2020 INFORMATION TECHNOLOGY

UNDERGRADUATE COURSE GUIDE
DISCOVER IT

Make your future a reality with Monash IT.

Monash is the birthplace of big ideas in computing and IT, and our people – who design and create the IT systems on which we rely – are pioneers in their fields. No other career pushes the boundaries of innovation more than IT, and there’s no limit to the things you can achieve at Monash IT.

Together we’ll make your future a reality.

Discover more to change more

At Monash, IT has a definitive place in our University DNA – it sits at the heart of big ideas that lead to big impact.

From maximising sustainable crop production in greenhouses by modelling the behaviour of bees, analysing big data on paramedic callouts to monitor and reduce drug overdoses, and creating a new and secure cryptocurrency exchange – we ignite new ways of thinking to amplify the full force of IT for positive social impact on a global scale.

IT for impact

All around us, IT experts are solving problems, designing solutions and implementing changes that benefit communities and societies.

Monash IT researchers are working with Oxfam to improve the quality of work and life for female farmers in remote communities of Bangladesh through mobile technology.

We’re developing new technologies to make information more accessible to people with severe vision impairment.

Our Cybersecurity Lab is working with the Australian Federal Police to develop a search tool to classify illicit images on the dark web.

A career in IT could be your chance to change the world, too.
MONASH IT
CHOICE, FLEXIBILITY, OPPORTUNITY

With a faculty dedicated solely to the study and research of IT — as well as accredited courses, double degrees, hands-on learning experiences and scholarships — Monash IT is your launch pad to a rewarding career.
AN ENTIRE FACULTY, JUST FOR IT
Monash is the only university in Australia’s prestigious Group of Eight Universities to dedicate an entire faculty to IT study and research. We cover every major area of IT – artificial intelligence, data systems and security, computer software, computational sciences, information systems, mobile and cloud computing, information and knowledge management.

HANDS-ON LEARNING EXPERIENCES
Participate in hands-on learning through your final year team project or through one of our highly sought-after programs such as the Industry Based Learning Program (IBL), Industry Experience, and Monash Industry Team Initiative.
(Some programs are select entry. You’ll find more information on page 12.)

BROADEN YOUR HORIZONS WITH A DOUBLE DEGREE
Double degrees broaden your education and career options. You can combine your IT studies with arts, business, commerce, criminology, design, engineering, fine art, laws or science. Turn to page 10 to find out more.

FACILITIES DESIGNED TO INSPIRE
Monash University is home to some of the best IT facilities available, including SensiLab, our technology-driven, design-focused research lab; the CAVE2™, an immersive hybrid 2D and 3D visualisation platform; and the Cybersecurity Lab, with its focus on different aspects of cybersecurity research.

GENEROUS SCHOLARSHIPS
Monash offers a wide range of scholarships, grants and awards, including Women in IT scholarships, scholarships for Industry Based Learning placements, IT Excellence Scholarships, and IT Indigenous Scholarships. They’re just one of the ways we reward excellence and support students who are disadvantaged. Total $7.3M scholarships (2017). monash.edu/scholarships to find out more.

STUDENT EXCHANGE
160+ partner universities in more than 35 countries.

STAFF AND STUDENTS
150 academic staff (2018)
4918 students (2018).

OPPORTUNITIES FOR TRAVEL
Consider your options for international studies – perhaps a winter semester studying in Prato, Italy, or study in Malaysia with the Monash Study Abroad program.

DEDICATED IT FACULTY
Monash is the only university in Australia’s prestigious Group of Eight universities to dedicate an entire faculty to IT study and research.

FULLY ACCREDITED COURSES
All of our undergraduate courses are accredited by the Australian Computer Society (ACS), which means that when you graduate you can apply for professional-level membership with the ACS.

RANKED TOP 100 IN THE WORLD FOR COMPUTER SCIENCE AND INFORMATION SYSTEMS*
* QS World University Rankings by Subject, 2019.

#1 IN AUSTRALIA FOR ENGINEERING AND TECHNOLOGY*
IT CAREERS

Careers in IT
IT careers are diverse and dynamic. You can take a career in IT almost anywhere in the world, and enjoy excellent financial rewards and abundant job prospects. There are plenty of opportunities to specialise, including business information systems, gaming and app development, cybersecurity or digital humanities. And you can apply your expertise in any field or industry, from banking and finance, through to health, the environment or the arts.

Graduates in demand
IT graduates are in high demand across the world, with new roles constantly emerging. IT professionals enjoy one of the highest average salaries in Australia. Employment projections from the Australian Government Department of Jobs and Small Business show excellent prospects for employment growth across all key areas of the IT sector in Australia for the five years to 2023.

AVERAGE SALARY OF AN IT PROFESSIONAL IN AUSTRALIA

$129,603*


PROJECTED INCREASE IN IT EMPLOYMENT TO 2023

Projected employment growth five years to 2023

- COMPUTER NETWORK PROFESSIONALS: 11.6%
- DATABASE AND SYSTEM ADMINISTRATORS AND ICT SECURITY: 7.6%
- ICT BUSINESS AND SYSTEMS ANALYSTS: 9.5%
- ICT MANAGERS: 13.9%

Source: Australian Government Department of Jobs and Small Business.
These projections coincide with increasing business spending on IT across the globe. The Gartner Worldwide IT Spending Forecast, released in April 2018, indicated that business spending is projected to increase from 3.5 trillion US dollars in 2017 to 3.8 trillion US dollars in 2019 – spending that’s likely to support a significant increase in IT-related employment.

THE CAREER POSSIBILITIES ARE ENDLESS. YOU COULD...

- use big data to investigate the origins of the universe
- use climate modelling to better predict and manage changes in our weather systems
- secure the systems and networks of multinational organisations
- be at the forefront of the next IT led breakthrough in health and medicine
- develop games and work in a team on the next AAA title
- design websites and apps or be at the forefront of emerging digital technologies
- become a business information systems analyst and use big data to guide organisations toward their goals
- develop software integral to controlling flight paths over major world cities

ICT NETWORK AND SUPPORT PROFESSIONALS
MULTIMEDIA SPECIALISTS AND WEB DEVELOPERS
SOFTWARE AND APPLICATIONS PROGRAMMERS
WEB DESIGNERS

15.3% 20.5% 21.0% 12.6%
Scholarships and awards
We pride ourselves in rewarding excellence and supporting students who are disadvantaged. We have an extensive range of scholarships, grants and awards, including scholarships for Women in IT, Industry Based Learning Placement Scholarships, IT Indigenous Scholarships, Merit Scholarships, Excellence Scholarships, and more.

monash.edu/it/ibl
monash.edu/scholarships
GET AMONGST IT

With exposure to world leading researchers working across the spectrum of IT, innovative teaching practices, opportunities to join our IT clubs and societies, and hands on learning, an undergraduate degree with Monash IT is an immersive and inspiring study experience.

Research excellence
At Monash, we’re harnessing IT in our quest to help meet the key global challenges of the 21st century. Our researchers are future focused and in pursuit of ways IT can have a positive global impact on health and medicine, productivity and innovation, and social inclusion.

We’re currently teaming up with Peter MacCallum Institute and The Alfred to investigate optimisation approaches to prostate cancer treatment, using automatic optimisation algorithms that deliver better treatments.

Our blockchain lab, a joint venture with CollinStar Capital and Hong Kong Polytechnic University, is developing a new cryptocurrency called HCash, so it can act as a connecting point for all existing blockchain cryptocurrency systems.

In collaboration with the Monash Energy Materials and Systems Institute (MEMSI), our researchers are harnessing the power of technology to develop innovative products and services for deployment in the energy sector in the future.

These projects are just the tip of the iceberg. An undergraduate degree with Monash IT gives you the opportunity to learn from, and even work alongside, some of these leading experts.

Teaching innovation
Your undergraduate years can be among the most rewarding and challenging years of your life; an opportunity to expand your mind, immerse yourself in learning, and set a course for your future. At Monash, we use innovative teaching models to ensure that your time with us is all of that, and more.

We’re leading the way in studio based learning in IT, which focuses on ‘learning by doing’ in a collaborative environment. We’re using the latest technology to provide interactive learning activities in lectures, and the Peer Assisted Study Sessions (PASS program) was established as an avenue through which students assist other students.

Opportunities abroad – combine study with travel
A career in IT can take you just about anywhere in the world, but why wait until you start working to travel? Monash IT offers a range of opportunities to take your studies overseas.

You can study one or two semesters at Monash campuses in Australia, Italy or Malaysia with the Monash Study Abroad Program — all with guaranteed credit towards your degree. Or spend three weeks at Monash’s Prato campus in Italy, developing a team based interdisciplinary project that draws on Italy’s rich historical, cultural and technological landscape. The Monash Undergraduate Research Projects Abroad program provides further opportunities for travel through research placements with elite international universities. Or you can pair your overseas studies with a Diploma of Languages as part of your elective program and enhance your language development.

monash.edu/study-abroad
Build your community
Student clubs and societies are a rewarding way to get involved in university life and get the best from your undergraduate years. Forge new friendships and connections, enrich your student experience, acquire new skills and knowledge, and open doors to career defining opportunities – all through our network of student organisations.

Commerce and Computing Association (CCA)
Got a passion for networking, public speaking and social events? Monash brings together business and IT students and professionals to host a range of social and career based activities to help prepare students for their future careers and employability.

MonSec
Keen to advance your cybersecurity knowledge? The cybersecurity club MonSec’s main purpose is to develop and encourage cybersecurity awareness and application. Join the club to hear about upcoming events and opportunities, and share your thoughts and experiences.

DiversIT Monash
DiversIT creates a welcoming space for under represented groups in IT, by providing a support network and promoting opportunities both within Monash and in industry. Its social and networking events, industry programs and mentoring programs are all designed to build community, guide career initiatives and create connections with mentors and alumni.
Monash Electronic Gaming Association (MEGA)
Monash’s premier gaming club runs regular weekly gaming sessions, where friends and strangers bond over games. It’s an inclusive club for student gamers of all kinds.

Monash Girl Geek Coffee Club
Monash Girl Geek Coffee Club is an open discussion group that aims to foster relationships, networking and mentoring for women in IT. Expand your network, share stories, find a mentor or become a mentor – all over a relaxed cup of coffee.

WIRED Monash
If you’re curious about all things digital, then Wired is for you. This student club offers networking opportunities, a weekly helpdesk, which assists you in gaining valuable programming experience and a range of social events to help connect you with industry and other students in the IT space.
HANDS-ON EXPERIENCE

Our graduates can be found working across the world in every conceivable field of IT and bringing their Monash IT experience to every other industry and discipline. Because when it’s time to embark on your career in IT, we want you to have knowledge and experience — a powerful combination in a highly competitive job market.
Industry Based Learning (IBL)

We’re a pioneer of IBL and IT in action, and our IBL program has been preparing undergraduate students for more than 30 years. The IBL program provides you with an opportunity to apply what you’ve learnt in the classroom to the workplace, setting you up with the highly sought-after skills in IT. The IBL is open to selected, high performing students (both international and domestic). Successful applicants gain valuable professional and business experience during one or two industry placements. The program is formally assessed and credited, with each IBL placement worth three units in your degree program. Plus, all IBL students receive an A$18,000 scholarship per six month placement. What’s more, we have partnerships with more than 30 leading Australian and global organisations such as PwC, ANZ and Deloitte. Consider the IBL program as the benchmark in work integrated learning.

monash.edu/it/ibl

Peer Mentor Program

The Peer Mentor Program is designed to help new students transition into university life and give current students the opportunity to participate in a mentoring program. Mentors build important leadership and communication skills that are vital to career success.

Industry Experience Program

Our Industry Experience Program provides you with an opportunity to translate what’s learnt in the classroom in a real world setting. In the final year of your course, you’ll apply the knowledge and expertise you’ve acquired to a real world problem and develop new skills via a team based project.

Working collaboratively, your team will:
- manage the project through all of its development stages
- communicate with project stakeholders
- develop project documentation, and present your work to your clients, academics and other groups

Some of our student teams have designed and built mobile apps, full scale games and 3D interactive animations, and tools for capturing, analysing and visualising data streams from online businesses – it’s the perfect opportunity to boost technical, communication, teamwork and time management skills. Our students consistently rank their final year project as the highlight of their course.

Monash Industry Team Initiative (MITI)

MITI provides an outstanding opportunity for selected students to combine academic knowledge with practical application – all while working in a contemporary business environment. The program is an Australian first and unique to Monash.

Multidisciplinary student teams are competitively selected and paired with leading Australian and global industry partners. Students collaborate and design innovative solutions to real issues in today’s business world.

Participants gain valuable exposure to relevant learning opportunities and acquire hands on practical experience that helps them to stand out in the competitive employment market.

miti.monash.edu

While I had so many amazing opportunities at Monash, the chance to complete two Industry Based Learning placements was the most amazing of all. While the scholarship was obviously an attractive aspect of the program, the most incredible part was the rate at which I learnt new things and was challenged. I formed relationships with industry professionals and was offered a graduate position at the end of my first placement – a full year before I was due to graduate.

WILL MANNING
Digital Services, PwC
Bachelor of Business Information Systems*

* Now offered as Bachelor of Information Technology (Business Information Systems)
IT COURSES YOUR WAY

Our undergraduate courses are designed with choice and flexibility in mind, meaning you get to decide how and what you study.

**Choice and flexibility**
From the more broad-based Bachelor of Information Technology, through to specialised courses such as the Bachelor of Computer Science within each degree, you also have the chance to pursue specific areas of interest by undertaking elective units in language studies, psychology, finance or science.

**Courses at a glance**

**Bachelor of Information Technology**
A comprehensive IT degree designed to introduce you to the full spectrum of IT disciplines, while allowing you to tailor your studies by choosing from our broad range of majors, minors and electives.

Specialise from the beginning or take the time to get a general feel for IT before eventually settling on your path.

Application developer, digital storyteller, web designer, business analyst, IT consultant, network administrator – this broad-based degree opens the door to career opportunities in the vast field of IT.

Combine it with another discipline in a double degree, and your career possibilities are limitless.

**Bachelor of Computer Science**
This degree allows you to specialise in advanced computer science or data science.

With this highly specialised degree, you’ll learn to think creatively and analytically – and you’ll learn it from some of the world’s best academics in this field.

Learn how to design algorithms and data structures, and create software that solves real-world problems.

From the way we interpret weather data through to cybersecurity and scientific discoveries that can change lives, computer science is a field offering countless career opportunities.

**Bachelor of Software Engineering (Honours)**
This specialised degree gives you the chance to build on your strong computer science and maths foundations, and gain deep expertise in software processes, architectures, methodologies and quality frameworks.

More than simply writing code, this course places a particular emphasis on collaborative studio based learning, and will give you strong skills in teamwork, project management and communication.

Major companies, governments and organisations depend on smartly designed and well built software – and they rely on the expertise of skilled software engineers to make it happen.

**Bachelor of Applied Data Science**
Developed to meet the demands of a growing industry, this degree is a new, specialist course available at Monash in 2020.

This cross disciplinary degree brings together the key subjects from Mathematics, Science and Computer Science and combines them with new Data Challenges subjects. Students then apply these theories to classroom-based project work.

Through selected streams, and working in groups and individual projects, you’ll develop your passion for the physical sciences, sociological or anthropological studies, business or engineering.

This course is offered through the Faculty of Science.

**Bachelor of Applied Data Science Advanced (Honours)**
This is an advanced degree program for those passionate about applied data science.

This four-year specialist course brings together studies in IT and mathematics in a series of interdisciplinary problem-solving challenges.
I realised quite early on in my degree the assets I had for future employers were my soft skills, so I sought to improve my leadership and teamwork skills. I’m involved in the Ancora Imparo Leadership Program, the Student Engagement Committee and as a Super Peer Mentor for new IT students at Monash.

These opportunities have opened so many doors for me, including employment offers, more leadership opportunities and potential internships. This experience allowed me to find a part-time job in web and VoIP development, which I thoroughly enjoy. I’m very excited to see where this experience will take me in the future.

ZOE HIGGINS
Bachelor of Computer Science (Advanced Computer Science)
DOUBLE DEGREES

Become an expert in two fields by choosing a double degree. Our double degrees allow you to study towards two different bachelor’s degrees at the same time, providing you with greater career flexibility and opportunities.
DOUBLE THE EXPERTISE – NOT DOUBLE THE WORK

It’s a common misconception that a double degree must be more work, but your study load won’t be any greater than if you were undertaking a single degree. Your studies will last a little longer, but in most cases, only one extra year of study is required to graduate with two bachelor’s degrees. In fact, a double degree takes at least two years less to complete than if you studied the two degrees successively. This is because the required units from one course count as electives in the partner course.

Arts
The globalising nature of IT industry calls out for people who have a strong understanding of the technical and human factors that are shaping it. As a graduate of this double degree, you’ll have the expertise to shape and manage emerging technologies backed by your studies in arts and humanities.

Business
Combining business and IT gives you the skills to apply business principles and knowledge across the IT sector or to assist businesses in implementing new technology to operate successfully in a global market that changes rapidly.

Commerce
Commerce and IT are inseparable in the commercialised world. The pressure for more advanced technology is intense, and people with the skills to understand and apply new technology in large corporations are in high demand.

Criminology
Crime, how we define it, understand its causes, and the ways we respond to it provides a window into a society’s challenges. IT seeks people with a strong technical background and deep understanding of human society. This double degree equips you with industry-relevant specialist skills to prepare for working and living in a world of constant technological change.

Design
Design and IT are a perfect match leading to creative and exciting careers. Together, they provide a powerful blend of highly valuable skills and knowledge. A combination of creativity and technology will challenge you to link your lateral thinking and problem-solving skills.

Engineering
In an age of increasing technological advancements, the synergy between engineering and IT will only become stronger. IT underpins engineering practice in all disciplines, and industry needs graduates with skills and expertise spanning both.

Fine Art
Use your IT skills to push the boundaries of what’s possible in artistic practice. From innovative design tools to digital artistic expression, you have the opportunity to take advantage of the growing intersection of IT and art.

Laws
This double degree presents opportunities for you in the evolving fields of legislative responses to computer science innovation, and the computerisation of legal decision-making and procedures.

Science
Technology is driving many of the changes in science, so it’s an exciting time to combine the study of computer science with any of the emerging or traditional areas of science. Science is increasingly relying on powerful computers to collect, store and analyse large volumes of data.

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<th>Double degree options</th>
<th>Arts</th>
<th>Business</th>
<th>Commerce</th>
<th>Criminology</th>
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<td><strong>Computer Science</strong></td>
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The Bachelor of Information Technology is a highly practical course that gives you the problem solving skills to drive the tech revolution in the way we communicate, conduct business and experience the world.

You’ll learn from the best, develop your strengths and explore new areas through our comprehensive range of majors, minors and double degrees.

Your studies will culminate in your final year project where you’ll get to put into practice all the skills and knowledge you’ve gained through our Industry Experience program. You’ll hit the ground running with your exciting new career in IT.

Alternatively, you can apply for our highly regarded Industry Based Learning (IBL) program. Successful applicants can undertake one or two half year industry placements with leading Australian and global organisations. These placements count towards your course and are supported by a generous $18,000 scholarship (per placement).

**Double degrees**
- Arts
- Business
- Commerce
- Criminology
- Design²
- Engineering²
- Fine Art²
- Laws (Honours)
- Science

**Careers**
Business analyst, cybersecurity specialist, web developer, cloud architect, project manager, animator, computer forensic investigator, games/interactive media developer.

**YOUR CHOICE OF MAJORS AND MINORS**
Majors and minors allow you to specialise within the Bachelor of Information Technology. You can try a range of subjects in your first year before choosing your major, and then add:
- a second major, or
- one or two minors, or
- electives.

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<th>Majors and Minors³</th>
<th>Major</th>
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1 The scores provided are to be used as a guide only and are either the lowest selection rank to which an offer was made in 2019 or an Estimate (E).
2 This double degree isn’t available with all majors and/or specialisations; see monash.edu/study for full details.
3 Some majors and minors require Year 12 or first year mathematics.
4 Digital humanities can also be taken as a second major.
AVAILABLE AS A MAJOR, MINOR OR EXTENDED MAJOR*

**Business information systems***
Develop a thorough understanding of business information systems, fundamental business IT concepts, and how IT can be used to tackle business needs.

* Available as an extended major

**Computer networks and security***
Acquire the in demand technical expertise to develop secure software and security measures to protect information and keep organisations resilient and operational.

* Available as an extended major

**Games development**
Learn the processes and technologies used in the development of games in a collaborative studio environment using advanced technology.

**Interactive media**
Build upon your foundation studies with digital imaging, sound and video, 3D modelling and interactive media. Add a creative element to your more technical IT studies.

**Software development***
Gain the technological skills needed to create robust software for a range of platforms, from mobile apps to web services and large scale enterprise systems.

* Available as an extended major
Data science
Explore the capture, management and use of huge volumes of digital data generated by businesses, large organisations and in science, and the technical areas of programming, databases, modelling, visualisation and analysis.

Data science is a cutting edge area of study in the fast-paced digital age. Explore the capture, management and use of large volumes of data, and learn technical areas such as programming, databases, modelling, visualisation and analysis.

Cybersecurity
Learn the theory and practical programming skills needed to protect private and public digital networks, including infrastructure, sensitive information and communications.

From government bodies to large enterprises, cybersecurity is critical in our connected world. This minor provides the technical depth of knowledge for those seeking a career in this important and expanding field of work.

Computer science
Learn to think creatively and analytically to design algorithms and data structures that solve real-world problems.

Digital humanities
Learn how to analyse and create content with the arts and technology, such as 3D modelling, game design, augmented reality and digital storytelling.

This new multidisciplinary minor combines the expertise of the faculties of Art, Information Technology, and Art. Design and Architecture to analyse and create content with art and technology such as 3D modelling, game design, augmented reality and digital storytelling.

Games design
Build the underlying principles of game design in an exciting field that doesn’t just need enthusiastic coders but passionate and creative designers as well.

Mobile apps development
Whether it’s to solve a problem or purely for fun, learn programming skills to create software on mobile devices.

IT for business
This minor equips you with practical technical IT skills to enhance your career prospects in business.

Software engineering
This minor will enable you to apply the tools, processes, management methods and quality-assurance techniques required to deliver robust and reliable software on time and within budget.

Web development
Web development skills are transportable to almost any career – this minor is your chance to be at the forefront of the online revolution. Learn to design, develop and manage websites using information management skills in the creation of high quality user interfaces.
BACHELOR OF COMPUTER SCIENCE

Who are computer scientists?
With the Bachelor of Computer Science, you’ll graduate with the skills to design data, develop algorithms (instructions for computers), and create software to solve big problems. Computer scientists and their creations are everywhere. They’re behind the weather reports, they design search engines, create animations that capture the imagination, and shape the cybersecurity mechanisms that protect global organisations. No other career pushes the boundaries of innovation more than computer science – it’s rated one of the top 10 jobs to pursue in 2020 (ZDNet; The 10 IT jobs that will be most in-demand in 2020).

Double degrees
- Commerce
- Engineering³
- Laws (Honours)
- Science

Find out more: monash.edu/study

Majors
Advanced computer science
If you enjoy solving problems that require analytical thinking with a mathematical and technical bent and want to use your talents to address challenging problems, then a major in advanced computer science is for you. You’ll graduate with the theory and practice necessary for creating substantial pieces of software.

Data science
Data science is a cutting-edge specialisation exploring the capture, management and use of large volumes of data. You’ll have access to some of the biggest names in big data here at Monash. With the largest cohort of data scientists of any research institution in the Asia-Pacific region, you’ll gain a deep understanding of the theory of computation, its foundations and practical applications to excel in your chosen career path.

Careers
Specialist programmer, software developer, machine learning engineer, forensic computer analyst, database administrator, IT consultant, data analytics specialist.

Prerequisite studies
VCE
English: Units 3 and 4: a study score of at least 30 in English (EAL) or 25 in English other than EAL.
Maths: Units 3 and 4: a study score of at least 25 in either Mathematical Methods or Specialist Mathematics.

IB
English: At least 4 in English SL or 3 in English HL or 5 in English B SL or 4 in English B HL.
Maths: At least 4 in Mathematics SL or 3 in Mathematics HL or 3 in Further Mathematics HL.

CRICOS: 079306A

Accredited by the Australian Computing Society.

1 The scores provided are to be used as a guide only and are either the lowest selection rank to which an offer was made in 2019 or an Estimate (E).
2 The degree you are awarded will reflect your chosen specialisation.
3 This double degree is not available with all specialisations.
BACHELOR OF COMPUTER SCIENCE ADVANCED (HONOURS)

Discover the world of digital research and development

This honours version of the Bachelor of Computer Science is for high achieving students with a research focus. It offers you all the benefits of the advanced computer science specialisation, including the same opportunities to gain valuable industry experience, plus a stream of hands on projects that engage you in research.

In your fourth year, you’ll undertake a substantial individual research project with your own academic supervisor, and you’ll develop the exceptional programming and analysis skills and the research capabilities needed for graduate study or a career in the expanding world of digital research and development.

Graduating with honours will not only enhance your employment opportunities, it also means you can complete a master’s degree in just one additional year, and it provides excellent preparation for a PhD program.

Careers

Data engineer, specialist programmer, IT consultant, chief information officer, scientific researcher, technical analyst, data architect.

Clayton
4 years full time, 8 years part time
February
ATAR¹: 95
IB¹: 37
MG¹: 90
Specialist
Bachelor of Computer Science Advanced (Honours)

PREREQUISITES

VCE
English: Units 3 and 4: at least 30 in English (EAL) or 25 in English other than EAL.
Maths: Units 3 and 4: a study score of at least 25 in either Mathematical Methods or Specialist Mathematics.

IB
English: At least 4 in English SL or 3 in English HL or 5 in English B SL or 4 in English B HL.
Maths: : At least 4 in Mathematics SL or 3 in Mathematics HL or 3 in Further Mathematics HL.

CRICOS: 08535G

Accredited by the Australian Computing Society.
Data Science is big business
In the information age where big data is ever changing and ever challenging, graduates skilled in data science are highly sought. If you’re interested in mastering big data, then applying your studies to data science is for you. Developed to meet the demands of a growing industry, the Bachelor of Applied Data Science is a new, specialist course available at Monash Clayton Campus, in 2020.

Are you interested in maths?
This cross-disciplinary degree will provide a deeper understanding of the mathematics underlying computer science. It brings together the key mathematics subjects from other Science and Information Technology degrees and combines them with newly developed data challenges where students apply these theories to classroom-based project work.

Data challenges
Each year you will complete a series of challenges making you ready to approach the professions of the future. Each challenge requires you to apply your and leadership and entrepreneurial skills to case studies and develop your technical know-how in being able to approach data challenges. These are completed through classroom-based project work.

A career in any industry
Through selected streams, and working in groups and individual projects, you’ll develop your passion for the physical sciences, sociological or anthropological studies, business or engineering.

PREREQUISITES
VCE
English: Units 3 and 4: a study score of at least 30 in English (EAL) or 25 in English other than EAL.
Maths: Units 3 and 4: a study score of at least 25 in Mathematical Methods (any) or Specialist Mathematics.

IB
English: At least 4 in English SL or 3 in English HL or 5 in English B SL or 4 in English B HL.
Maths: At least 4 in Mathematics SL or 3 in Mathematics HL or 3 in Further Mathematics HL.

VTAC SUBJECT ADJUSTMENT BONUS
Improve your ranking and eligibility with additional points towards your ATAR aggregate. This bonus rewards students studying more than one of the following Year 12 science subjects: Algorithms (HESS), Biology, Chemistry, Environmental Science or Physics.

1 The scores provided are to be used as a guide only, and are either the lowest selection rank to which an offer was made in 2019 or an estimate (E).
BACHELOR OF APPLIED DATA SCIENCE ADVANCED (HONOURS)

Advanced Degree program
Research and analysis into big data have the capacity to make a positive impact on our daily lives. If you are really passionate about Data Science then consider an advanced degree program.

This specialist course adds an additional year of advanced practice to the three-year Bachelor of Data Science degree.

The Frontiers of Data Science
Highlighting further study in research methods, theory of Data Science and a high-level industry research project, the Honours degree brings together the studies from the Bachelor degree into an advanced series of interdisciplinary problem-solving challenges.

Careers for Graduates
Graduates with Data Science skills are in high demand. Possible careers for graduates could include:

- Business intelligence analyst
- Chief data officer
- Data analyst
- Data architect
- Data mining engineer
- Data scientist
- Quantitative analyst
- Quantitative researcher

In a range of industries, including:

- Digital humanities
- Consulting
- Cybersecurity
- Law
- Scientific research
- Marketing
- Robotics
- Engineering
- Business analytics
- Banking

1. The scores provided are to be used as a guide only, and are either the lowest selection rank to which an offer was made in 2019 or an estimate (E).
BACHELOR OF SOFTWARE ENGINEERING (HONOURS)

Software Engineering is a project-rich specialisation designed to address industry demand for tech-savvy graduates who possess large-scale software systems project capability. This course is part of the Bachelor of Engineering (Honours), and is taught by Monash IT.

Learn to apply engineering principles to systematically analyse, develop and improve software to ensure it runs effectively, safely and securely.

Acquire high-level programming expertise, but you’ll also learn that software engineering goes well beyond just writing code.

Develop strong skills in teamwork, project management and communication through an emphasis on collaborative studio-based learning.

Graduate with a degree accredited by the Australian Computer Society and Engineers Australia.

Open the door to exciting opportunities for research and development.

**Who are software engineers?**
Software engineering is an exciting field of study that’s constantly evolving as new technologies emerge. At the heart of it are the skilled software engineers who design and create the cutting-edge IT software systems that our world relies on. You’ll see their work everywhere, such as dispensing medicines and controlling flight paths. Major corporations, governments and organisations depend on smartly designed and well-built software.

In your first year you’ll undertake the engineering common first year², where you’ll immerse yourself in hands-on design-and-build activities, including building mobile apps. From second year onwards, you’ll focus on software engineering, with a combination of core and elective units.

**Double degrees**
- Arts
- Commerce
- Computer Science³
- Information Technology³
- Science

For further details [monash.edu/study](http://monash.edu/study)

**Careers**
Software developer, software engineer, software architect, network administrator, user interface designer, business analyst, software tester, programmer analyst, software project manager, configuration control manager.

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1 The scores provided are to be used as a guide only and are either the lowest selection rank to which an offer was made in 2019 or an Estimate (E).

2 For further information on the engineering common first year, please refer to the Engineering Undergraduate Course Guide or visit [monash.edu/engineering](http://monash.edu/engineering).

3 The double degree is not available with all majors and/or specialisations.
UNDERGRADUATE COURSES AT A GLANCE

All Monash undergraduate courses require you to have previously studied and achieved required standards in certain specified subjects.

Academic prerequisite subjects

The table below outlines the requirements, and the course listing tells you which categories apply to each course. Note that some courses have special requirements such as folios, special admissions tests or interviews. Make sure you check if this applies to your course of choice in the courses section of this guide.

<table>
<thead>
<tr>
<th>Units 3 and 4: a study</th>
<th>Mathematics</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>score of at least 35 in</td>
<td>Units 1 and 2: satisfactory completion in two units (any combination) of General Mathematics or Mathematical Methods or Specialist Mathematics</td>
<td>Units 3 and 4: a study score of at least 25 in one of Science approved list, unless otherwise stated</td>
</tr>
<tr>
<td>English (EAL) or 30 in</td>
<td>Units 1 and 2: satisfactory completion in two units (any combination) of General Mathematics or Mathematical Methods or Specialist Mathematics</td>
<td>Units 3 and 4: a study score of at least 25 in one of Science approved list, unless otherwise stated</td>
</tr>
<tr>
<td>English other than EAL</td>
<td>English A: Language, or English A: Language and Literature, or Literature and Performance, OR</td>
<td>At least 4 at SL or 3 at HL in Science approved list, unless otherwise stated</td>
</tr>
<tr>
<td>At least 3 in one of the</td>
<td>At least 4 at SL or 3 at HL in Science approved list, unless otherwise stated</td>
<td></td>
</tr>
<tr>
<td>following HL subjects:</td>
<td>At least 4 in one of the following HL subjects:</td>
<td>At least 4 in one of the following HL subjects:</td>
</tr>
<tr>
<td>English A: Literature, or</td>
<td>English A: Language, or English A: Language and Literature, or</td>
<td>Mathematics, or</td>
</tr>
<tr>
<td>English A: Language and Literature, or</td>
<td>Literature and Performance, OR</td>
<td>Mathematics: Analysis and Approaches, OR</td>
</tr>
<tr>
<td>At least 5 in one of the</td>
<td>At least 4 in one of the following SL subjects:</td>
<td>One of biology, chemistry, environmental science, physics, geography, psychology or higher level mathematics (or Australian Year 12 equivalent unless otherwise stated)</td>
</tr>
<tr>
<td>following SL subjects:</td>
<td>* English A: Literature, or</td>
<td></td>
</tr>
<tr>
<td>* English A: Language, or</td>
<td>* English A: Language and Literature, or</td>
<td></td>
</tr>
<tr>
<td>* Literature and Performance, OR</td>
<td>* Literature and Performance, OR</td>
<td></td>
</tr>
<tr>
<td>At least 4 in one of the</td>
<td>At least 4 in one of the following SL subjects:</td>
<td>Mathematics, or</td>
</tr>
<tr>
<td>following HL subjects:</td>
<td>* English A: Literature, or</td>
<td></td>
</tr>
<tr>
<td>* English A: Language and Literature, OR</td>
<td>* English A: Language and Literature, OR</td>
<td></td>
</tr>
<tr>
<td>At least 6 in one of the</td>
<td>At least 5 in the following HL subject:</td>
<td></td>
</tr>
<tr>
<td>following SL subjects:</td>
<td>* English B, OR</td>
<td></td>
</tr>
<tr>
<td>* English AB, or</td>
<td>At least 5 in the following HL subject:</td>
<td></td>
</tr>
<tr>
<td>* English B, OR</td>
<td>* English B, OR</td>
<td></td>
</tr>
<tr>
<td>At least 4 in the</td>
<td>At least 5 in the following HL subject:</td>
<td></td>
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<tr>
<td>following HL subject:</td>
<td>* English B, OR</td>
<td></td>
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<tr>
<td>* English B.</td>
<td>At least 5 in the following HL subject:</td>
<td></td>
</tr>
<tr>
<td>* English B.</td>
<td>* English B, OR</td>
<td></td>
</tr>
<tr>
<td>Higher score in English</td>
<td>Mathematics (Australian Year 11 equivalent).</td>
<td></td>
</tr>
<tr>
<td>(Australian Year 12 equivalent).</td>
<td>Mathematics (Australian Year 12 equivalent).</td>
<td></td>
</tr>
<tr>
<td>Higher level</td>
<td>Higher level</td>
<td></td>
</tr>
<tr>
<td>mathematics (Australian Year 12 equivalent).</td>
<td>mathematics (Australian Year 12 equivalent).</td>
<td></td>
</tr>
<tr>
<td>One of biology, chemistry, environmental science, physics, geography, psychology or higher level mathematics (or Australian Year 12 equivalent unless otherwise stated)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Some double degree courses may require you to study across two campuses in order to complete your course. To be eligible for admission to a double degree course, you’ll need to meet the academic entry requirements for both single degree courses. All scores are to be used as a guide only.

For detailed international, non-school leaver requirements, and double degree entry requirements, visit monash.edu/study

M Master’s accelerated pathway  T Indigenous entry pathway

CL – Clayton  CA – Caulfield  PE – Peninsula  PA – Parkville  RC – Range of criteria  E – Estimated: the provided score is estimated and is to be used as a guide only.

1 Duration is based on a standard full-time load of 48 credit points per annum.
2 Science approved list: VCE: Biology, Chemistry, Environmental Science, Geography, Mathematical Methods (any), Specialist Mathematics, Physics or Psychology. IB (SL or HL): Biology, Chemistry, Environmental Systems and Societies (SL only), Further Mathematics (HL only), Geography, Mathematics: Analysis and Approaches (HL only), Mathematics: Applications and Interpretations (HL only), Physics or Psychology.
3 Indicative – The provided score is the 2019 lowest ATAR to which an offer was made, or and Estimate (E), and is to be used as a guide only.
4 Depending on your Arts major, you may take the Arts component at Clayton or Caulfield.
5 This course has additional selection requirements: see monash.edu/study
6 The Bachelor of Laws (Honours) is an accelerated course where you’ll be required to undertake more than the standard annual load of 48 credit points in year two and/or year three in order to complete the course in four calendar years.
## DOMESTIC ADMISSIONS AND ATARS

<table>
<thead>
<tr>
<th>Course</th>
<th>Duration (years)</th>
<th>English</th>
<th>Mathematics</th>
<th>Science</th>
<th>Prerequisites (refer to table on page 28)</th>
<th>Degree awarded</th>
<th>Location</th>
<th>Indicative ATAR</th>
<th>Indicative IB score</th>
<th>Monash Guarantee</th>
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</thead>
<tbody>
<tr>
<td><strong>SINGLE DEGREES</strong></td>
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<tr>
<td>Engineering</td>
<td>4</td>
<td></td>
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<td></td>
<td>Chemistry of Physics</td>
<td>Bachelor of Software Engineering (Honours)</td>
<td>CL, CA</td>
<td>86.60</td>
<td>31</td>
<td>75</td>
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<tr>
<td>Computer Science</td>
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<td>Bachelor of Computer Science</td>
<td>CL, CA</td>
<td>84.40</td>
<td>30</td>
<td>75</td>
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<td>Computer Science Advanced</td>
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<td></td>
<td></td>
<td>Bachelor of Computer Science in Data Science</td>
<td>CL, CA</td>
<td>95</td>
<td>37</td>
<td>90</td>
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<tr>
<td>Information Technology ^</td>
<td>3</td>
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<td></td>
<td></td>
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<td>Bachelor of Information Technology</td>
<td>CL, CA</td>
<td>80.15</td>
<td>29</td>
<td>75</td>
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<tr>
<td>Applied Data Science</td>
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<td></td>
<td></td>
<td>30+ in Math Methods or Specialist Maths</td>
<td>Bachelor of Applied Data Science</td>
<td>CL, CA</td>
<td>E:85</td>
<td>E:31</td>
<td>75</td>
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<tr>
<td>Applied Data Science Advanced</td>
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<td></td>
<td></td>
<td>Bachelor of Applied Data Science Advanced (Honours)</td>
<td>CL, CA</td>
<td>E:90</td>
<td>E:33</td>
<td>90</td>
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<tr>
<td><strong>DOUBLE DEGREES</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Business / Information Technology</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bachelor of Business and Bachelor of Information Technology</td>
<td>CL, CA</td>
<td>86.60</td>
<td>31</td>
<td>75</td>
</tr>
<tr>
<td>Commerce / Computer Science</td>
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<td></td>
<td></td>
<td></td>
<td>Bachelor of Commerce and Bachelor of Computer Science</td>
<td>CL, CA</td>
<td>96.95</td>
<td>39</td>
<td>88</td>
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<tr>
<td>Commerce / Information Technology</td>
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<td></td>
<td>Bachelor of Commerce and Bachelor of Information Technology</td>
<td>CL, CA</td>
<td>92.45</td>
<td>35</td>
<td>86</td>
</tr>
<tr>
<td>Criminology / Information Technology</td>
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<td></td>
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<td>Bachelor of Criminology and Bachelor of Information Technology</td>
<td>CL, CA</td>
<td>80.70</td>
<td>29</td>
<td>75</td>
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<tr>
<td>Design / Information Technology</td>
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<td></td>
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<td></td>
<td>Bachelor of Communication Design and Bachelor of Information Technology</td>
<td>CL, CA</td>
<td>88</td>
<td>32</td>
<td>75</td>
</tr>
<tr>
<td>Engineering / Computer Science</td>
<td>5</td>
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<td></td>
<td>Chemistry of Physics</td>
<td>Bachelor of Electrical and Computer Systems Engineering (Honours) and Bachelor of Computer Science</td>
<td>CL, CA</td>
<td>93.30</td>
<td>35</td>
<td>88</td>
</tr>
<tr>
<td>Engineering / Information Technology</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>Chemistry of Physics</td>
<td>Bachelor of Electrical and Computer Systems Engineering (Honours) and Bachelor of Information Technology</td>
<td>CL, CA</td>
<td>92.20</td>
<td>35</td>
<td>86</td>
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<tr>
<td>Fine Art / Information Technology</td>
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<td></td>
<td>Bachelor of Visual Arts and Bachelor of Information Technology</td>
<td>CL, CA</td>
<td>E:85 RC</td>
<td>E:31 RC</td>
<td>75 RC</td>
</tr>
<tr>
<td>Information Technology / Arts ^</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bachelor of Information Technology and Bachelor of Arts</td>
<td>CL, CA</td>
<td>86.70</td>
<td>31</td>
<td>75</td>
</tr>
<tr>
<td>Information Technology / Science</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bachelor of Information Technology and Bachelor of Science</td>
<td>CL, CA</td>
<td>85.30</td>
<td>31</td>
<td>75</td>
</tr>
<tr>
<td>Laws / Computer Science</td>
<td>5.25 ^</td>
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<td>Bachelor of Laws (Honours) and Bachelor of Computer Science</td>
<td>CL, CA</td>
<td>E:98</td>
<td>E:40</td>
<td>94</td>
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<tr>
<td>Laws / Information Technology</td>
<td>5.25 ^</td>
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<td>Bachelor of Laws (Honours) and Bachelor of Information Technology</td>
<td>CL, CA</td>
<td>E:98</td>
<td>E:40</td>
<td>94</td>
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<tr>
<td>Science / Computer Science</td>
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<td></td>
<td>Bachelor of Science and Bachelor of Computer Science</td>
<td>CL, CA</td>
<td>85</td>
<td>31</td>
<td>75</td>
</tr>
</tbody>
</table>
# 2020 INTERNATIONAL ENTRY REQUIREMENTS

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Bachelor of Information Technology C2000</th>
<th>Bachelor of Computer Science C2001</th>
<th>Bachelor of Computer Science Advanced (Honours) C3001</th>
<th>Bachelor of Applied Data Science Science S2910</th>
<th>Bachelor of Applied Data Science Science S3003</th>
<th>Bachelor of Software Engineering (Honours) E3001</th>
<th>Calculation of Score</th>
<th>Minimum English language entry requirements</th>
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<tbody>
<tr>
<td>Entry Score</td>
<td>Overall average of the best four academic subjects (excluding Physical Education) and results indicated as ‘PA22’.</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>70% 75% 83% 75% 83% 81%</td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>2020 ATAR For International Students (Australian Year 12)</td>
<td>75 80 90 80 90 87.5</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>GCE A Level</td>
<td>8 9 12 9 12 11</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total score of a maximum of the best three A Level subjects examinations taken within two years. Two AS Level subjects can be counted in place of one A Level subject, provided that the subject has not been taken at A Level, and there is at least one A Level subject included in the calculation. AS Level results cannot be used to replace a poor performance in an A Level subject. Score A Level grades as follows: A*(a*)=5, A(a)=5, B(b)=4, C(c)=3, D(d)=2, E(e)=1, U=0. Score AS Level grades as follows: a1=2.5, b1=2, c1=1.5, d1=1, e1=0.5, U=0. N Narrow failure and U (Unclassified) are not to be included in the calculation. A maximum of 1 bonus point is offered when achieving A* in an A Level subject. GCE A Levels must be awarded by: Cambridge Assessment International Examinations (CAIE) (previously known as CIE), Pearson Edexcel (previously known as Edexcel), Council for the Curriculum, Examinations and Assessment, Oxford, Cambridge and RSA Examinations, Welsh Joint Education Committee or Assessment and Qualifications Alliance.</td>
<td></td>
<td></td>
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<td></td>
<td>* B grade in IGCSE English as a Second Language, OR</td>
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<tr>
<td></td>
<td>Final ATAR as awarded by the relevant Australian state Year 12 authority.</td>
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<tr>
<td>Hong Kong Diploma of Secondary Education</td>
<td>17 18 21 18 21 20</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Total score of the best five subjects # (Category A and C only). Scores grades as follows: Level 1 = 1, Level 2 = 2, Level 3 = 3, Level 4 = 4, Level 5 = 5 or A = 5, B=4, C=3, D=2, E=1. A maximum of 1 bonus point is offered when achieving Level 5** or Level 5* in a HKDSE Category A subject. # Subject examinations taken within two years may include more than one sitting. For example, subject examinations in June 2014 until June 2016 are acceptable.</td>
<td></td>
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<tr>
<td>Indian School Certificate Examination</td>
<td>65% 70% 77% 70% 77% 76%</td>
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<tr>
<td></td>
<td>Overall average of the best four academic subjects (excluding Physical Education) and results indicated as ‘PASS CERTIFICATE AWARDED’. 60% in English.</td>
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<td>International Baccalaureate (IB) Diploma</td>
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<tr>
<td>Monash University Foundation Year (MUFY)</td>
<td>70% 70% NA 72.5% 80% 76.25%</td>
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<tr>
<td></td>
<td>To calculate the average mark required for the Monash University destination degree, refer to the ‘How to calculate your Foundation Year score’ information available at: monashcollege.edu.au/courses/program-destination-degrees. The undergraduate entry requirements published in this brochure are for students who commence the MUFY program in 2020.</td>
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<tr>
<td>National Certificate of Educational Achievement Level 3, New Zealand</td>
<td>To view NCEA entry requirements, refer to: monash.edu/admissions/entry-requirements/nz-ncea-entry-requirements</td>
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</table>

In addition to the above entry requirement (i.e. entry score and minimum English language requirements) students must also satisfy the following prerequisite requirements:
- Bachelor of Information Technology C2000 requires mathematics [Australian Year 11 equivalent]
- Bachelor of Computer Science C2001, Bachelor of Computer Science Advanced (Honours) C3001, Bachelor of Applied Data Science Science S2910 (owned by the Faculty of Science)
- Bachelor of Software Engineering (Honours) E3001 (owned by the Faculty of Engineering) requires higher level mathematics and chemistry or physics (all Australian Year 12 equivalent)
- Bachelor Applied Data Science Advanced (Honours) (owned by the Faculty of Science) requires a higher score in higher level mathematics (Australian Year 12 equivalent).

Other international qualifications entry requirements can be found at monash.edu/prior-study

Please note that all entry requirements for Monash University are subject to change.

For detailed international, non-school leaver requirements, and double degree entry requirements, visit monash.edu/study
<table>
<thead>
<tr>
<th>Qualification</th>
<th>Entry Score</th>
<th>Calculation of Score</th>
<th>Minimum English language entry requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario Secondary School Diploma – Grade 12, Canada</td>
<td>78.5% 81.6% 87.9% 81.6% 87.9% 86.3%</td>
<td>Overall average of the best six academic Grade 12 subjects excluding workplace preparation courses and open courses. Students must achieve a minimum total of 30 credits and complete Community Involvement.</td>
<td>50% in Grade 12 English (course code ENG4C) or English University Preparation (course code ENG0U).</td>
</tr>
<tr>
<td>High School Diploma (Bằng Tốt nghiệp Trung Học Phổ Thống), Vietnam</td>
<td>8.14 8.28 8.56 8.28 8.56 8.49</td>
<td>Overall average of all Grade 12 subjects.</td>
<td>Submission of an approved English language proficiency test (such as an Academic IELTS or equivalent) with the required scores. Refer to the Monash Find a course to locate the Monash courses English language proficiency test requirements: monash.edu/study/courses/entry-score</td>
</tr>
<tr>
<td>SAT (Scholastic Aptitude Test) (Total Score out of 1600)³⁴</td>
<td>1600 1600 1810 1650 1800 1770</td>
<td>Total score out of 2400: Total score obtained by adding the highest section scores²⁸ by adding the best scores achieved for “Critical Reading,” “Mathematics” and “Writing” across all SAT examinations submitted to Monash University. The following documents must also be submitted: • Official final SAT examination issued by The College Board, and • Official final academic transcript and Diploma Certificate for the American High School Diploma (or equivalent Australian Year 12 qualification)²⁷.</td>
<td>Pass average in Grade 12 English or Grade 12 English Rich subject²⁶ or AP examination score of 3 in AP English Literature and Composition (a score of 3 must be achieved in each AP examination). The acceptance of Grade 12 English Rich subjects are subject to faculty approval.</td>
</tr>
<tr>
<td>SAT (Scholastic Aptitude Test) (Total Score out of 1600)³⁴</td>
<td>1160 1190 1290 1190 1290 1270</td>
<td>Total score out of 1600. Total score obtained by adding the highest section scores²⁸ by adding the best scores achieved for “Evidence Based Reading and Writing” and “Math”²⁹ across all SAT examinations submitted to Monash University. The following documents must also be submitted: • Official final SAT examination issued by The College Board, and • Official final academic transcript and Diploma Certificate for the American High School Diploma (or equivalent Australian Year 12 qualification)²⁷.</td>
<td>Submission of an approved English language proficiency test (such as an Academic IELTS or equivalent) with the required scores. Refer to the Monash Find a course to locate the Monash courses English language proficiency test requirements: monash.edu/study/courses/entry-score</td>
</tr>
<tr>
<td>SMA3, Indonesia – on a 100% scale where 60% is a pass.</td>
<td>80% 83% 88% 83% 88% 87.5%</td>
<td>Overall average of Semester 1 and Semester 2 Grade 12 results. Note: Monash University undergraduate entry scores vary for SMA3 qualifications that are marked on differing grading scales.</td>
<td>Submission of an approved English language proficiency test (such as an Academic IELTS or equivalent) with the required scores. Refer to the Monash Find a course to locate the Monash courses English language proficiency test requirements: monash.edu/study/courses/entry-score</td>
</tr>
<tr>
<td>STPM, Malaysia</td>
<td>7.9 8.5 9.7 8.5 9.7 9.4</td>
<td>Total of the best three subjects, excluding Pendidikan Am (General Studies).</td>
<td>C grade in GCE O Level English Language – 1119 (STPM)</td>
</tr>
<tr>
<td>UEC, Malaysia</td>
<td>5 4.2 2.6 4.2 2.6 3</td>
<td>Overall average of the best five subjects. Only grades A1, A2, B3, B4, B5 and B6 to be included in calculation. C7, C8 and F9 cannot be included in the calculation. Five subjects must be included in the calculation with a score of B6 grade or higher in each subject. Score grades as follows: A1=1, A2=2, B3=3, B4=4, B5=5, B6=6. It should be noted that a score of A1 is the highest score.</td>
<td>Submission of an approved English language proficiency test (such as an Academic IELTS or equivalent) with the required scores. Refer to the Monash Find a course to locate the Monash courses English language proficiency test requirements: monash.edu/study/courses/entry-score</td>
</tr>
<tr>
<td>UNSW Foundation Studies</td>
<td>7 7.0 7.5 7.5 8.5 8.25</td>
<td>Final grade point average.</td>
<td>C grade in Academic English.</td>
</tr>
<tr>
<td>University of Melbourne Trinity College Foundation Studies</td>
<td>72% 77% N/A 77% 86% 83%</td>
<td>Overall average of the best four subjects (excluding English for Academic Purposes).</td>
<td>85% in English and 50% in English for Academic Purposes.</td>
</tr>
</tbody>
</table>

1 Additional Requirements for SAT: The American High School Diploma cannot be accepted independently for admission into Monash University. Schools that offer the American High School Diploma outside the United States of America must be accredited by the Advanced Ed or an equivalent regional accrediting agency in the United States of America as follows: Middle States Association of Colleges and Schools, New England Association of Schools and Colleges, North Central Association of Colleges and Schools, Northwest Commission on Colleges and Universities, Northwest Accreditation Commission, Western Association of Schools and Colleges, Southern Association of Colleges and Schools. If a student has undertaken multiple American Admissions Tests i.e. SAT, AP or ACT, the test with the highest achieved scores will be considered as meeting Monash University undergraduate entry requirements.

2 Students who have undertaken an American Admissions Test (i.e. SAT, AP or ACT) with another international qualification equivalent to an Australian Year 12 will be considered for Monash University undergraduate admission, however the qualification or American Admission Test with the highest achieved score will be used to determine whether the student has met the entry requirements. Students who have undertaken an accredited final secondary school leaving award that is not equivalent to an Australian Year 12 may be considered for Monash University undergraduate admission only with an approved American Admissions Test however higher entry scores will apply.
Alternative Pathways

Direct entry is just one way to embark on your undergraduate degree with Monash IT, our alternative pathways offer many more opportunities to begin your journey with us.

Technical and Further Education (TAFE)
Satisfactory completion of a TAFE certificate IV or diploma can enable you to gain admission into an IT degree. If your previous study in a diploma qualification is assessed as being equivalent to Monash University units, credit may be granted.
monash.edu/study/courses/find-a-course

Transfer from other universities
Students from other universities are able to transfer to Monash. If your previous study is assessed as being equivalent to Monash University units, credit may be granted.
monash.edu/study/courses/find-a-course

Single units of higher education study
If you successfully complete two approved higher education IT single units, you’re eligible to apply for entry into a Monash IT undergraduate course.
monash.edu/study/courses/find-a-course

Monash College
Monash College is a preferred pathway for students who aspire to study Information Technology at Monash University, but who narrowly miss the academic requirements for direct entry. The course you choose depends on your current level of study and future career plans. After completing your first year with Monash College, depending on the results you receive, it may be possible to transfer to Monash University for the remainder of your course.
monashcollege.edu.au

Transfer from another Monash course
You can apply to transfer to a Monash IT degree from any other Monash degree if you meet the criteria.
monash.edu/it/future-students/how-to-apply

Diploma of Higher Education studies (Monash Malaysia)
Satisfactory completion of the Diploma of Higher Education IT stream qualifies you for entry into the second year of the Bachelor of Computer Science at our Malaysia campus.
monash.edu/it/future-students/how-to-apply

Monash University English Language Centre (MUELC)
All of Monash’s IT courses have minimum English language requirements. Our English language centre offers English language programs to assist students in meeting these requirements.
monash.edu/study/courses/english-language-programs

How to Apply

Domestic Students
Apply through VTAC
If you’re an Australian or New Zealand citizen or an Australian permanent resident, apply through the Victorian Tertiary Admissions Centre (VTAC).
www.vtac.edu.au

Mid-year entry
For mid-year entry, apply directly to Monash.
monash.edu/admissions/apply/domestic-ug

International Students
Apply directly to Monash University
All international students must apply for a Monash University course online. Please refer to the following website for a step-by-step guide:
monash.edu/study/how-to-apply

Note: International students who are undertaking an Australian Year 12 qualification (for example, VCE or equivalent) in Australia or overseas, the International Baccalaureate (IB) Diploma in Australia or New Zealand, or the National Certificate of Educational Achievement (NCEA) Level 3 in New Zealand must apply through the Victorian Tertiary Admissions Centre (VTAC).
www.vtac.edu.au

Fees
Fees for each course can be found at monash.edu/study/courses/find-a-course
Loan options for eligible applicants can be found at monash.edu.au/enrolments/government-loans

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UPCOMING EVENTS

Build your network, broaden your knowledge and connect with your community with our regular Monash events.

Visit monash.edu/it for dates of upcoming events:

**Big Data Challenge**
22nd February 2019
Big Data Challenge Day is an exciting opportunity for students to explore what they can achieve at university with mathematical skills. As part of the day, students are placed in teams and tackle a challenge from the aspects of business, IT and science in the theme of ‘Melbourne in 2050’.

**VCE and Careers Expo**
2nd–5th May 2019
Come and find our stand at Caulfield Racecourse to discover what a career in IT can do for you.

**Inside Monash Seminars**
Get the inside scoop of what it’s really like to study IT at Monash. You’ll hear from current students and alumni, as well as one of our leading academics.

**Information Technology and Computer Science**
9th May 2019, Clayton
29th August 2019, Caulfield

**IT double degrees and internships**
15th May 2019, Clayton

**Conquering Code**
10th July 2019
Coding is the language of the future. At our Conquering Code workshop you’ll be inspired and learn from incredible female role models studying IT at Monash. Enhance your skills in the rewarding and creative outlet that is coding.

**Open Day**
4th August 2019
Discover more to change more at Monash Open Day. This not-to-be-missed event is your chance to talk with current students, meet academics and speak with our student services team about your future. Watch live demonstrations, tour our facilities and soak up the campus atmosphere.

**Take CTRL**
3rd October 2019
Explore the life of a Monash IT student at this two-day boot camp, where you’ll discover where an IT degree can lead you. This is your chance to take control and join like-minded students in exciting, innovative workshops and experience the latest technologies, interact with our current students and hear from our alumni.

To find out more and register your interest, go to monash.edu/it/about-us/news-and-events
Monash and the Faculty of Information Technology are proud to have the following industry partners who support our students through scholarships and prizes:

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The information in this brochure was correct at the time of publication (April 2019). Monash University reserves the right to alter this information should the need arise. You should always check with the relevant faculty office when considering a course.

CRICOS provider: Monash University 00008C Monash College 01837J

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