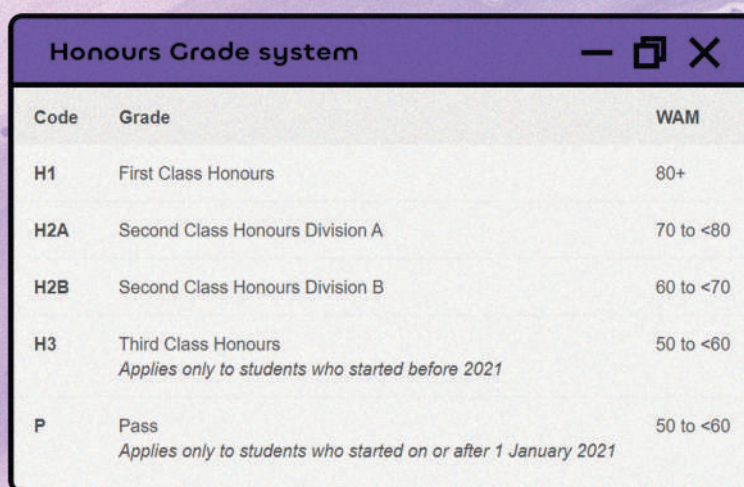
As you would notice, there is a difference between Bachelor of CompSci (Honours) and Bachelor of CompSci Advanced (Honours).

For the Bachelor of CompSci (Honours), you **MUST** complete the standard undergraduate CompSci course before you can apply for an Honours program. To satisfy Monash University's minimum entry requirements, you must successfully complete a Bachelor of CompSci with an "average of at least 70% overall or equivalent qualifications and experience approved by the faculty". Entry can be competitive, hence admission is not guaranteed; the Faculty will consider not just your academic records but also your candidate statement.

Whereas for the Bachelor of CompSci Advanced (Honours), you can be admitted via your ATAR, through course transfer (where your study credits will be used accordingly) or other similar ways. **To put it more simply, consider this degree a completely different one from that of a standard Bachelor of CompSci. It is akin to the Bachelor of Engineering (Honours) (thereby extending to Software Engineering (Honours)) and Bachelor of Laws (Honours).**

HONOURS GRADING SYSTEM (OVERALL)

Upon completion of an Honours program, students receive an overall Honours mark and grade.



Code	Grade	WAM
H1	First Class Honours	80+
H2A	Second Class Honours Division A	70 to <80
H2B	Second Class Honours Division B	60 to <70
H3	Third Class Honours <i>Applies only to students who started before 2021</i>	50 to <60
P	Pass <i>Applies only to students who started on or after 1 January 2021</i>	50 to <60

SHOULD YOU DO AN HONOURS PROGRAM?

Honours is quite research-oriented and involves a more academic approach to a subject than a standard degree program. High-achieving students who seek to further develop their knowledge and understanding will undertake research methodology training and carry out independent research under the guidance of a supervisor.

If you are a standard CompSci student, you may apply to complete the program after you finish your bachelor's degree if you are interested in research and enhancing your knowledge. **OR** you may want to work immediately after your degree if research is not for you.

However, you can always do the one-year Honours program later on if you want to further your studies or would like to do research. **So you can finish the standard CompSci degree, work for a few months or year, then apply for the Honours program.**

MAJORS, MINORS & SPECIALISATIONS

You will come across these words quite often throughout your degree. So what are they?

MAJOR

Majors refer to a study in a single discipline (eg. IT) where there is a specially defined set of units — around 48 credit points, with no more than 12 credit points at level 1 and no less than 18 points at level 3 — listed under each area of study (eg. Cybersecurity).

Please refer to **Pages 5 and 6** for the full list. For more information, please refer to <https://handbook.monash.edu/browse/By%20Faculty/FacultyofInformationTechnology>

MINORS

A minor consists of 4 units of study (24 credit points). You may pick a minor to broaden your education alongside your major to significantly enhance your knowledge in another area of study. The Faculty of IT offers a wide array of minors.

Please refer to **Pages 5 and 6** for the full list. For more information, please refer to <https://handbook.monash.edu/browse/By%20Faculty/FacultyofInformationTechnology>

SPECIALISATIONS

A specialisation refers to a specific set of units that caters to a particular stream of learning. For the Faculty of IT, the Bachelor of Computer Science offers two specialisations you may choose from: Advanced Computer Science and Data Science.

Please refer to **Pages 5 and 6** for the full list. For more information, please refer to <https://handbook.monash.edu/browse/By%20Faculty/FacultyofInformationTechnology>

If you find yourself conflicted when it comes to choosing a major, minor or specialisation, please refer to **Pages 5 and 6**.



CREDITING UNITS

If you have experience in a related field or similar study to the course you wish to enrol in, you should consider applying for credit towards your Monash course. Crediting refers to the recognition of previous study or learning that can be counted towards a qualification. Monash can assess a wide range of learning types for equivalency to Monash study which includes **formal learning taken through a structured program and work-related, social, family and leisure activities and experiences**. Doing this can reduce the number of units required to complete your course of study.

Commencing and current students

If you are Monash University's current student, you may visit this <https://online-credits.monash.edu/login> to apply for credit transfer for previous study, Recognition of Prior Learning (RPL) or etc.

Ideally, you should apply as early as possible, well before starting your course because it gives you time to change your enrollment if you need to. Applying too late might mean you may not be able to take advantage of credit awarded towards your course.

If you have already enrolled, you can change your enrollment once you have been given credit. **However, you can only change enrollment before the cut-off dates for adding or withdrawing units (<https://www.monash.edu/students/admin/enrolments/change/add-or-discontinue-units>).**

Future students

How you are assessed for credit depends on whether you are applying for your course through VTAC or directly to Monash.

For VTAC application, you need to apply for the course you want via VTAC and wait for an offer. To accept your course offer, you need to enrol in first year units before you can change accordingly after applying for credits.

For direct Monash application, you can indicate that you want to be considered for credit in your application. **Ensure that you upload supporting documents as evidence of your studies.** If you would like credit for work experience, you can apply for a credit assessment once you've received and accepted your course offer.

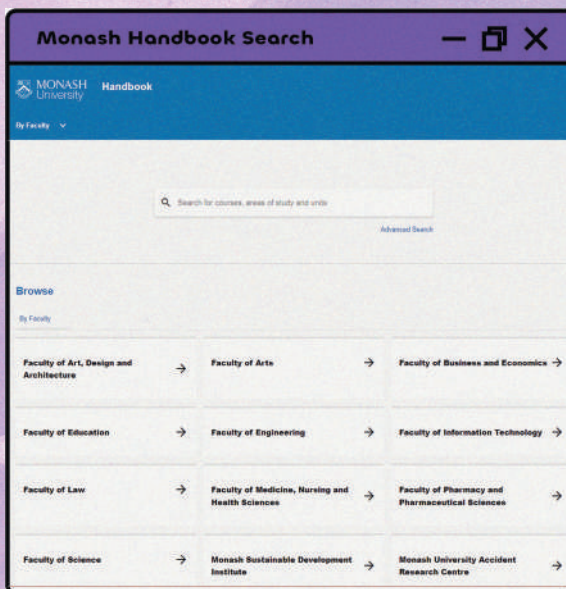
For more information on crediting units, please visit this <https://www.monash.edu/admissions/credit>.

MONASH HANDBOOK

HANDBOOK

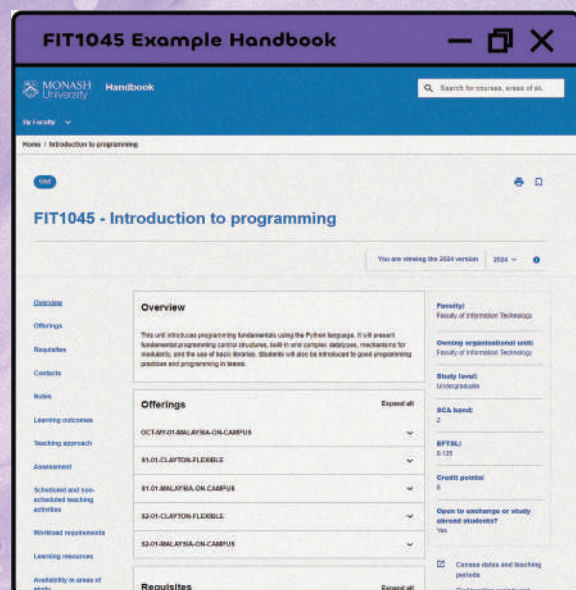
Ever wonder how you'll find all your relevant information to set yourself for your first year at Monash University? Meet the Monash Handbook.

The Monash Handbook (<https://handbook.monash.edu/>) is a reference guide that covers all the essential information on various units offered by Monash. It provides details on the course structure, assessment types, prerequisites and other additional information to assist you in identifying and selecting the most appropriate units. Utilise the handbook to explore the units offered throughout the year and start to organise your roadmap to success in your degree!



(This image pictured left depicts the Monash Handbook search page, which enables students to search for individual unit handbooks, areas of study, or courses. Additionally, it provides options for students to filter their searches by faculty.)

(The image displayed on the right showcases the handbook page for unit FIT1045. A standard handbook page for a unit includes essential information such as an overview, unit offerings, enrolment rules and prerequisites, contact details, assessment/workload summaries, and other pertinent details.)



UNIT CODES

Each unit has a 3 letter prefix, followed by 4 unique combination of numbers (eg. FIT1045: Introduction to Programming). The prefix helps us understand what faculty the unit is under. You may encounter these common faculty abbreviations codes below:

- **FIT** - Faculty of IT
- **MAT** - Math unit within faculty of IT

The numbers after the prefix acts as a unique identifier. The very first number helps students identify the unit level. First-year targeted units are represented with a number 1 for the start of the unit code (FIT1008) whilst the second year and third year units are represented with the number 2 and 3 respectively (FIT2081 or FIT3171).

FIRST-YEAR UNITS

“Level-one” or “first-year units” are designed to help students gain confidence and understand the expectations and the university system within the first year. Credit points for these units are slightly reduced (0.5 credit points) as these units are often introductory and foundation units that will provide fundamental knowledge for the years ahead. During the course of your degree, you have the opportunity to fulfil 48 first year credit points or a maximum of 60 credit points of first year.

Overview of common IT first-year units:

FIT1045/FIT1053: Introduction to Programming

- Fundamental programming language in Python
- You will be supplied with pre-workshop, applied, workshop and post-workshop activities every week on the Ed Discussion platform
- You will learn everything from variables, control flows (i.e conditional statements), functions, data structures.
- Requires no previous coding knowledge but will be a bonus if you do have some!

FIT1047: Introduction to computer system and network security

- This unit will introduce how computers understand binary code (zeros and ones) from digital circuits using logic gates
- Introducing low-level programming language in MARIE (Machine Architecture that is Really Intuitive and Easy) to understand how high-level code is translated into machine code
- Gain an insight on network protocols, communication technology and security measures to protect information transmission over networks

FIT1049: IT professional practice

- Develop skills related to workplace communication, ethics, teamwork and project management
- Building bridges between theoretical knowledge gained in academic settings and applying them into real-world scenario

MAT1841: Continuous mathematics for Computer Science

- Simple class structure of 3 x 1 hr lectures per week paired with an applied class to attempt questions with peers and TA's
- Develop strong mathematical writing skills
- Students who have completed Specialist, Further or Methods will see lots of reappearing content

MAT1830: Discrete mathematics for Computer Science

- Completely new branch of mathematics explored every 2-3 weeks to keep you engaged
- Brief introduction to how maths is used in computer science

COURSE MAP

Your course map is a roadmap of the journey you will take in the lead up of your completion of your degree. You have the flexibility to customise your academic experience by determining the unit load for each academic year (either part-time or full-time). Additionally, single-degree students may select elective units from various faculties to enhance their learning experience.

To complete your degree, you will need to complete a total of:

- **Single degree:** 24 units or 144 credit points*
- **Double degree:** 28 units or 192 credit points*

*Each unit is worth 6 credit points, unless specified.

To understand your course map, the shaded units signify mandatory courses for your chosen major, while unshaded units are considered "core" units which are the general requirements for all students within a particular faculty.

[Refer to [MonPlan](#) to help create your personalised course map – under 'Surviving University']

FEELING INDECISIVE?

It's completely normal in your initial year to be unsure about your preferred major or minor. Take your time and engage with the first-year core units. Since many of these units are core requirements, you'll have the flexibility to transition within your major if you uncover your true interests later on.



**PATHWAYS
PATHWAYS
PATHWAYS**

POTENTIAL CAREERS

The IT industry is expansive and still ever-developing. There are so many prospective careers you can do with your undergraduate degree(s) such as becoming a Software Engineer / Developer, IT Consultant, etc.

However, there may be some role that you may not have heard of before, or considered. Below is a (non-exhaustive) list of unique career options available with your IT / CompSci / Software Eng degrees:

BACHELOR OF IT

Business Information Systems

- System / Business Analyst
- IT Manager
- Project Manager
- Information Manager
- Archivist / Librarian
- Data Analytics * (eg. for students with double degree in Bachelor of Business or Commerce and IT)

Cybersecurity

- Cybersecurity Analyst / Specialist / Consultant
- Cybersecurity Architect
- Cryptoanalyst
- Information Security Officer
- Forensic Computer Scientist
- Penetration Tester
- IT Support / Network Technicians
- Cybersecurity Lawyer * (eg. for students with double degree in Bachelor of Law and IT / CompSci)
- Intelligence Analyst * (eg. for students with double degree in Bachelor of Criminology / Arts and IT / CompSci)

Games and Immersive Media

- Graphic Designer
- Multimedia Designer
- Games Developer
- Web/UX Designer
- Interaction Designer

- Animator
- Industrial Designer
- Interior Designer
- Visual Merchandiser
- Experience Designer
- Augmented Reality / Virtual Reality (AR / VR) Developer

* Many of these can be achieved with the sole Bachelor of IT or be paired with Bachelor of Fine Art or Design.

Software Development

- Mobile Developer
- Full Stack Developer
- UI / UX Developer
- DevOps Engineer
- Software Engineer / Developer
- Web Developer

BACHELOR OF COMPSCI

Advanced Computer Science

- Database Administrator
- Computer Programmer
- Software Architect

* Many Bachelor of IT jobs listed above can be similarly achieved via Computer Science degree.

Data Science

- Data Scientist
- Data Architect
- Data Engineer
- Data Manager



INDUSTRY VS ACADEMIC RESEARCH

Over the summer of 2023, I had the unique opportunity of doing a Machine Learning Engineering internship at Canva. The project involved researching AI safety techniques for AI image generation, and unlike an ordinary project, my objective was to present my findings by the end of the internship. My project was more akin to industrial research and development (R&D), as there was no signposting for my project, only the discoveries I made. **Industry research roles fall under titles like Applied Scientist, Machine Learning Engineer, or Research Engineer.**

Industry research deviates from research in Academia, as you'll ultimately be researching techniques and results that contribute towards a product; in the case of Canva, an online design platform, it would be relating to image generation, or more generally; to design. Adobe is in a similar space, where they employ research engineers and applied scientists, who work on applications such as Adobe Firefly (a generative AI application relating to photo editing and generation).

In general terms, an Applied Scientist works on researching, experimenting, and presenting proof of concept ideas, and if given the go-ahead, a Machine Learning Engineer will then work to productionise that idea. A Research engineer will do some amount of experimental and production work. Openings for these roles are scarce, with very few openings for undergraduates as they look to hire Masters by Research or PhD students who have either a catalogue of published work or expertise on a topic that won't be found in any undergraduate curriculum. **An honours year is a great start for these roles, as you'll be synthesising a piece on a topic you'd have researched and experimented with.**

In academia, you have more control of the research topic, while the driving force of industrial R&D is that somewhere down the line, the decision to invest in research yields a profit. There is still an aspect of freedom in what you're able to research, but with the expectation that you produce novel results that can be turned into a product. Some other examples of industrial research include Google's DeepMind, which has developed some of its large-scale AI but has considerable research output, and OpenAI, whose premise involves rapid deployment of discoveries across text, image, audio, and so on.

My advice to new students

Compared to high school, your actions have much more weight and are more noticeable. If you want to make the most of university, attend events outside of classes, and don't focus exclusively on your grades, you gain little if you spend all your time on it. Student clubs and teams are the highlight of university, you can learn much from everyone around you. I got introduced to my former club by talking to the former president about resumes, and the effect of having a more experienced community to look over your shoulders and guide you is immense, so make many friends. When it comes to opportunities, whether they're internships, graduate roles, or research experiences, be proactive, if you're hesitant about applying somewhere, just do it, and do it early, and work alongside your peers to help each other with these opportunities. Even if you don't feel you'd get selected for an opportunity, the practice and experience gained from applying are invaluable and help for future applications. Additionally, use university courses not to make yourself more employable, but to study courses that are intellectually stimulating or interesting for you; you have a lot of time outside of class to develop yourself as a candidate. But most importantly, don't rush university, you'll have time to learn more about what you want to do with the countless opportunities presented.



Sai

Former MAC President

Currently Machine Learning Engineer at Canva

Website - <https://www.saikumarmk.com/>

GUIDE FOR INTERNATIONAL STUDENTS: NAVIGATING YOUR AUSTRALIAN ACADEMIC JOURNEY ABROAD LIKE A PRO

PRO TIP: DO NOT GET DEPORTED. KNOW YOUR VISA CONDITIONS.

“Read your Visa Grant Details on your ImmiAccount at www.homeaffairs.gov.au. There is a suspicious amount of international first years that I have never seen again. No correlation of course.”

As an international student in Australia, there are few differences between yourself and domestic students, however, there are some aspects of your university life that you have to take into special consideration. This is because, unlike domestic students, you need to have a valid visa to stay in Australia and keep studying for your degree. Starting your degree and coming over to Australia for the first time at the same time can be overwhelming, but here are some tips to keep on top of working and studying in Australia as an international student.

WORKING IN AUSTRALIA

Apply for a Tax File Number (TFN):

“My friend randomly told me to apply for it in my first week here and man am I so grateful that he did. When I got a job 6 months later I was completely blindsided when they asked for my TFN.”

If you are planning to get a job in Australia in the near future, apply for a Tax File Number (TFN) as soon as possible. It is a unique identifier issued by the Australian Taxation Office (ATO) that ensures you are taxed correctly on your income. If you do not have one, you will be taxed at the maximum rate, even if you are earning too little to pay tax normally. Apply for one ASAP when you have a proper mailing address. It is an online process on the ATO website which should take pretty quickly. You do not want to wait until you are filling in your job details and get taxed too much on your first paycheck.

Working Hours:

“Why is everything so expensive? - Every international student ever”

On the topic of working, international students do have limited working rights in Australia. Working casually or part-time can be a great way to gain experience, develop your resume, and get some spending money in this expensive country. While you cannot start working until your course starts, currently, international students are allowed to work 48 hours per fortnight* while your course is in session. When school is not in session, there are no restrictions.

*The 48 hours a fortnight work limit does not apply if you hold a student visa granted in relation to a master's degree by research or doctoral degree and you have commenced the master's degree by research or doctoral degree.

Internships / Graduate Programs:

"I was chatting with this company rep for a good 20 min about their internship program and I swear they loved me. Until they asked about my residency status. Then they kinda lost interest. I found out why later."

When searching for internships or graduate programs towards the middle or end of your degree, keep in mind that some programs will require Australian residency/citizenship. However, each program is different even within the same company. An internship might have a residency restriction but the same company's graduate program might not. Do careful research when looking for these programs as some will simply reject your application due to your residency status.

STUDYING IN AUSTRALIA:

Course Load:

"When asking for advice about managing my course load, I was told that underloading is a good option. I would if it wouldn't lead to me getting deported. Was nice advice though."

International students need to be studying a full-time load as part of their visa conditions. There is no underloading here so make sure you keep up with the workload. Spend some time carefully mapping out your course and figuring out what classes you need or want to take. It is highly recommended to discuss your course map with a course advisor. Be very careful as some units only run during semester one or two which might lead to you not being able to finish your degree on time.

Industry Based Learning (IBL):

“I bought plane tickets to go back home in the summer. Thanks to IBL, I will need to take a summer unit instead to graduate on time. I still took the plane back home. Thankfully that unit had no in-person assignments.”

Studying in the School of IT means you can be eligible for Monash’s IBL placement program, where you will be treated like a fresh graduate employee at a host industry partner company for 23 weeks. However, you will **HAVE** to take a summer/winter unit or overload to do so as an international student. This is because the IBL program replaces your classes for a semester (4 units) but only counts as 3 units worth of credits. This is the only method to achieve a full-time course load to meet your visa requirements. If you want to go on an IBL placement (and get some valuable industry experience), prepare to slot a unit during one of your breaks. IBL has NO visa implications as it is a scholarship-based internship NOT paid employment (which also means the money is tax-free).



Ziki Zheng
Vice-President of WIRED
Bachelor of Computer Science

A laptop is positioned in the center of the page, resting on a dark surface. The laptop is illuminated from below by a blue and purple light, creating a glowing effect. The text "GAIN EXPERIENCE" is repeated three times in a bold, white, sans-serif font, stacked vertically and centered over the laptop. The background is a dark, gradient blue and purple.

GAIN EXPERIENCE
GAIN EXPERIENCE
GAIN EXPERIENCE

A standard degree (or double degree) contains crucial units that aim to equip students with as much knowledge and technical skills as possible. Yet, soft skills such as communication, organisation, initiative, adaptability, etc. are highly valued by employers, and one of the most valuable ways of learning is **experience**.

One of the great ways to gain experience is through the IBL (Industry-Based Learning) that is offered within the Faculty of IT. This program has helped students unpack the theoretical knowledge learnt in classrooms and build their knowledge in a professional industry. Participants accepted into Monash's IBL program will immerse themselves in a new environment, gain real-world experience, develop new skills and build a professional network.

As such, IBL placements are highly valued and sought after by many students. Naturally, due to the high demand of students wanting to apply to this program, it can become quite a competitive and challenging process to apply. However, if prepared well, students can take advantage of this program!

Here is a guide to IBL by Madison Geeson who completed their IBL at Ernst & Young in 2022 Semester 1. They graduated in 2023 with a Bachelor of Computer Science / Science and is currently a graduate software developer at Optiver.

IBL (INDUSTRY BASED LEARNING)

WHAT IS IBL?

IBL, or Industry Based Learning (<https://www.monash.edu/it/industry-based-learning>), is the Faculty of IT's internship program where students undergo 22-23 week placements with Monash's partners in the IT industry. During this period you work full-time alongside regular employees of the company you are placed with, and receive a scholarship stipend and credit towards your degree. The program is open to any single- and most double-degree undergraduate students within the Faculty of IT, including Bachelor of Engineering (Honours) - Software Engineering.

It's important to note that because of how the IBL program is structured and the diversity of partner companies. Whilst students are not guaranteed technical experience in their desired field through the placement, the focus of the placement is shifted towards gaining insight into working in the IT industry and developing professional skills

ELIGIBILITY & PREREQUISITES

As stated, you will be eligible to apply if you are an undergraduate student (domestic or international) enrolled in the following degrees:

DEGREE	WHEN TO APPLY
Bachelor of Information Technology	End of first year
Bachelor of Computer Science	End of first year
Bachelor of Computer Science (Advanced)	End of first year
Bachelor of Engineering (Honours) - Software Engineering	End of second year
Double degrees with IT / CompSci	End of second year

Whilst on placements, you will be enrolled in one of the IBL units: FIT2032, FIT3045 or FIT4042. Please refer to '**3. Course Map Consultation**' for further details you should be aware of.

It is important that you fulfil these units' prerequisites, **as well** as several criterias by the time you reach your admission interviews and placements.

UNIT PREREQUISITES

- Students in all undergraduate degrees of the Faculty of IT;
- with at least 72 credit points (including 60 FIT or MAT credit points); and
- have been accepted into the Industry-Based Learning program.

They must also have completed:

- one of FIT1045, FIT1053, FIT1048, FIT1051 or ENG1003.

For Bachelor of CompSci (C2001) and Bachelor of IT (C2000) students, there are additional prerequisite units: FIT1049 or equivalent.

CRITERIAS

You must satisfy several criterias by the time you pass the admission interviews and reach your placement:

- **Have at least 72 credit points of study** towards an IT bachelor's degree, including at least 60 FIT or MAT points (as above)
 - Complete **FIT2108 Industry-based Learning seminar** (only offered in semester one).
 - Have a **rounded WAM of at least 65 immediately before the selection interviews, placement interviews and the placement itself.**

- **Be studying full-time for the two semesters before a placement** (at least three units per semester).
 - **Have a free semester in your course map for the placement.**
 - **Have completed at least three semesters of your degree** (four for double degrees).

Please note: Your placement cannot be done in Semester two IF it or the succeeding summer semester is your final semester. Extending your degree to circumvent this condition is not allowed! **This criterion does not apply to students entering Monash in semester one via Monash College.**

For more information, please refer to https://www.monash.edu/it/industry-based-learning/key-student-information#tabs__2999317-02

IMPORTANT DATES

Key dates for IBL applications vary and change every year. Applications for Semester 2 2025 and Semester 1 2026 placements will potentially be opened in August 2024. For more information, please visit this website.

HOW TO GET IN?: THE PROCESS

1. Apply for the IBL program

You need to apply for the IBL program as early as August in your first year, depending on your course and whether you started mid-year. Be aware of this early date for some courses - particularly three year FIT single degrees.

The application itself involves providing some background information about yourself - your employment history, units studied, interests and extracurriculars - as well as a two minute video detailing your reasons for applying to the IBL program.

For your application, it's important to think about all possible experiences you can talk about - even those you might not think of as typically related to the industry. For example, part time work, private tutoring, participation in a club or society, hackathons, even your GitHub link if you've completed any personal projects.

When describing your reasons for undertaking a placement, it's important to reflect on and reference the goals of the program, which are the development of soft skills and exposure to the broader IT industry. Consequently, emphasising these aspects in your application is important. Given these goals, if you are looking for more specific exposure to a particular field a self-sourced internship may be more suitable.

2. Entry interview

The entry interview is a single 10 minute interview with an industry representative from one of the IBL partner companies. It intends to assess whether students are ready for a placement at any partner company (not necessarily the company you interview with).

Don't worry about lacking any formal industry experience – that isn't expected for an IBL placement – but think about how you can use your previous experiences to demonstrate communication, professionalism, enthusiasm and leadership.

3. Course map consultation

The next step is a quick consultation with a Monash staff member to determine which semester your placement should fit in. To ensure you are able to do this, it's important to plan to have a semester available for IBL from the start of your degree. **Also remember that IBL is only worth 18 credit points (equivalent to three units), and you cannot take a unit alongside IBL, so you must either complete a unit in a summer semester or overload.** Keep in mind many units are only offered in semester 1 or 2 and not both.

4. Attend IBL seminar series

In the nearest semester 1 preceding your placement, you'll attend a weekly IBL seminar presented by an industry partner each week. These seminars are simply pass/fail for attendance and writing a reflection, and are intended to give students valuable information about IBL placements and the IT industry as a whole. Current IBL students will often also present at these seminars.

5. Placement interviews

The final stage of the IBL process is quick-fire placement interviews with partner companies. Companies select which students to interview based on degree, major, or specialisation, so students tend to have about 15-25 interviews to attend. These interviews are 10 minutes each and take place in-person over a few days or online over a couple of weeks depending on the circumstances. These interviews are focused on your soft skills, similar to the entry interview, as well as figuring out if your background and interests align with the company. Note that companies aren't permitted to ask technical or coding questions – although they can and sometimes do ask about your familiarity with certain technologies or languages.

It's important to try your best in all interviews – even for companies you are less interested in – as your likelihood to be placed depends on your rating across all placement interviews. However, you can order your interviews tactically with your more desired companies later so that you'll be more practised for them.

Preparation for these interviews should be quite similar to the entry interviews; thinking about your experiences and how you'd respond to common behavioural questions. In addition, you should read about each company before your interviews – both through materials provided by the IBL team as well as their company websites and public information – to see why you might be a good fit and what parts of the company interest you. Also, at the end of most interviews you'll be asked if you have any questions – it tends to reflect well and demonstrate your interest if you prepare some beforehand.

INDUSTRY PARTNERS

Monash University partnered with over 20 companies, some includes:

- Deloitte
- Commonwealth Bank
- NAB
- Australia Post
- Jetstar
- etc.



Key student information - Information Technology (monash.edu) - <https://www.monash.edu/it/industry-based-learning/key-student-information>

COMMON QUESTIONS

Q1: Will I be able to work with the IBL company after I graduate?

Although each company may have different procedures and processes for the next phase of graduate programs, some outstanding students with great performance during this program may be offered a position in the company after they graduate.

Q2: How can I prepare for the interview?

A good way to prepare for these types of interviews is to learn and practice using the STAR framework, using lists of common behavioural questions you can find online.

The framework gives you a simple format to highlight your skills and focus your answer while telling a story. First, you describe the **Situation** – giving the necessary details of the example and setting the scene. Next you describe your **Task** and responsibilities in that situation. Then you explain exactly how you addressed the task through your **Action**. Finally, you share the **Result** you achieved through your actions.

Q3: Can I travel overseas if I get a work-from-home IBL position?

Students placed in the IBL program are restricted to work in Melbourne for the full duration of their placement session – even if they are given the flexibility to work from home (WFH). This mainly stems from many security reasons and agreements between our IBL partners.

Q4: How will I be assessed for the IBL units?

IBL assessments are split into two sections.

The first half weight will be assessed by Monash which includes:

- Goals, logs and reflections
- Report writing
- CV
- Final oral presentation

The remaining half will be assessed by your IBL Partner Company supervisor which includes:

- Mid-placement evaluation
- End-of-placement evaluation

Q5: What if I don't get into IBL?

IBL may not be suitable for everyone especially when the IBL program has specific conditions, including application timelines, application stages, and the pressure to overload units to fulfil the overall requirements.

Students may opt for a different path especially when there are many alternatives outside of Monash's IBL program where you will still be able to gain valuable experience.

If entry into the IBL program proves challenging or if you're inclined towards acquiring specific tech skills elsewhere, be sure to explore opportunities beyond Monash. This approach allows you to stay on track with your regular course map while acquiring well-rounded knowledge to better prepare for the professional industry after you graduate from your course.

IBL EXPERIENCE: EXPERT ADVICE FOR WHEN YOU'RE ON PLACEMENT

Have an open mind, and perform the best you can whether your IBL placement is in your dream field or not. Even if you don't think your work sounds that interesting, by taking initiative (and after performing well in your original placement domain) you can often network your way into work you are passionate about and have unique, meaningful experiences. This also gives you great anecdotes to use in future behavioural interviews!

I personally was placed in a very non-technical team within EY, where our work was focused around mostly PowerPoints, Excel, and low-code work. By reaching out to many other team leads in more development-centric teams, I was able to spend the majority of my placement writing APIs in Java for a major client. Talking about this experience (as well as the process I took to get myself on this work) helped me secure other experiences later in my degree and eventually my graduate role.

As for how you can perform at your best – open communication with your supervisor is really important, especially confirming the expectations of you as well as how often you can anticipate communicating with them and how and when you will receive feedback.

A common pitfall with many students on placement (and more broadly during internships) is either asking not enough questions, or asking too many questions. On the one hand, struggling for hours or days on a task without asking for help is often a waste of time and fruitless after the initial problem-solving steps are attempted.

On the other hand, messaging or interrupting your supervisor or mentor for very short questions frequently can interrupt their focus.

A good way to achieve balance here is to give yourself a certain amount of time to struggle with a task before asking for help – this technique is known as timeboxing. It can also be great to write your questions down and collect a list to ask all at once; and you can also tell your supervisor what you've tried to solve your problems.

It's also a good idea to immerse yourself in your placement – spend as much time as possible in the office, and go along to company social events where you can. This helps you grow your professional network; and by talking to a diverse range of individuals you can find out about more varied career paths in the IT industry you might be interested in.

WHAT HAPPENS IF I DON'T GET IN?: ALTERNATIVES TO IBL

An IBL placement is only one potential part of the holistic set of experiences you gain during your degree. Failing to secure an IBL placement is not the end of the world, and there are many alternative ways to gain experience.

There are many companies that run summer internships, and a few which offer longer programs. Often you can gain more from these internships than from IBL because you choose specifically where you want to intern and what sort of work you want to focus on. IBL also usually prevents you from undergoing a summer internship in a year as it starts too early (for semester 1 placements) or finishes too late (for semester 2 placements) for you to do both, which is a consideration when deciding to apply for the program. See internships on **Page 35**.

The capstone units which IBL replaces can also give a great project to reference on your resume and experience working in teams for behavioural interviews.

You can read more about the IBL program, including key dates and application deadlines, at <https://www.monash.edu/it/industry-based-learning/key-student-information>

Madison Geeson
2023 CompSci / Science Graduate
Software Developer @ Optiver

INTERNSHIPS

Internships are run by numerous organisations who offer paid, course-related work experience opportunities to students. Companies with formal internship and vacation programs typically recruit groups of five or more students. These programs often come with structured orientation and training sessions, facilitating a smooth transition into the professional workplace and the organisation.

Typically conducted at the end of your penultimate year, these programs frequently result in future graduate employment offers. Application closing dates vary, and some employers maintain open applications throughout the year.

Searching for work experience is similar to searching for any other work, you should use all job hunting methods including searching for advertised positions and indirect approaches (i.e. networking and canvassing employers).

Tip: Student clubs such as WIRED, MAC, MONSEC, CCA, MEGA, MDSS etc., usually promote available internships so remember to keep an eye out for them throughout the year!

Below are several sources of work experience opportunities and information:

- Log into UniHub and search for opportunities
<https://unihub.monash.edu/students/login>
- Grad Connection internships search
<http://au.gradconnection.com/>
- Internships for students with disability
<https://www.and.org.au/students-jobseekers/start-an-internship/>
- Careers events
<https://www.monash.edu/students/future-work/career-connect/build/events-workshops>
- Unpaid work experience, job placements and internships - Fair Work Ombudsman
<https://www.fairwork.gov.au/pay/unpaid-work/work-experience-and-internships>
- Monash Jobs for Students program
<https://www.monash.edu/students/future-work/career-connect/find-a-job/students>
- Career Trackers Indigenous Internship Program
<https://www.careertrackers.org.au/become-an-intern/>

**GET INVOLVED
GET INVOLVED
GET INVOLVED**

**CLUBS AND SOCIETIES
AND
INITIATIVES**

MONASH ASSOCIATION OF CODING MAC



Hello,

I am Jayce (JC), the President of **Monash Association of Coding (MAC)**. MAC is an IT club focused on providing the best opportunities and resources for students aiming for technical roles.

Our goal in 2024 is to **elevate employability** by providing prime opportunities, impactful workshops, and essential skills. We aim to equip our members with the tools necessary to achieve their **personal and professional goals**.

We aim to achieve this through 3 key workshops.

Build: Create technical projects through our weekly workshops, focusing on building various features and pages for your portfolio site.

Learn: Acquire new technical skills, including languages, frameworks, and libraries throughout the year. These can range from APIs, to game development, and Minecraft server hosting.

Career: Establish industry connections, prepare for interviews, and learn standout tips through our diverse Career workshops. These sessions cover a broad spectrum, including interview preparation and alumni insights.

Our flagship events will also be bigger this year with **2x Networking Nights** and upwards of **4x Hackathons**. Each Hackathon will be based around a different theme such as UX/UI, Web Development, Mobile Apps and Artificial Intelligence.

Want to get some insider tips and land your first tech role? We got you covered! MAC has a plethora of Alumni in different tech companies such as **Google, Atlassian, ANZ, Deloitte**, and a variety of Startups, who are willing to help in your development and provide referrals.

Not only are we career focused, we also provide fun social events such as **Trivia, game and food nights, and a bar night** coming very soon.

We are also looking for the next leaders within Monash tech space, and are recruiting **First Year Reps** to join our committee.

If you're interested in either joining as a member or as a committee member come check out our social media!

MONASH CYBER SECURITY CLUB MONSEC



You've probably wondered how on earth does Elliot manage to catch the cafe-owner at the start of Mr Robot? Perhaps you want to know how cybercriminals can turn a jumbled mess of letters and numbers into your password and steal all your information? Maybe you just want to learn how to protect yourself better

Say no more! Because if you love cybersecurity or want to learn something cool, you'll love Monash Cyber Security Club (MonSec)! It doesn't matter if you're just beginning your cybersecurity journey and have never seen a Kali machine before or even if you're a veteran who can break into any system. At MonSec, we want to make cybersecurity interesting, engaging and, most importantly, fun for everyone. Come along to our events, we'd love to see you there!

So what do we run at MonSec?

- Weekly industry workshops: Every Monday, we bring in the experts... They come from all across the industry to talk to you about some aspect of cybersecurity. These topics tend to range from technical talks about a specific tool to more casual conversations about what a typical day looks like for a cybersecurity master/professional. These workshops are a great opportunity to engage with the industry and to gain unique insights into cybersecurity as a career (and trust us, it's a cool industry to get into)!

- Weekly technical workshops: On Wednesday, the gatekeepers of cybersecurity (aka our committee) run a technical workshop, with each one focusing on a specific topic. Like with our industry workshops, we cover a wide variety of topics, from web security to network forensics, and we make sure that every workshop is beginner-friendly, but with some additional challenges for more experienced members too!

- Annual Capture-The-Flag Competition: Every year, we run our CTF competition. It's a great opportunity to apply some of the technical skills you have learnt (and to learn on the fly!) and meet people who are also passionate about cybersecurity. If that's not enough, there are also some fantastic prizes on offer... So good, that if we mentioned them in this post, hackers would already be trying to find out how to retrieve them!

- And many more events that our team are proudly cooking up!



Keep up to date with us on our social media pages (we also post memes on there :p):

- Instagram: @monashcybersec
- Facebook: <https://www.facebook.com/MonashCyberSecClub/>
- Twitter/X: <https://twitter.com/monashsec>
- Discord: <https://discord.com/invite/QFbzbjF>
- Website: <https://monsec.io>



MONASH ELECTRONIC GAMING ASSOCIATION MEGA



Who we are

Monash Electronic Gaming Association (MEGA) is a recreational gaming and esports community based at Monash University Clayton. We aim to enhance your university experience by providing a platform for students and staff to share a common passion for gaming in an engaging, positive and friendly community.

Originally called SVGA and specialising in HALO LAN parties, MEGA has evolved to include both a base of players and fans of various video game franchises, and a wide array of events and initiatives, including assistance in the creation of Monash's eSports Room in 2021, a room located on the bottom floor of its Campus Centre that contains 12 top-of-the-line PCs.

Our Subcommittees

MEGA's major subcommittees each comprise of games and types of games that have the largest presence at Monash, including Super Smash Bros, Rhythm Games, League of Legends, Valorant and Overwatch. These subcommittees run various events and organisations, with major ones including JMLeague, our Super Smash Bros Ultimate league for all skill levels of competitive Super Smash Bros; our fortnightly Rhythm Games nights, where Rhythm Games players (and Hatsune Miku fans) can gather for a night of playing various Rhythm Games like Taiko no Tatsujin, osu! and Project Sekai; and our eLeagues for League of Legends, Valorant and Overwatch subcommittees, which are also open to all levels of skill.

Our Esports scene

MEGA is also responsible for leading Monash's eSports scene, with major teams in League of Legends, Overwatch and Valorant. Our League of Legends teams have a long and storied history, with our D1 women's team having won the QUT inter-varsity championships 3 times since the division's inception, and our Valorant teams coming close to getting into bigger tournaments and playing some of Australia's best players. Each team hosts open tryouts at the start of each year for players to try their hand at getting into them.

COMPUTING AND COMMERCE ASSOCIATION CCA



A massive “WELCOME TO MONASH” from us at CCA! We’re the only joint commerce and IT club at Monash and we’re passionate about business, technology and the intersection of the two. Whether you’re studying degrees in business and tech or not, we welcome anyone interested to join us!

Here at CCA, we know how daunting it can be to navigate the challenges of uni, internships, working life and deciding what the heck you want to do. That’s why we strive to equip our members for professional working life through providing opportunities to connect with working professionals (who were once in our shoes!) and each other.

We host a range of events to help students expand their networks, learn new skills and develop confidence to put themselves forward. From the more professional suit-and-tie networking to chill social events, our events calendar is full of variety so there is something for everyone! Our 3 Flagship Events are Trivia Night, Entrepreneurship Evening and Corporate Dinner- keep an eye out for more details throughout the year.

As a first year, there are plenty of opportunities to get involved with CCA. We’ve got our Crash Course to First Year event in Week 1 of Sem 1 and first year representative positions to look forward to! Our event in Week 1 is all about giving jaffies our tips and tricks on what to expect from first year- we’ll cover all the basics you’ll need to know to survive uni and how to leverage yourself to make the most of your first year.

If you’d love to join a tight-knit committee and instantly gain a new family, we highly recommend applying for our First Year Representative role! You’ll get to see the behind-the-scenes of running a student club and events and rotate through our portfolios.

Our biggest tip to make your uni experience special and something your future self will look back fondly on is to **put yourself out there** and get involved! Whether it be attending events or joining a student team/club committee, there are so many ways to meet new people and create memories! All it takes is you showing up and it’ll all go from there

Our inbox and DMs are always open for your questions- find us @ccamonash

tldr: we are a no-fuss, good vibes, business x tech, fun times tupa club and we can’t wait to meet you! CC y’All around

MONASH DATA SCIENCE SOCIETY MDSS

MDSS is the central hub for Monash Data Science students, aiming to support, engage and foster all things Data! Founded in 2016, we're now one of the largest Data Science societies in Melbourne, with a mission to bridge the gap between industry, the IT faculty at Monash, and university students.

Our core vision can be encapsulated by the words Community, Professionalism, and Diversity, all of which are values that we strive to uphold as a community throughout our activities and events.

Each year, we host numerous networking nights and technical workshops in collaboration with various companies ranging from niche startups to Big Tech - for example, Akuna Capital, Black.ai, Maltem, NAB, EY, and many more. Our annual Datathon and Visathon case competitions (with prizes!) are also some of our most popular events, with separate Beginner and Advanced streams, so students of any skill level are more than welcome to give the challenges a shot!

Our community's feedback is also something we highly value, and every year, we always strive to incorporate those suggestions into our events to the best of our ability. In 2024, by popular demand, we're aiming to host more social and community focused nights, to provide our members with more opportunities to meet like-minded peers and wind down from academic and work pursuits.

To those that are keen, joining our committee is also an excellent way to get involved with the inner workings of our club, organising events, developing leadership skills as well as forming lifelong friendships with our awesome team! With our community growing faster than ever, we're super excited to have you onboard, and we can't wait to show you what we have in store!



DIVERSIT

Who are we?

DiversIT is a Faculty of Information Technology student initiative focused on supporting diverse and underrepresented students in IT. Our aim is to give people opportunities to find others like them and provide support to underrepresented groups within IT – be it gender, sexuality, ethnicity, race, or disability.

What we do!

Social events such as trivia nights or study hangouts to meet other students like you.

Workshops on diversity in tech to spread awareness of the issues in this space.

Industry talks from diverse industry people to form connections for your career.

Connect with us!

Find us on Facebook, Instagram, and Discord, or subscribe to our bi-weekly newsletter for the latest in diversity news, Monash IT opportunities, and to find out what events we're running. Keep an eye out for our revived podcast coming soon! Links to all our stuff are on monashdiversit.com!

Get involved!

Join our growing community! We're proud to have engaged hundreds of students across our events last year, with hopefully many more to come. Joining our community is completely free, just follow our socials to keep updated on what we're doing! You can even join our committee next time we're recruiting and be a catalyst for positive change in IT at Monash!

UNITY

Hello everyone and welcome to UniTy where we support women and non binary people as well as their allies on their journey to success! We believe diversity is the backbone of creating a society where technology serves all and our accomplishments deserve recognition and our up and coming students deserve to prosper and grow in a positive environment. We focus on creating a strong social and professional network. UniTy hosts social events such as trivia nights, movie nights and online game nights to encourage students to find friends and connect with others. We also provide professional development workshops to help you develop your ability to communicate, interview well, negotiate your pay and optimise your social and professional media presence. All are welcome!!

GLEAM (QUEERS IN STEM)

GLEAM is a vibrant student group at Monash University dedicated to fostering a supportive community for Queer+ identifying STEM (Science, Technology, Engineering, and Mathematics) students. GLEAM's mission is to provide younger Queer+ individuals with opportunities to establish nurturing connections within the broader Queer+ community at Monash. GLEAM prioritises the development of lasting friendships across different year levels and facilitates valuable industry connections with companies that embrace LGBTI+ inclusivity. Join for exciting GLEAM events, where we not only build a strong network but also have a great time together!

MONASH ENERGY CLUB

The Monash Energy Club is a student-run organisation targeted at every faculty within Monash University, to provide exclusive career opportunities and the forum required to learn about Australia's energy transformation. Monash Energy Clubs aims to shape the future of the Australian energy industry by educating and connecting Monash's most enthusiastic students to energy-related issues and organisations.

The Monash Energy Club runs several events throughout the year such as Hackathon, Networking Night and more. If you are interested in the Monash Energy Club, please refer to <https://monashenergy.org/upcoming-events>



GOOGLE DEVELOPER STUDENT CLUBS GDSC

Google Developer Student Clubs (GDSC) are university-based community groups for students interested in Google developer technologies. With chapters in over 1,900 colleges and universities across more than 100 countries, GDSC provides a platform for students to learn about a wide range of technical topics and gain new skills through hands-on workshops, events, talks, and project-building activities, both online and in-person. At GDSC Monash, some of our key aspects include:


Community Building: Our chapter brings students with diverse backgrounds and majors together, fostering a sense of belonging and community in the tech world. We host a variety of events, including technical workshops, networking events, and talks with industry leaders. These events are designed to cater to a wide audience, including those with non-technical backgrounds. Moreover, some of these events will be in collaboration with other GDSC chapters across Melbourne! So come along with us and embrace this awesome opportunity to meet new people and grow together!

Learning, Development & Solution Challenge: There will be tons of opportunities to learn about various technical topics such as web and app development, cloud computing, data science, AI/ML, and more! Students are encouraged to apply their learnings and contribute to an important part of GDSC, which is the Solution Challenge. This is where students get to work in teams to develop technology solutions for local community problems, aligning with the United Nations Sustainable Development Goals.

Networking and Professional Growth: GDSC leads to connections with a global network of student leaders, professional community organisers, industry experts, and Googlers, providing guidance and knowledge sharing opportunities.

GDSC plays a significant role in the tech world by nurturing the next generation of developers and tech enthusiasts. It provides a platform for students to learn, grow, and make an impact, bridging the gap between academia and the tech industry.

For more detailed information and to explore GDSC activities and impacts further, you can visit our official website: <https://gdsc.community.dev/monash-university/>



**GET INVOLVED
GET INVOLVED
GET INVOLVED
MONASH STUDENT
TEAMS INITIATIVE**

Monash University supports student-run 'organisations' or teams where you will work together collaboratively to tackle and solve important societal challenges with your technical skills. You will work on projects, supported by experienced mentors, and make connections with students and professionals. Below are six IT teams under the Monash Student Teams Initiative (<https://www.monash.edu/engineering/student-experience/teams-and-clubs#teams>), open to enthusiastic students from all faculties:

IT STUDENT TEAMS

Monash Analysis of Images in Medicine (Monash AIM)

If you are interested in the development of technology in healthcare, then Monash AIM might be perfect for you! Revolutionised by Artificial Intelligence (AI), medical imaging now sees advanced tools such as clinical photography, digital pathology, X-ray, ultrasound, MRI and computerised tomography.

Utilising the development of AI, Monash AIM aims to improve the management of health conditions by automating tasks such as disease classification, detection and segmentation using unimodal and multimodal data!

Here are some useful skills and attributes to possess if you are interested in joining Monash AIM: python, deep learning/machine learning, data wrangling, AI, image processing, and natural language processing.

Monash Assistive Technology Team (MATT):

While hearing aids, cleaning robots, wheelchairs that can climb stairs and prosthetic limbs are all innovative technologies that have been developed to enhance the lives of people with certain disabilities, MATT aspires to dive deeper into designing solutions for unique needs.

These projects include helping children struggling with fine and gross motor skills engage with Nintendo Switch, creating an audio feedback system through a system that recognises hand gestures and many other upcoming projects.

If you have lived experiences of disability, worked with people with disabilities or have technical skills in hardware or software systems, consider joining MATT and getting involved in building a brighter and more impactful future!

Stay connected: MATT Website - <https://www.monatt.org/>

Monash Algorithms and Problem Solving (MAPS)

Are you someone who loves problem-solving through programming, mathematics and logic? If so, consider joining and participating in MAPS' activities and events throughout the year!

Passionate about algorithms, data structures and problem solving, the student team runs weekly workshops and hosts big programming competitions such as the International Collegiate Programming Contest, Google Code Jam, IEEEXtreme, Facebook Hacker Cup, CodeForces and Atcoder. These competitions highlight real-world problems that require abstract thinking and deep knowledge of programming, mathematics and logic.

Ready to dive in? Expect to work seamlessly as part of a team, excel under pressure, communicate effectively and tackle these challenges with your competitive spirit!

Stay connected: Website - <https://monashaps.com/>

Monash Digital Twin Applications in Medicine (Monash D-TAM)

The future of healthcare is being shaped by digital twins which are used to build digital representations of data – such as hospital environments, lab results or human physiology – via computer models. The revolutionary advancements brought about by digital twins are steadily influencing areas such as personalised treatment planning and delivery models.

Monash D-TAM aims to engage students to explore the application of digital twins and dive into an ever-expanding, cutting-edge research and development agenda.

If you are interested in joining Monash D-TAM, here are some useful skills and attributes to possess: VR, AR, mixed reality, Unity, app development, Python, deep learning/machine learning, data wrangling, AI, image processing, natural language processing.

Monash Emerging Technology Themes and Applications (METTA)

With METTA, students will get the exciting opportunity to collaborate with researchers and industry experts in designing and building proof of concepts for the future of Monash's extensive digital ecosystem.

The team's goal is to impact how the university operates by implementing innovative and new methods and technologies, such as VR and AR, immersive collaboration and human-centric software solutions. Acting as a student-led consultancy, METTA, with direct support from eSolutions, aims to achieve scalable outcomes.

If you are interested in joining METTA, here are some useful skills and attributes to possess: VR, AR, mixed reality, Unity, app development, technical expertise with hardware and software systems.

Stay connected: METTA Website - <https://metta.vercel.app/>

Monash Energy Transition for Net Zero (Monash NetZero)

One of the greatest challenges of tackling climate change is the decarbonisation of energy production using renewables like wind and solar. However, these sources are dependent on natural factors and cannot be produced on demand. As more renewable energy integrates into the grid, accurately forecasting demand and generation becomes crucial in incentivising flexibility, optimising battery storage, and meeting supply and demand more effectively.

Monash NetZero will apply AI and optimisation to manage rooftop solar and battery, together with controllable demand in the Monash Smart Energy City. The team will focus on innovative IT devices and practical tools to enable energy transition for decarbonisation and netzero for a sustainable future.

If you are interested, here are some useful skills and attributes to possess: AI, optimisation, data analytics, cybersecurity.

Monash DeepNeuron (MDN)

Monash DeepNeuron develops creative, educational, and ethical projects in Artificial Intelligence (AI) and High-Performance Computing (HPC). From aerospace to art and psychology, MDN's technical project teams collaborate across disciplines to design custom AI or HPC solutions and compete in global competitions.

MDN's non-technical teams, which encompass Marketing, Industry Engagement, Outreach, and the Law & Ethics Committee, People & Culture, strive to educate and empower anyone who is interested in the world of HPC and AI by running educational campaigns, networking with AI companies, completing school outreach, analysing AI ethics and fostering a diverse team culture.

If you are strongly motivated, a great team player and have adequate skills in coding, join Monash DeepNeuron to shape the future!

Stay connected: MDN Website - <https://www.deepneuron.org/>

MOODLE 101

Moodle is a platform that allows students to access lectures, material, unit announcements and assignments for each of their units. It is basically your main 'learning portal'. While it may seem daunting at first being presented with so many resources like weekly graded quizzes, assignment details, consultation times, etc., you will eventually get the hang of it! Here are just a few things to look out for:

Weekly Content:

Weekly material will be neatly placed into tabs for each unit; this material could be the links for the weekly:

- Lectures/Seminars/Video Recordings with their weekly slides for that week (i.e. an embedded video link for a weekly 2 hour seminar)
- Tutorial Sheets (i.e. a tutorial sheet to complete at home before going through the answers in class)
- Moodle quizzes (i.e. a weekly 10 question multiple choice quiz that is marked)

Tips: For some units, you may have to do some pre-work like reading a textbook chapter or watching a lecture/seminar before attending class. Remember to look out for any Week 1 pre-work which you may have to do before your first class!

Assignments + Administration:

Unit coordinators you can contact, prescribed textbooks, weekly topics, unit announcements and extra helpful resources can all be found on the main unit page in Moodle.

Most assignments are submitted through Moodle (via the "Grades" page or under the weekly tabs in the form of a Moodle Quiz) and run through "Turtitin", a plagiarism detection software that will determine what percentage of your assignment can be found online or in other students' work. The Moodle page will also include the details/instructions of the actual assignment. This is an example from the unit MKC1200: Principles of Marketing

Assessment Distribution				
Assessment summary				
Assessment task	Value	Due date	Group or Individual	Learning Outcomes Assessed
Weekly online quizzes	15%	11:55 PM Friday (Week 2 to Week 11)	Individual	All
Tutorial assessments	15%	Week 2 to Week 11	Group	All
Individual essay	20%	11:55 PM Week 10 Friday	Individual	All
Final exam	50%	TBA	Individual	All

Assessment Page

Assessment 1: Online Quizzes

[Details of Assessment 1 Online Quizzes](#)

Assessment 2: Tutorial Activities Participation

[Details of Assessment 2 Tutorial Activities Participation](#)

[MKC1200 S2 2023_T10_Tue 9:30_Narelle](#)

Assessment 3: Individual Essay

[Details of Assessment 3 Individual Essay](#)

[Essay discussion forum](#)

[Essay guidance \(with example\) 1.4MB PDF document](#)

[Library support: Business Source Complete \(BSC\) database and APA](#)

[Additional library support](#)

[Submit Assessment 3](#)

Final Exam

Exam day/time: the exam is scheduled at **10:30 AM 06/11/2023 (Monday)**.

The exam is going to be **open access**. You're permitted to access and use physical/digital notes

All the topics covered from Week 1 to Week 12 are examinable.

In **Week 12 online lesson**, we will release more specific guidance on exam preparation.

Conclusion:

The unit landing pages can vary drastically between all your subjects which is why this section on Moodle may seem a bit vague. Adapting to new websites and software is commonplace, especially in IT, and involves a good deal of independent thinking and effort.

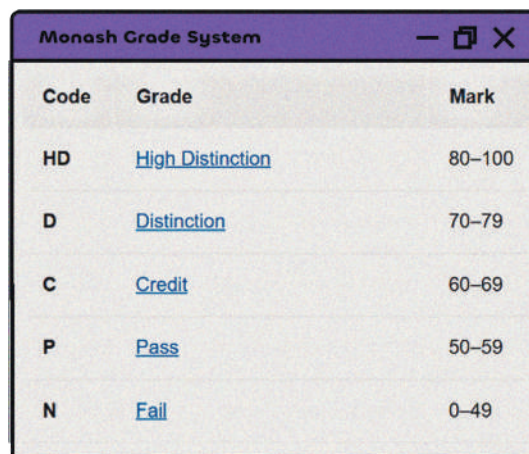
However, after using Moodle throughout the semester across multiple units you will eventually interact with this platform effortlessly.

EDUCATION STRUCTURE AT MONASH

Monash Grading System

It is quite common to enter uni with the expectation to obtain grades ranging from A's to A+. But what is an 'A' in uni? You might be shocked that we completely removed the letter grading system. (So no more A, B and Cs from this point forward!)

Instead, you will be introduced to the Monash Grading System which will be used for all your assessments and your overall grade for your unit.

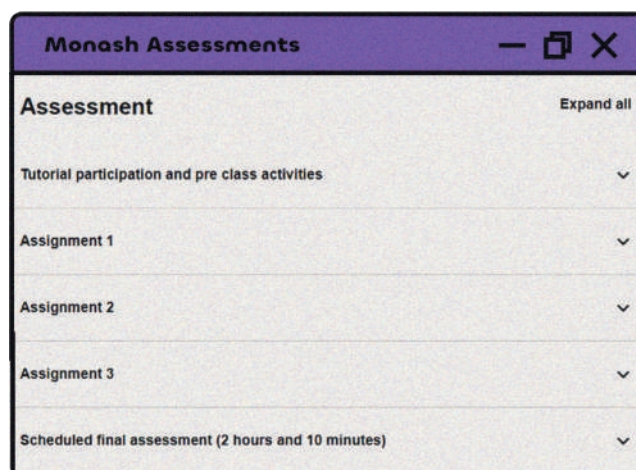


A screenshot of a window titled "Monash Grade System". It contains a table with three columns: Code, Grade, and Mark. The rows are: HD (High Distinction, 80-100), D (Distinction, 70-79), C (Credit, 60-69), P (Pass, 50-59), and N (Fail, 0-49). The Grade column contains blue hyperlinks for each grade.

Code	Grade	Mark
HD	High Distinction	80-100
D	Distinction	70-79
C	Credit	60-69
P	Pass	50-59
N	Fail	0-49

Understanding your Assessments

You can view all assessments through the assessment schedule on Moodle or in the Monash handbook for the respective unit. Each assessment is assigned a specific weight to indicate its significance in determining the overall grade. These assessments may include mandatory quizzes during classes, contributing to your final grade, or weekly coding interviews for your tutors to check your overall understanding.



A screenshot of a window titled "Monash Assessments". It shows a list of assessments with a table structure. The first row is "Assessment" with an "Expand all" link. The following rows are: "Tutorial participation and pre class activities", "Assignment 1", "Assignment 2", "Assignment 3", and "Scheduled final assessment (2 hours and 10 minutes)". Each row has a downward arrow icon on the right.

Assessment	Expand all
Tutorial participation and pre class activities	▼
Assignment 1	▼
Assignment 2	▼
Assignment 3	▼
Scheduled final assessment (2 hours and 10 minutes)	▼

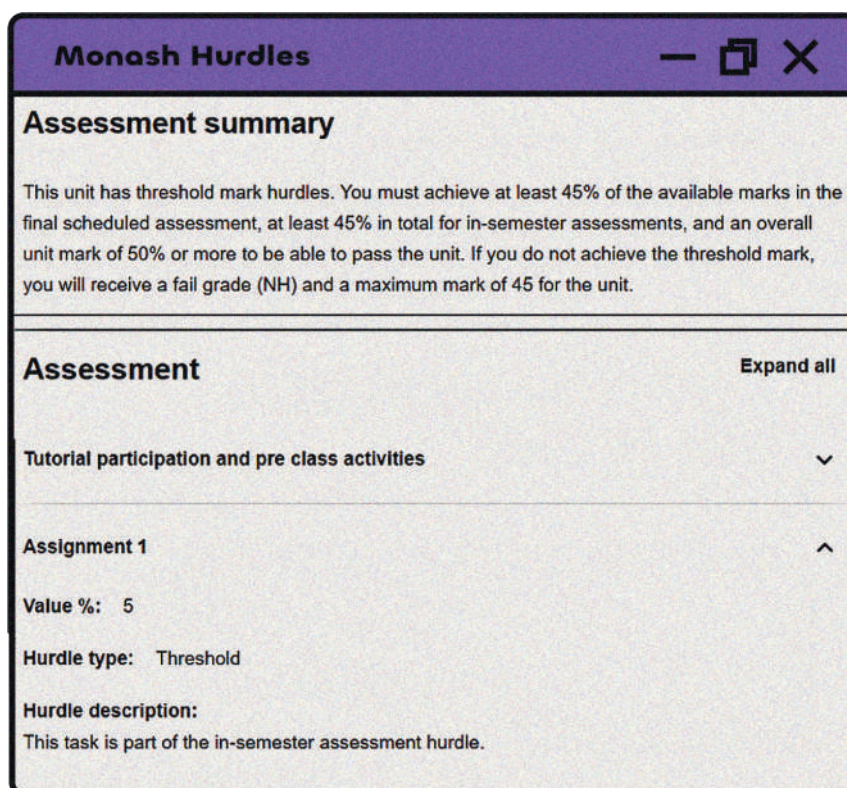
Avoid common assignment submission errors:

Most students don't realise that after uploading their work on Moodle, it is saved as a draft. To fully submit your work, remember to submit it after it's in its draft form!

What are Hurdles?

All marked assessments at Monash have a specific percentage allocated to them, the higher the percentage the more they are worth to your final grade. In some cases there are assessments which are specially marked as 'Hurdle' Tasks. **If you receive a percentage between 0-49 (N - Fail) for any marked Hurdle Tasks you will not be able to pass the unit.** While it is more than possible to obtain a passing grade in a unit after failing a regular marked assessment, failing a hurdle task essentially voids any final percentage you obtain at the end of the semester and automatically prevents a passing grade.

It is important to know if an assessment is marked/non-marked/graded as a hurdle task; marked assessments and especially Hurdle Tasks will always be made clear to students through the Monash handbook, moodle announcements and in-person reminders from lecturers.



The screenshot shows a window titled "Monash Hurdles" with a purple header bar containing a minus sign, a square icon, and an 'X' icon. Below the header is a section titled "Assessment summary" with the following text: "This unit has threshold mark hurdles. You must achieve at least 45% of the available marks in the final scheduled assessment, at least 45% in total for in-semester assessments, and an overall unit mark of 50% or more to be able to pass the unit. If you do not achieve the threshold mark, you will receive a fail grade (NH) and a maximum mark of 45 for the unit." Below this is a table with the following structure:

Assessment	Expand all
Tutorial participation and pre class activities	▼
Assignment 1	▲
Value %: 5	
Hurdle type: Threshold	
Hurdle description: This task is part of the in-semester assessment hurdle.	

Exams

Although there is a push to phase out final exams in many units to create greater emphasis on project-based assignments, there are still some units that require a final examination to test your overall knowledge of the unit. These exams may range from 40 - 60% and typically last for approximately 2 hours, depending on the unit. These exams usually take place online, however, for some, you may need to be on campus for your assessments.

You will also need to ensure you follow the instructions carefully and understand what is permitted in the exam. This may include prohibition or permission to have access to notes, calculators, blank paper or other materials; which will be clarified by your teachers and supervisors.

Supplementary Assessments

Supplementary assessments (<https://www.monash.edu/students/admin/assessments/supplementary>) provide eligible students with an additional chance to successfully complete a previously failed unit with a **maximum result of 50 (P)**.

To be eligible for a supplementary assessment, you:

- received an **overall mark of 45 to 49 for the unit, and your grade is either 'N' or 'NH'**;
- **study a unit that offers supplementary assessments** (some units do not offer supplementary assessments because of the way they are taught, e.g. professional practice, clinical placements and project-based units);
- **have not completed a deferred or rescheduled deferred assessment for the unit;**
- **do not have a finding of academic misconduct with a zero (0) mark penalty applied to an assessment task worth 20% or more;**
- **opt in within five (5) University working days** of the results release date for your unit (before 11.59pm).

You must also be able to complete the supplementary assessment on the date it is scheduled and within 90 days of the results release date for your teaching period.

There are also many things you should consider before opting in for supplementary assessments:

(a) As stated, the highest mark you can get for your unit – even if you sit a supplementary assessment – is 50 (P). Consider other options like possibly retaking the unit where you will have the chance to receive a higher mark.

(b) There is no limit to the number of supplementary assessments you can opt in (if you are eligible) so it is generally recommended that you choose one that you have the best chance of passing.

Unit Scores:

At the end of every semester you will receive your final unit grades for the units you have completed in an email in the following form:

Monash Grades			
Unit Code	Title	Mark	Grade
BTC1110	Business and Commercial Law	100	HD
FIT1008	Introduction to computer science	50	P
MAT1841	Continuous mathematics for computer science	75	D
MKC1200	Principles of marketing	100	HD
Course		WAM	GPA
Bachelor of Commerce and Bachelor of Computer Science		81.25	3.000

Your final unit grade is calculated depending on how you perform on the assessed tasks throughout the semester. The assessed tasks in each unit can range from marked attendance for applied classes, to workshop quizzes, to assignments and final exams. The assessment structure can be found in the Handbook for the respective unit.

What is WAM/GPA?

'Weighted Average Mark' (WAM) and 'Grade Point Average' (GPA) is essentially a numerical indicator of a student's academic achievements. While both have their distinct ways of representing a student's overall score, WAM is the most preferred and widely adopted across Australia. This is because WAM is based on the raw percentages and marks achieved by the student rather than a grade-point system.

Key areas that you need to know about WAM:

- WAM takes into account the credit points of each unit or course. Therefore, the more credit points for a certain unit, the more influence it will have on your overall WAM.

- While GPA converts your overall grades across all your units into a 4.0 scale, WAM is measured out of 100.

- Your WAM score can fluctuate depending on your performance within each semester. The more you improve in your overall performance, the higher your WAM will increase. Improvement will always be your key to success!

Want to find out more on how you can calculate your WAM?

Calculate a rough estimation of your WAM using Monash's WAM calculator (<https://www.monash.edu/students/admin/assessments/results/wam>).

HOW TO HANDLE WORKLOAD?

Adjusting to university life can be challenging, especially if you are the type of person who likes and relies on structure. As someone who loves their routine, I struggled immensely juggling between my part-time job, my studies as a Law / IT student, and my personal and social life. Work and assessments were thrown at me endlessly and it seemed as if I would never catch up; but I was able to bounce back and pull through.

Here are some tips from me as a seasoned third-year student on how to navigate overwhelming workload:

EFFECTIVE STUDYING

Prioritise!

Identify your most critical tasks and prioritise them. Managing your time is definitely one of the most critical skills employers look out for, and being able to effectively complete and carry out tasks in a timely manner whilst maintaining quality is important yet so difficult.

I still struggle with this sometimes because life can definitely get busy and overwhelming. For me, I firstly weigh what I value most: (1) my studies; (2) extra-curricular activities; (3) part-time work; (4) personal life. This can change and vary depending on the week, and yours may be completely different, but it is important to identify what you value most.

Plan

Sometimes you can wing it, but most of the time you have to plan it! Planning provides a sense of structure and direction which keeps you focused and organised. I occasionally skip planning out my day out of laziness which almost always results in me doing nothing the whole day and procrastinating.

So in order to keep myself organised and on-track, I actively use tools like bullet journals, planners, digital calendars, etc. to plan my days and weeks in advance. This also helps me to stay aware of assignments deadlines, and quizzes opening and closing time.

Study Budd(ies)

Group studying can sometimes (~~often?~~) be chaotic and distracting, especially if you do it with your friends, but this method is undeniably one of the most effective and beneficial ways to learn and retain content. I have found that when it comes to subjects like coding and programming, studying with another person – friend or otherwise – provides me with another perspective and approach I have not considered on my own. Or if you have a sound grasp of a concept, teaching and explaining a concept often enhances and reinforces your own understanding of it.

Study buddies don't only have to be your friends, but they can also be your TAs (who you may consult with in class), your classmates, or online friends. The key to a successful studying session is purpose and intention! Make sure you have a clear goal of what you want to achieve by the end (which, for example, could be understanding a coding concept) and actively participate during your learning session.

SEIZE THE OPPORTUNITY

Underloading

One of the best, and – for some – worst, things about university life is that you have control over your own studies and how many units you may want to take every semester. Monash course maps are based on full-load semesters, where you could complete 4 units per semester; however, it is quite popular among students to opt for enrolling in fewer units within a semester to reduce their workload. This is referred to as “underloading”. If you want to work full-time, approximately 20+ hours a week, or otherwise, you may want to consider underloading, which means you study less than 6 units per year!

Tackling university full-time, studying eight (8) units per year, can be very time-consuming and mentally draining. One of the biggest myths and misunderstandings you may have is that underloading means you are “lacking” and incapable of completing your degree. However, this is completely untrue! Underloading is actually a strategy for students to have more flexibility with their time to engage in their work life, social and personal life, and University life outside of their academics. Furthermore, it may also help improve your mental well-being by lowering the pressure and stress within a semester.

Changing your study load can have repercussions like becoming ineligible for government payments (i.e. Youth Allowance, etc.), so remember to consult with the people around you and request course advice.

For more information, please visit <https://www.monash.edu/students/admin/enrolments/study-load>

Suggestion: Students may also consider taking a Summer/Winter (<https://www.monash.edu/students/admin/enrolments/summer-winter/faculty>) unit to lighten the workload during regular semesters, especially if students wish to avoid prolonging their expected graduation year.

Resources

Your coursework typically builds on top of what you have previously learned, which means that it is crucial to get a good grasp of the content. Finding the right resources will come in handy to help you study more effectively. Thanks to Google, you have instant access to a library of content where a community of people have posted similar concepts and ideas, with clear explanations which you can learn from and build on knowledge of what you've learnt.

Make use of online tools like Stack Overflow, YouTube, and official documentation to help you excel in your assessments. If you are interested in more personalised and Monash centred resources, please refer to the material discussed in the next section, **Seeking Help!**

Applying for Extensions

Everyone is capable of producing high-quality work, however, sometimes our biggest constraint is the limited time we have to complete our work to our satisfaction. Especially when we're all juggling multiple assessments at a single point in time, quality of work might be a sacrifice that we simply have to make to avoid late-penalty submissions. Fortunately, a late penalty can be avoided if you apply for an extension.

For students who are facing short-term difficulties in work submission, Monash offers **short-period extensions – up to two calendar days**. When applying for the very first 'short extension' application for a unit, you will not be required to supply evidence or state a reason for a need for a short extension. Once you submit the application form, you will receive an email informing you of the updated due date for your assessment if you are eligible.

Additionally, if you were to be involved or face an unfortunate event, you should consider requesting special consideration for a longer extension. In this case, you will need to provide supporting documentation and gain approval from the unit's Chief Examiner (CE).

To find out more about further requirements, please visit Monash's Extensions and Special Consideration page (https://www.monash.edu/students/admin/assessments/extensions-special-consideration#Short_extensions_two_calendar_days-1)

SEEKING HELP

As mentioned previously, learning how to use Monash resources and follow new practices in this new university environment involves a great deal of independent effort; how you take notes in lectures, the order in which you tackle assignments and what units you take, are solely decided by you. In such a rigorous environment, self-reliant work can aid immensely in building your work ethic and perseverance.

However, there will be times where the tasks in front of you can be challenging, especially at times when decisions aren't related to a black and white assignment/topic, but course advice and questions such as:

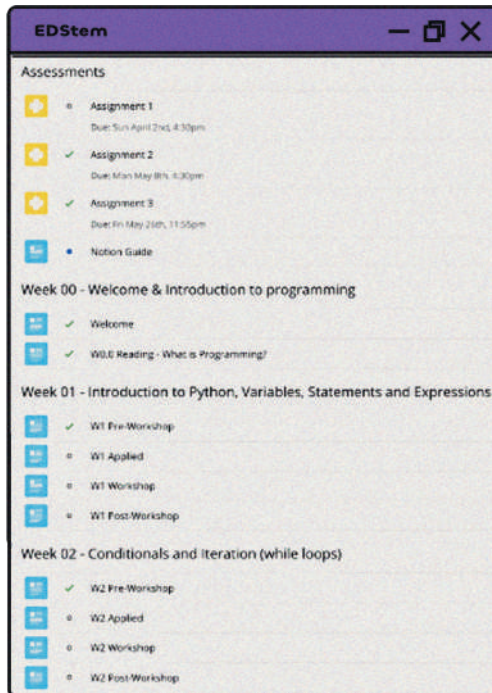
- What electives will pair nicely with my core units?
- Should I major in Data Science or Advanced Computer Science?
- What are other people in my situation prioritising now?

Fortunately, there are numerous official/student-led resources at Monash to help address these questions to ensure your university experience is as smooth as possible.

Ed-Stem

This platform is the main channel of communication from staff members to students across most coding units, and it is important to check as regularly as your Moodle. It is the website where you access all assignments, workshops, applied classes and theory material. It also acts as a space where staff and students can make public (or private) posts:





The most common posts relate to important topics such as:

- Announcements: Assignment mark release dates, upcoming events and general administration (Generally staff use this tag for important administration)
- Lessons: Questions relating to material covered in class
- Marking: Questions relating to mark tallying, marking guide updates for assignments

An important note is that you can post anonymously, so you don't have to be anxious about posting questions to a large audience. Posting and discussing material/assignments on Ed-Stem not only saves staff from being bombarded with emails, but also allows your posts to become discussion spaces where students and staff can discuss the problem in depth through replies and offer new perspectives.

PASS Support Program

Peer Assisted Study Sessions (PASS) is an academic support study group led and run by a PASS leader (often high-achieving students who studied the same units). Spanning from week 2 to week 12, a PASS leader will facilitate sessions consisting of up to 30 students where they will help break down the complexity of the unit material from the previous week. PASS leaders incorporate activities that foster both active and independent learning, preparing students for assessments and year-end exams.

Students will gain valuable techniques and strategies on how to advance in their unit to achieve their desired results. IT PASS (https://www.monash.edu/access-inclusion-success/pass#tabs__3128716-05) unit includes the following first-year units:

- FIT1008 and FIT2085 - Computer science
- FIT1045 - Introduction to programming
- FIT1047 - Introduction to computer systems, networks and security
- FIT1051 - Programming fundamentals in Java
- FIT5197 - Statistical data modelling
- FIT9131 - Programming foundations in Java
- FIT9132 - Introduction to databases
- FIT9136 - Algorithms and programming foundations in Python

These sessions may be held both online and on campus. To join, enrol in the offered PASS sessions through allocate+ by **Monday 26 February 2024**.

Consultations

Students can be prone to falling behind and feeling overwhelmed/anxious due to the fast pace at which new material is introduced. Therefore, seeking help by attending consultation in the early weeks of the semester can help students keep up to date on content as well as help them revise previously covered material.

Students find consultations particularly helpful especially when seeking help regarding assignments, administration issues or general queries. These sessions take place in the form of Zoom meetings or classrooms at Monash run by Teaching Assistants and are one-on-one.

Furthermore, the main benefit of a consultation is that it is more intimate than a lecture or a regular tutorial class. This means that an experienced TA who has taken the unit before can personally assist you in clearing up any confusion and allowing you to perform to the best of your ability.

Consultation Timings

Consultation sessions are conveniently scheduled multiple times throughout the week. If you find yourself struggling with coursework, feel free to join a consultation without the hassle of registration.

Moodle

Consultation times can always be found on the Moodle page for the respective unit.

Maths Learning Centre

The Maths Learning Centre (MLC) is a dedicated maths study space located in Room G39, 9 Rainforest Walk, Clayton Campus and is open quite generously from 10am-2pm Monday-Friday starting in Week 2 of every semester until the end of the second week of the exam period.

This centre is suited for those who do not have a strong background in mathematics or for those who simply need assistance in understanding weekly content. The core mathematics units for computer science can be quite abstract and lecturers introduce material at a very fast pace.

Taking on these challenging maths units without guidance can be time consuming and daunting, so dedicating some time every week to study in the MLC where experienced maths staff can personally walk you through topics can make studying maths much easier.

Discord Servers

Discord servers can offer invaluable support for students. They enable you to interact with hundreds of peers who are studying the same unit as you, as well as TAs – who grade your code – and senior club members. These servers are more than just helpful for learning; they are essential to enhance your university experience and discover new opportunities. There are servers for essentially every field offered at Monash such as philosophy, music, business, etc. Below are some of the most active IT centred servers at Monash.

IT @ Monash (<https://discord.gg/monashft>)

- Largest discord server in Monash University
- #announcements and #opportunities channels are constantly updated with:
 - Upcoming Networking events and Career Expos
 - Deadlines (Unit Enrollment dates to avoid \$348 late fee, IBL application date)
 - Summer internships and Job Listings
- Dedicated text channels for every IT unit at Monash whose members are:
 - TA's willing to clear up administration/assignment issues
 - Students studying the same unit who discuss weekly content/questions

- Generic text channels such as:
 - Dedicated course advice threads
 - Study and Support channels

Maths @ Monash (<https://discord.gg/fcG2XcYu>):

- Generic text channels such as:
- Dedicated unit advice threads
- Study and Support channels

Club Servers:

Please be aware these are not all the clubs discord servers just a handful of them:

- WIRED: <https://discord.gg/DwnyQgCj>
- MAC: <https://discord.gg/e4NAtJqv>
- MAAPS: <https://discord.gg/hA4djhcV>

Course Advice

The discord servers mentioned above all have dedicated course text channels where you can ask specific course questions which older and more experienced users can respond to.

Final Note about Seeking Help

In addition to these resources that are available, it is integral to attend all classes diligently and check your emails/Moodle regularly for any important updates. Workshops, Applied Classes and Theory Lessons are all outlets to communicate and work with experienced tutors and students to further understanding. Working with others is hands down the best way to solidify knowledge and finish coursework efficiently and attending scheduled classes should be a priority over going to any consult or PASS session.

All these outlets of support, resources on Moodle, weekly marked quizzes and new things you need to adapt to at Monash will be daunting at first, but have faith in yourself and be reassured that every student at Monash has been in your shoes at one point.

CHOOSING YOUR ELECTIVES

Monash University boasts an incredibly diverse set of electives that allows students to explore interests inside or outside their IT degree. Choosing electives you are genuinely passionate about can undoubtedly enhance your university experience. It may be possible for you to choose from a wide breadth of elective units like Arts, Maths, Business whilst studying your selected degree. Elective opportunities not only allow you to explore your interests but also diversify your profile.

Single Degree:

During a period of 3-4 years (typical of a single degree), you will be required to select a major within your faculty where this will become your specialised area.

While the option exists to pursue up to two majors, the more common approach is for students to concentrate on a single major and utilise their elective courses to explore other areas of interest.

Additionally, pursuing a single degree allows for the possibility of minoring. Although minoring is optional, a minor represents a secondary area of interest that demands fewer units to satisfy the requirements.

Major and minor requirements:

- Major: complete 8 units or 48 credit points
- Minor: complete 4 units or 24 credit points

Double Degree Electives:

The reason for which double degrees allow for a fast completion of two separate qualifications is that the electives are removed from both degrees to make room for core units in the other degree. This can be seen in the double Commerce/Computer Science degree (left image) and single Computer Science degree (right image) course maps:

	Bachelor of Commerce		Bachelor of Computer Science	
Year 1 Semester 1	*ACC1100 Introduction to financial accounting or ACC1001 Accounting fundamentals	BTC1110 Commercial law	FIT1045 Introduction to programming	MAT1830 Discrete mathematics for computer science
Year 1 Semester 2	ECC1000 Principles of microeconomics **ECC2003 Economics	ETC1000 Business and economic statistics	FIT1008 Fundamentals in algorithms	MAT1841 Continuous mathematics for computer science
Year 2 Semester 1	MGC1010 Introduction to management	MGC1200 Principles of marketing	FIT2004 Algorithms and data structures	FIT1047 Introduction to computer systems, networks and security
Year 2 Semester 2	Commerce elective unit from the Faculty of Business and Economics	Commerce listed major unit 1	FIT2014 Theory of computation	FIT1040 IT professional practice or FIT1055 IT professional practice and ethics
Year 3 Semester 1	Commerce listed major unit 2	Commerce listed major unit 3	Specialist discipline knowledge specialisation unit	Specialist discipline knowledge specialisation unit
Year 3 Semester 2	Commerce listed major unit 4	Commerce listed major 3 rd year level unit 5	Specialist discipline knowledge specialisation unit	Specialist discipline knowledge specialisation unit
Year 4 Semester 1	Commerce listed major 3 rd year level unit 6	Commerce listed major 3 rd year level unit 7	Applied practice Computer science or Data science project	Specialist discipline knowledge specialisation unit
Year 4 Semester 2	Commerce listed major unit 5 or additional commerce unit from the Faculty of Business and Economics	Capstone*, consulting project, international experience or internship unit**	Applied practice Computer science or Data science project	Specialist discipline knowledge specialisation unit

Bachelor of Computer Science (C2001) – 2024				
Advanced computer science specialisation				
Year 1 (48 credit points)				
First semester	FIT1045 Introduction to programming	FIT1047 Introduction to computer systems, networks and security	MAT1830 Discrete mathematics for computer science	Elective
Second semester	FIT1008 Fundamentals of algorithms (FIT1045)	FIT1049 IT professional practice (13 ph FIT study) OR FIT1055 IT professional practices and ethics	MAT1841 Continuous mathematics for computer science	Elective
Year 2 (48 credit points)				
First semester	FIT2004 Algorithms and data structures (FIT1008 and 6 ph L1 Math)	FIT2099 Object-oriented design and implementation (one of FIT1045 or FIT1008)	FIT2094 Databases (FIT1045)	Elective
Second semester	FIT2014 Theory of computation (FIT1008 and MAT1830)	FIT3102 Programming paradigms (FIT1008)	Elective	Elective
Year 3 (48 credit points)				
First semester	FIT3161 * Computer science project 1 (FIT3004)	Level 3 * Computer Science Approved Elective**	Elective	Elective
Second semester	FIT3152 * Computer science project 2 (FIT3004)	FIT3155 Advanced data structures and algorithms (FIT3004)	FIT3143 Parallel computing (FIT3004)	Elective

In this case, a maximum of two electives (only under the Faculty of Business and Economics) can be chosen for a Commerce/Computer Science degree. Conversely, a maximum of 8 electives can be chosen from any faculty in a Monash Computer Science single degree.

Double degrees do significantly narrow the breadth of electives you are allowed to choose and it is important to consider this before enrolling in one. (Note: This narrowing varies among double degrees hence it is important to check yourselves what electives you can and can not do for your chosen degree).

Extra Elective Tip: There is a way to get more elective spots in a double degree in the process of choosing your major, however they must be inside one of your faculties.

(1) Choose a major from one degree and carefully look at units offered

(2) Enrol in unit that you have already completed as part of your other degree (i.e. FIT1045 completed in Computer Science and you choose it again as a unit under a Business Analytics major in Commerce)

(3) Technically, a unit spot in Commerce is free now as you've already completed the unit. You can choose an extra elective now (although this has to be under Faculty of Business and Economics)

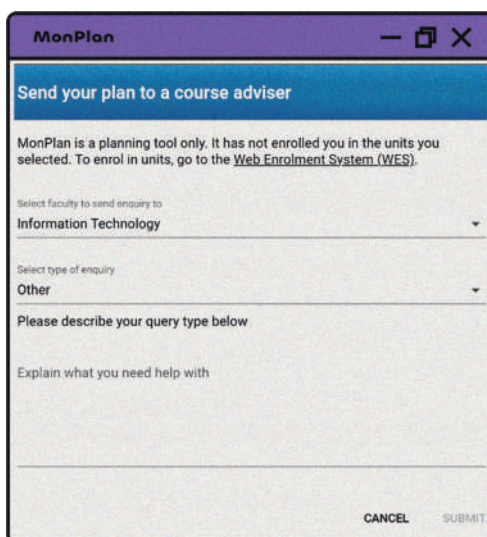
MONPLAN

Creating your personalised course map with 'MonPlan'

MonPlan is an online management tool to assist Monash students in designing their personal course maps and managing their academic progression. By logging into your Monash account, you can create as many drafts as your heart's content by providing your bachelor's and your area of specialisation. It's as easy as simply dragging and dropping the units from your search and then dragging them directly into your course map template.

This may be particularly useful for students who are contemplating a gap year, considering taking Summer/Winter (<https://www.monash.edu/students/admin/enrolments/summer-winter/faculty>) units or planning to over/underload units as MonPlan stands out as a valuable resource to ensure they stay on course with their degree. Throughout this process, students may need to seek additional guidance, especially when exploring further advice or addressing any unit-overlapping issues. In such cases, reaching out to Monash Connect (<https://www.monash.edu/students/support/connect#monash-faq-help-panel>) for assistance in resolving unit-related matters can be your go-to solution, or alternatively, utilising the built-in course progress checker.

To request a review of your personalised MonPlan course map, you can select your inquiry type and provide a concise overview of your concern. Once submitted, a course advisor will email you with their expertise and further assistance.



The screenshot shows a web form titled "Send your plan to a course adviser" within the MonPlan interface. The form includes a header with the MonPlan logo and window controls. Below the header, there is a blue bar with the title. The main content area contains a disclaimer: "MonPlan is a planning tool only. It has not enrolled you in the units you selected. To enrol in units, go to the [Web Enrolment System \(WES\)](#)." Below this, there are two dropdown menus: "Select faculty to send enquiry to" with "Information Technology" selected, and "Select type of enquiry" with "Other" selected. A text area is provided for the user to "Please describe your query type below" and "Explain what you need help with". At the bottom right, there are "CANCEL" and "SUBMIT" buttons.

DISABILITY SUPPORT SERVICE (DSS)

Monash University's Disability Support Service (DSS) (https://www.monash.edu/students/support/disability/services#tabs__1335666-01) is a welcoming and safe environment designed to assist students facing disabilities, medical conditions, or mental health conditions that may impact a student's academic studies.

The DSS works collaboratively with the individual student, providing tailored adjustments and recommendations to facilitate a positive learning experience.

These services and customised arrangements include*:

- Accessibility Accommodation on Campus
- Alteration arrangement for final assessments
- Assistive technology
- Equipment
- Library services
- Resting rooms

To discuss your personal needs and explore the available services, feel free to contact our DSS advisor by scheduling an appointment (<https://www.monash.edu/students/support/disability/services/advisers>) for more information and assistance. Please be assured that all discussions are private to ensure your privacy.

(*You may find more services and information on Monash's official website)

Video: <https://youtu.be/WdnRc1gj1vQ?si=x-eK8bTtYgMUJ4w4>

DEBUNKING COMMON MYTHS

Myth 1: WAM is the sole determinant of employability

Although certain companies may use WAM scores as an initial filter for a large pool of applicants, employers ultimately prioritise their opening positions for graduates who possess strong technical skills and knowledge for their offering role. While employers recognise that WAM is merely a numeric representation earned during university, a WAM score lacks tangibility and connection-building qualities. Consequently, employers are more inclined to express interest in personal projects showcased through your portfolio rather than your WAM.

Student Tip:

Here are some tips to stand out from the crowd:

- Create a portfolio to demonstrate your practical skills and accomplishments eg. GitHub, Personal website, Club involvements, free online courses...
- Be confident and prepare for interview questions
- Remember that soft skills are as important as hard coding skills!

Myth 2: All classes have compulsory attendance

Entering uni gives students the flexibility to choose how much effort they wish to put into participating and attending class, whether that's choosing to attend online classes over in-campus or watching pre-recorded lectures. While certain classes may not be categorised as mandatory, it is strongly recommended that you attend most-to-all sessions of your enrolled classes to ensure you receive relevant information regarding your upcoming assignments and/or exams.

Therefore, it is up to the student's responsibility to ensure that they are up to date with class content, seek help when needed and intend compulsory assessment dates that may require full or partial attendance for participation, assessments or coding interviews as part of the unit's hurdle.

Myth 3: Stuck with my first-preference course

After exploring the first semester or year of your degree, many students may start to consider transferring to a different course. It is quite possible that your current course doesn't align with your future aspirations. Or maybe you took an elective outside of the faculty of IT and realised, 'This is what I want to pursue'.

If you find yourself in this situation, take the time to thoroughly explore whether this is the path you want to follow. Many students may hesitate to make changes after commencing or being accepted into their initial course.

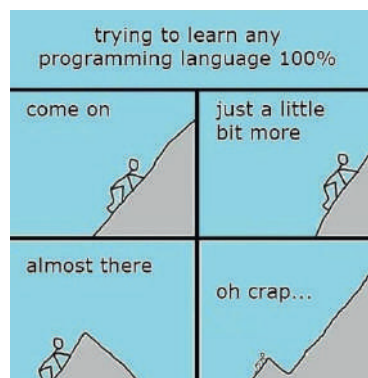
However, not everyone finds a strong connection with their chosen path right away. It is recommended that you pursue a degree in a field you genuinely enjoy to cultivate a more meaningful and fulfilling career in the future.

To find out more about eligibility and requirements, visit the 'entry requirements' under your desired course (<https://www.monash.edu/study/courses/find-a-course>).

Advice: Before transferring to a different course, the first year typically covers the overall foundation of your course. It may be intimidating to learn a completely new topic, especially in IT, as many people have never touched coding in their lives.

However, if you invest your time and effort to seek the right help from teachers, friends or online resources, you will learn that everyone was once in the same boat as you and that improvement comes over time and practice.

Don't give up too early on when it starts to get hard, because IT learning curve can sometimes look something like this:



Myth 4: IT only focus on coding

A common misconception about IT is that it predominantly focuses on coding. While coding helps you build up your problem-solving skills and understand the fundamentals of how technology essentially works, you won't be limited to becoming a software developer or programmer with a CompSci or IT degree. You may find yourself building skills in problem-solving, critical thinking and team management throughout your course.

You may find yourself interested in these areas that may require little to no coding:

1. Creative Minds: UI/UX designers
2. Business Orientated: Project management, product development

3. Network and security: Cybersecurity, network administrator
4. Others: Data Analyst, IT consultant

(OR just refer to the page about pathways)

Myth 5: Everyone graduates on time

Students often feel pressured to graduate on time, however, there are many challenges and factors that can extend this journey. This includes: changing majors/courses, personal challenges or juggling between a part-time job and full-time uni student responsibilities. It is important to understand that everyone works at their own pace and that there shouldn't be a race to graduate as long as you are persistent in your learning journey.



RESOURCES
RESOURCES
RESOURCES

RESOURCES

CSESoc Enrollment Guide: Explore the CSESoc Enrollment Guide for comprehensive information on enrolling in Computer Science and Engineering courses, offered by the Computer Science and Engineering Society at the University of New South Wales. <https://media.csesoc.org.au/cse-enrol/>

Monash University Clubs and Societies: Join a diverse range of clubs and societies at Monash University through the Monash University Clubs and Societies platform, fostering connections and enhancing your extracurricular experience. <https://clubs.msa.monash.edu/joinnow/clubs-and-societies/>

Monash University IT Courses: Discover a wide array of Information Technology courses at Monash University, designed to equip you with essential skills and knowledge in this rapidly evolving field. Explore available courses here: <https://www.monash.edu/study/courses/find-a-course/information-technology-c2000>

Monash University IT Student Teams: Engage with student teams within the Information Technology department at Monash University, fostering collaboration and hands-on experience in real-world projects. Learn more about IT student teams here: <https://www.monash.edu/it/student-teams>

Bonus Tip for MAT1841: For students taking MAT1841, leverage 3Blue1Brown's video series on Linear Algebra and Calculus available on YouTube. These resources offer a clear and intuitive understanding of key topics, empowering you to excel in your studies. Access the Linear Algebra video series here: <https://www.youtube.com/watch?v=kjBOesZCoqc&list=PL0-GT3co4r2y2YErBmuJw2L5tW4Ew2O5B>





>wired_

ALL THE BEST

