



MONASH
University

MALAYSIA

The background of the page features a large, abstract graphic. It consists of two main vertical panels: a pinkish-purple panel on the left and a blue panel on the right. Both panels are decorated with white, vertical, sharp-edged spikes. The blue panel also contains a complex, wavy pattern of white lines that resemble contour maps or liquid flow. Overlaid on the blue panel is the text "INFORMATION TECHNOLOGY COURSE GUIDE 2026" in a white, sans-serif font.

**INFORMATION
TECHNOLOGY**
COURSE GUIDE 2026

IT OFFERS A WORLD OF OPPORTUNITY - AND YOU BELONG IN IT

Information technology lies at the heart of every industry, from robotics and healthcare to finance and manufacturing. A career in this dynamic field means you'll enjoy endless variety, strong demand, and constant professional growth.

Your studies with us will be fuelled by the expertise of leading specialists and enriched by unparalleled facilities. We also ensure you get the chance to gain industry experience that's highly desired by employers.

From protecting sensitive data to empowering the world's most vulnerable, go further than you ever thought possible – with an IT degree from Monash.

PROFESSIONALLY ACCREDITED



All of our IT undergraduate and taught postgraduate programs are undifferentiated from those offered at Monash University Australia and are fully accredited by the Australian Computing Society (ACS), the trusted national body for the technology profession.

ACS accreditation is awarded only to programs that meet the highest standards of academic quality. As a Monash IT graduate, you will also be eligible to join the ACS and gain access to career support, industry insights, professional networks and more. This accreditation is recognised internationally, strengthening your global mobility and expanding your career opportunities worldwide.

PREMIER DIGITAL TECH INSTITUTION



The School of Information Technology at Monash University Malaysia is recognised by Malaysia Digital Economy Corporation (MDEC) as a Premier Digital Tech Institution. This distinction reflects the quality of our programs, our strong partnerships with industry, and our proven track record of producing highly employable graduates ready to thrive in the digital and AI economy.



I'm immensely passionate about AI. I think that AI has boundless potential and I'm eager to apply it in many domains and to play a small part in furthering humanity's technological progress."

MICHELLE ADELINE

Bachelor of Computer Science
Bachelor of Computer Science (Honours)

Recipient of the 2022 Cliff Belamy Award, presented to academically outstanding IT students at Monash.

Currently pursuing her graduate degree focusing on AI and robotics research at the University of Illinois Urbana-Champaign, USA.

For her final-year project at Monash, Michelle led a team of three to design an automated active surveillance system that detects weaponised aggression and alerts security personnel to enable rapid intervention. The team collaborated with Sunway Group, leveraging their surveillance network to obtain training data and test the system at Sunway Pyramid, a major shopping mall in the country.

#36 IN THE WORLD'S
TOP UNIVERSITIES¹

#40 GLOBALLY FOR DATA SCIENCE
AND ARTIFICIAL INTELLIGENCE²

#61 GLOBALLY FOR
COMPUTER SCIENCE³

#62 GLOBALLY FOR
COMPUTER SCIENCE AND
INFORMATION SYSTEMS²

¹ QS World University Rankings 2026

² QS World University Rankings by Subject 2025

³ Times Higher Education World University Rankings by Subject 2025

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COURSE INFORMATION FAST FACTS

Look for these icons on each course page for key information:

	Duration
	Intakes
	Fees
	Degree type
	Professionally recognised
	Industrial training

STEP INTO A THRIVING INDUSTRY

IT graduates are highly sought-after for their skills that complement all fields and underpin the success of any organisation.

WHAT THE WORLD NEEDS



ARTIFICIAL INTELLIGENCE

Creating systems capable of tasks requiring human intelligence. It spans machine learning, deep learning, natural language processing and other areas that equip computers to think, understand and speak like humans.

CREATE YOUR FUTURE IN THIS AREA

Bachelor of Computer Science in Artificial Intelligence

Master of Artificial Intelligence



DATA SCIENCE

Collecting, processing and analysing information to extract meaningful insights for better decision-making, optimisation and competitive advantage.

CREATE YOUR FUTURE IN THIS AREA

Bachelor of Computer Science in Data Science

Master of Data Science



BUSINESS INFORMATION SYSTEMS

Driving innovation and efficiency at the intersection of technology and business strategy. It leverages information systems to help organisations navigate the modern landscape and boost performance.

CREATE YOUR FUTURE IN THIS AREA

Master of Business Information Systems



SOFTWARE ENGINEERING

Developing robust, scalable and efficient software solutions, encompassing the entire lifecycle from requirements gathering and design, to deployment and maintenance, with a human-centred and ethical approach.

CREATE YOUR FUTURE IN THIS AREA

Bachelor of Computer Science with a specialisation in Algorithms and Software

Bachelor of Software Engineering (Honours)



CYBERSECURITY

Safeguarding computer systems, networks and data from unauthorised access, threats and malicious activities. It involves technologies and practices to ensure the confidentiality, integrity and availability of digital assets.

CREATE YOUR FUTURE IN THIS AREA

Bachelor of Computer Science with electives in Cybersecurity

STRONG PREDICTED GROWTH TO 2030



113%

BIG DATA SPECIALISTS



82%

AI AND MACHINE LEARNING SPECIALISTS



57%

SOFTWARE APPLICATIONS DEVELOPERS



53%

SECURITY MANAGEMENT SPECIALISTS



49%

DATA WAREHOUSING SPECIALISTS



48%

UI AND UX DESIGNERS



42%

INTERNET OF THINGS SPECIALISTS



41%

DATA ANALYSTS AND SCIENTISTS

Where are our graduates?

Our graduates have taken their skills and experiences gained, combined with the passion to explore new worlds nurtured during their academic study, to traverse the globe and succeed in varied careers in very different societies and cultures. You, too, can go anywhere with a Monash degree.



AN EDUCATION THAT'S ALL ABOUT YOU



Experiential AI (XAI) Lab

We always focus on translating theory into practice. As an IT student at Monash, expect the chance to apply your expertise to real-world problems – sharpening your technical and soft skills while experiencing a future in tech.

A FOCUS ON TRANSFORMATIVE TEACHING

Your time as an undergraduate can be among the most challenging yet rewarding years of your life. They give you plenty of opportunity to expand your knowledge, explore new ways of thinking – and discover more about yourself.

At Monash, it's all about 'learning by doing' in a collaborative environment. We use the latest technology to make your lectures interactive and engaging. And our Peer Assisted Study Sessions can connect you with other Monash students to drive your success.

Learn in teaching labs equipped with the latest technology to support studies in generative AI, data science and high-performance computing. Or find inspiration at the Cyber-Physical AI Lab, dedicated to showcasing ongoing research like AI for medical imaging and music, large language models, computational vision and hidden emotions recognition.

LESSONS FROM THE INDUSTRY'S BEST

In your degree, you'll learn directly from world-class specialists across all disciplines in IT. Partnering with like-minded organisations and professionals, they're pioneering innovative solutions for real-world problems.

In a recent collaboration with Intel Malaysia, Monash researchers are working on addressing knowledge gaps present in the multinational corporation's support platforms.

Content on such platforms can generate valuable explicit and tacit knowledge bases, represented as domain-sensitive knowledge graphs. The resulting knowledge graphs could then be leveraged to provide quick, effective solutions by recognising similar problems and powering chatbots.

Successfully using artificial intelligence in this knowledge extraction would result in a robust solution with a global impact on an efficient and effective support system.

REAL-WORLD EXPERIENCE AND A COMPETITIVE EDGE



Cyber-Physical (CyPhi) AI Lab

Putting you first, our teaching approach gets you hands-on at every opportunity. So when you graduate, you won't just be equipped for career success – but also to make a positive, long-term impact in the world.

>95%

**GRADUATE EMPLOYMENT RATE
FOR MONASH IT GRADUATES**

2024 Tracer Study by the Ministry of Higher Education, Malaysia

INDUSTRY-BASED LEARNING (IBL)

This flagship initiative offers high-performing students the opportunity to participate in placements at top organisations. It counts as three units in your degree, and you'll receive a scholarship for your internship.

The IBL program prepares you for the workplace with the opportunity to apply the skills you've learnt in the classroom in the corporate world, helping you gain valuable professional and business experience.

STUDENT LEADERS NETWORK (SLN)

SLN is a one-year program that prepares you to be an IT leader. It's an opportunity to engage with industry professionals through workshops, industry site visits, networking evenings, and a student-organised leadership summit. This experience will help you to develop critical employability skills, such as leadership, teamwork and communication, that are highly regarded by employers.

INTERNSHIP

As an alternative to IBL, you'll complete a 12-week internship in an industry-based environment after your second year. This internship will give you a strong foundation and framework for experiential learning.

OTHER OPPORTUNITIES

Your undergraduate years can be full of opportunities to broaden your perspective on the IT industry, enhance your marketability, and develop the necessary mindset to transition from student to IT professional.

You'll have special access to career talks and panel discussions with invited industry guests, industry competitions, as well as professional certification programs. These will help you to:

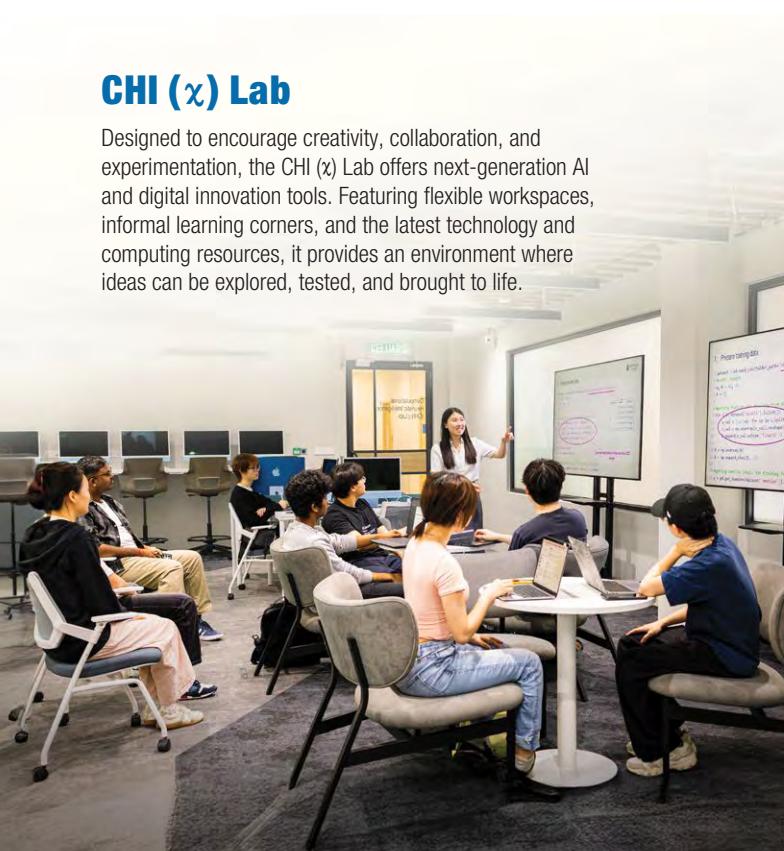
- learn about emerging industry trends in IT
- gain a better understanding of what the industry expects from IT graduates
- discover the variety and scope of careers in IT
- build industry contacts via networking opportunities.

ENHANCED LEARNING SPACES

Experience learning like never before with our cutting-edge labs, collaborative spaces, and advanced resources.

CHI (χ) Lab

Designed to encourage creativity, collaboration, and experimentation, the CHI (χ) Lab offers next-generation AI and digital innovation tools. Featuring flexible workspaces, informal learning corners, and the latest technology and computing resources, it provides an environment where ideas can be explored, tested, and brought to life.



Experiential AI (Ξ) Lab

The XAI (Ξ) Lab offers a dynamic and immersive space to learn, experiment, and explore the latest innovations transforming the way we live, work, and connect. Equipped with flexible workstations, collaborative zones, and even exercise bikes to keep your mind and body active, the lab provides an environment where creativity, experimentation, and hands-on learning thrive.



Cyber-Physical (CyPhi) AI Lab

The CyPhi AI (ΨΦ) Lab is a futuristic space dedicated to showcasing innovative research in emerging fields, including AI for medical imaging and music, large language models, computational vision and emotion recognition. Equipped with leading-edge technology, the lab houses VR headsets, wearable devices, drones, and Robomasters for hands-on robotics experimentation. Switchable glass walls allow privacy or openness at the touch of a button, creating a flexible and dynamic workspace.



Master's Hideout

Reserved exclusively for Master's students in IT, the Master's Hideout provides a comfortable environment to unwind, collaborate, and connect with peers. Whether it's for brainstorming ideas, discussing projects, or taking a well-deserved break, this space is designed to foster a sense of community and encourage informal learning.



WORLD-CLASS FACILITIES

Monash researchers have access to a range of high-performance computing facilities to support complex data processing, modelling, simulation, and visualisation tasks.

Key platforms include the Monash Malaysia Futuristic Architecture for Next Generation Research (MONTAGE) High Performance Computing at the Malaysia campus as well as the M3/MASSIVE computing platform at the Australia campus.

MONTAGE supports a wide range of software and applications, including LAMMPS, PyTorch, TensorFlow, MATLAB, ANSYS, Quantum ESPRESSO, Keras, and more. The platform enables researchers to efficiently run large-scale simulations, machine learning workflows, and computational modelling projects.

You'll have the computational power and software ecosystem needed to tackle advanced research challenges across disciplines.



LIFE AT MONASH

Your time at Monash will be enriching in every way. We help you go beyond the classroom so you can experience new things, forge lifelong connections, explore your interests and engage in meaningful extracurricular activities.

'STUDY OR TRAVEL?' HOW ABOUT BOTH.

Partnering with more than 140 universities across the world, our exchange programs let you blend your passion for adventure with your hunger to learn.

Or head to one of our Australia campuses to delve into IT in one of the top 10 most liveable cities¹. As a Monash student, the Global Intercampus Program lets you spend a semester in Melbourne with no added costs to your regular course fees.

Learn more:

monash.edu.my/study-abroad

CONNECTING TALENT WITH OPPORTUNITY

Each year, our students take part in the Mind Engine Expo, an exclusive IT career fair bringing together some of the world's top companies such as Deloitte, Western Digital, Dassault Systèmes, AMD, OSK Group.

Through panel discussions, networking sessions, and on-the-spot interviews, you'll gain valuable exposure to industry expectations, emerging tech roles, and pathways for professional growth.

ENGAGE WITH INDUSTRY

Participate in datathons, hackathons, site visits to leading organisations like Google Singapore, CelcomDigi's AI Experience Centre, and MoneyLion, as well as networking events, workshops, and tournaments.

These experiences not only sharpen your technical skills but also build industry networks that open doors to future careers.

1 Global Liveability Index 2024, Economist Intelligence Unit, 2024.



Students visiting Google's APAC Office during a five-day experiential learning trip to Singapore.

STUDENT CLUBS

MEET PEOPLE WHO SHARE YOUR PASSIONS

By joining one of our many clubs and societies, you can make friends and expand your network while nurturing your personal growth.



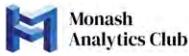
MONASH CYBERHACK CLUB

Join a student-led cybersecurity community where you can sharpen your skills through hands-on challenges, strengthen cyber awareness on campus, and collaborate to build Monash's cyber presence.



MONASH BLOCKCHAIN CLUB

Be part of a passionate community exploring the future of decentralised technology. Learn, prototype, and network with peers as you dive into blockchain innovation and real-world applications.



MONASH ANALYTICS CLUB

Connect classroom learning with industry-ready skills in data science and analytics. Work alongside your peers to turn data into real insights through projects, workshops, and best-practice training.



Google Developer Group

Monash University Malaysia

GDGoC MONASH UNIVERSITY MALAYSIA

Join a Google-empowered student chapter that drives the adoption of Google technologies. Learn best developer practices, build impactful solutions, and collaborate within a dynamic tech community.



ACM'S WOMEN IN COMPUTING

A supportive student chapter dedicated to empowering women in computing. Engage in advocacy, mentorship, and professional development while building a strong network of peers in tech.



	3 years
	February, July and October
	RM47,040 Malaysian student RM54,720 International student 2026 fees per year
	Professionally accredited
	Industrial training

CAREER PATHS

Computer scientists are in high demand in a wide variety of roles, such as:

- specialist programmer
- systems analyst
- research scientist
- IT manager
- application developer
- cybersecurity analyst
- forensic computer analyst
- game designer
- machine learning engineer
- UX designer
- web developer.

You can pursue research and development in these exciting areas:

- artificial intelligence
- computer vision
- large language models
- mobile application development
- cybersecurity
- Internet of Things
- networking
- foundations of computing
- robotics.

BACHELOR OF COMPUTER SCIENCE

KPT/JPT (R3/0613/6/0089) 01/30 - MQA/SWA0123

Computer scientists drive everything, from search engines and smart watches to cybersecurity and autonomous drones.

The Bachelor of Computer Science is a degree that could take you anywhere. Flexible and practical, this course will teach you how to think creatively and analytically in equal measure. You'll also graduate with the skills needed to design algorithms and data structures – creating software that will benefit people around the world.

Professionally accredited

This course is accredited by the Australian Computer Society.

Areas of study

We offer the following subjects on demand:

- Algorithms and data structures
- Artificial intelligence
- Cybersecurity
- Data analytics
- Deep learning
- Entrepreneurship
- Malicious AI and dark side security
- Mobile application development.
- Parallel computing

What you'll learn

In this course we'll teach you how to:

- leverage the value of computer science and computational methods in a wide range of applications, supported by a solid theoretical background critical for effective practice
- use problem-solving techniques to analyse challenges in your chosen specialisation and develop effective software and technology solutions
- coordinate initiatives strategically using diagrams, graphics, interactive visualisations and modern project management tools
- become a technology leader by prioritising competing demands, regularly reviewing performance, driving development and behaving as a top professional
- adapt to the ever-changing landscape of technology, embracing emerging technologies with a wide range of strategies
- address ethical and legal considerations in your chosen discipline and prepare for its future scientific, industrial and social contexts.

Course structure

This course consists of 15 compulsory (core) units in computer science and mathematics, one restricted elective chosen from an approved list of computer science topics, eight free elective units, and an industry attachment. The free electives can be taken as a sequence in a specific field of study within the school or from a discipline offered by another school. A capstone project spanning both semesters of the third year concludes your studies.

Elective units

LEVEL ONE

- Introduction to data science
- Programming fundamentals in Java

LEVEL TWO

- Operating systems
- Mobile application development
- Modelling for data analysis
- Introduction to cyber security
- Software quality and testing
- Software engineering process and management

LEVEL THREE

- Computer architecture
- Data analytics
- Deep learning
- Artificial intelligence
- Software engineering: Architecture and design
- Usability
- Big data management and processing
- Malicious AI and dark side security
- Industry-based learning (equivalent to three units, i.e. 18 points of level three elective units).

Alternative pathway

If you don't quite meet the entry requirements, you can still study the Bachelor of Computer Science. Successfully completing the Diploma of Higher Education Studies will allow you to transfer into the second year of this degree.

monash.edu.my/dhes

Pursue two passions

Gain dual expertise that expands your career prospects with a double degree in business and commerce and computer science. Even better, it's faster to complete than two separate courses.

monash.edu.my/business-computer-science

What your course will look like

YEAR 1/LEVEL 1		UNITS			
Semester 1 24 Credit points	FIT1045 Introduction to programming 6 Credit points	FIT1047 Introduction to computer systems, networks and security 6 Credit points	FIT1058 Foundations of computing 6 Credit points	Elective 6 Credit points	
Semester 2 24 Credit points	FIT1008 Fundamentals of algorithms 6 Credit points	FIT1055 IT professional practice and ethics 6 Credit points	Elective 6 Credit points	Elective 6 Credit points	
YEAR 2/LEVEL 2		UNITS			
Semester 1 24 Credit points	FIT2004 Algorithms and data structures 6 Credit points	FIT2099 Object-oriented design and implementation 6 Credit points	FIT2094 Databases 6 Credit points	Elective 6 Credit points	
Semester 2 24 Credit points	FIT2014 Theory of computation 6 Credit points	FIT2102 Programming paradigms 6 Credit points	FIT2109 Computer science workshop 6 Credit points	Elective 6 Credit points	
Summer semester	FIT3199 Industry work experience				
YEAR 3/LEVEL 3		UNITS			
Semester 1 24 Credit points	FIT3161 Computer science project 1 6 Credit points	FIT3155 Advanced data structures and algorithms 6 Credit points	Technical elective unit 6 Credit points	Elective 6 Credit points	
Semester 2 24 Credit points	FIT3162 Computer science project 2 6 Credit points	FIT3143 Parallel computing 6 Credit points	Elective 6 Credit points	Elective 6 Credit points	

█ Foundation studies █ Professional practice studies █ Specialist studies █ Applied studies █ Free elective studies
█ Industrial training (compulsory MQA requirement for students who do not participate in the IBL program)

Approved technical elective units

FIT3080 Artificial intelligence **FIT3139** Computational modelling and simulation **FIT3146** Maker lab
FIT3165 Computer networks **FIT3182** Big data management and processing **FIT3159** Computer architecture.

Please refer to page 10 for a list of Level 1, 2 and 3 electives. Students are also allowed to opt for other electives offered across the University. This course map is intended as a rough guide. Units listed may vary depending on intake, availability and the latest requirements.



Scan to view all possible course progressions.



I studied computer science because I like to code, and I like how technology can be used to make things more efficient and accessible. Computer science skills are widely applicable across different fields, offering a lot of opportunities for growth and exploration post-graduation.

My lecturers at Monash were not only knowledgeable but also very supportive. I appreciated that the coursework was intellectually challenging, pushing me to expand my knowledge and skills.”

LIM KAH XUAN

Bachelor of Computer Science

Software Engineer, Google Taiwan

	3 years
	February, July and October
	RM47,040 Malaysian student RM54,720 International student 2026 fees per year
	Professionally accredited
	Industrial training

CAREER PATHS

You'll be equipped to pursue a wide range of AI-driven careers, including:

- computer scientist
- algorithm and software developer
- autonomous systems developer
- AI product specialist/consultant
- AI ethics and safety specialist
- AI wrangler
- computer vision specialist
- generative AI specialist
- human AI interaction specialist
- machine learning researcher
- machine learning/deep learning developer
- AI robotics engineer.

You'll be able to work in a wide range of industries, such as:

- autonomous systems and smart mobility
- cloud computing and data centres
- consulting and professional services
- creative and generative media
- cybersecurity and digital trust
- e-commerce and digital platforms
- energy and sustainability
- finance and fintech
- digital health
- logistics and smart cities
- research and development
- robotics and advanced manufacturing.

BACHELOR OF COMPUTER SCIENCE IN ARTIFICIAL INTELLIGENCE

KPT/JPT (N/0613/6/0135) 11/30 - MQA/PSA 18789

Build the AI systems that shape the world.

Artificial intelligence is transforming our world at an unprecedented pace. It shapes the way we connect, create and solve problems, and it is redefining what is possible across every field. As the global demand for AI talent continues to rise, the opportunity to make a lasting impact has never been greater.

This degree invites you to be part of that future. At Monash, you will explore the foundations of computer science while gaining deep insight into the ideas and technologies that power modern AI. You will discover how intelligent systems learn, how data becomes knowledge and how innovative solutions can improve lives in meaningful ways. Your skills will prepare you for diverse pathways in technology, health, finance, defence, government and research, in Australia, Malaysia and around the world.

Your journey at Monash is shaped by experience and inspired by curiosity. Through hands-on learning, immersive projects and a full-year capstone experience, you will design and build AI solutions that address real challenges. You will also engage with the ethical and social responsibilities of this rapidly evolving field, preparing you to lead with integrity and purpose.

You will graduate ready to contribute to a world where intelligent technologies drive progress, create opportunity and empower global communities. With a Monash education, you will be equipped not only to succeed, but to shape what comes next.

Professionally accredited

This course is accredited by the Australian Computer Society.

Areas of study

We offer the following subjects on demand:

- Foundation of computing
- Introduction to artificial intelligence
- Symbolic artificial intelligence and machine learning
- Generative artificial intelligence
- Intelligent agents
- Deep learning
- Malicious AI and dark side security
- Parallel computing.

What you'll learn

Pursuing artificial intelligence, your learning experience includes:

- foundational technical skills in programming, algorithms, data structures, and computer systems that underpin AI development

- core AI techniques and its theoretical foundations spanning symbolic reasoning, machine learning, deep learning, and generative AI, preparing you to build AI-powered applications
- intelligent system design, including intelligent agents, neural architectures, for building real-world autonomous systems that perceive, reason, and act
- ethical and societal implications of AI technologies, including responsible deployment, mitigation, and the social impact of intelligent systems
- communication and professional skills critical for explaining complex AI concepts to diverse stakeholders and collaborating in multidisciplinary teams.

Course structure

This course comprises 144 points, of which 96 points must be from computer science study and 48 points are used to provide additional depth or breadth through elective study.

Elective units

LEVEL ONE

- Programming fundamentals in Java
- Introduction to software engineering
- Introduction to data science

LEVEL TWO

- Operating systems
- Mobile application development
- Introduction to cybersecurity
- Object-oriented design and implementation
- Modelling for data analysis
- Programming paradigm
- Software engineering process and management

LEVEL THREE

- Emerging and advanced topics in artificial intelligence
- Malicious AI and dark side security
- Data analytics
- Computer architecture
- Big data management and processing
- Parallel computing
- Software engineering: Architecture and design
- Advanced data structures and algorithms
- Business intelligence and data warehousing
- Industry-based learning (equivalent to three units, i.e. 18 points of level three elective units).

Bursaries

Receive a 10% tuition fee waiver when you successfully enrol in this course. Visit monash.edu.my/scholarships for details.

What your course will look like

YEAR 1		UNITS		
Semester 1 24 Credit points	FIT1045 Introduction to programming 6 Credit points	FIT1047 Introduction to computer systems, networks and security 6 Credit points	FIT1058 Foundations of computing 6 Credit points	Elective 6 Credit points
Semester 2 24 Credit points	FIT1008 Fundamentals of algorithms 6 Credit points	FIT1049/FIT1055 IT professional practice 6 Credit points	FIT1061 Introduction to artificial intelligence 6 Credit points	Elective 6 Credit points
YEAR 2		UNITS		
Semester 1 24 Credit points	FIT2004 Algorithms and data structures 6 Credit points	FIT2094 Databases 6 Credit points	FIT2111 Symbolic artificial intelligence and machine learning 6 Credit points	Elective 6 Credit points
Semester 2 24 Credit points	FIT2014 Theory of computation 6 Credit points	FIT2112 Deep learning 6 Credit points	Elective 6 Credit points	Elective 6 Credit points
Summer semester	FIT3199 Industry work experience			
YEAR 3		UNITS		
Semester 1 24 Credit points	FIT3193 Artificial intelligence project 1 6 Credit points	FIT3191 Generative artificial intelligence 6 Credit points	Elective 6 Credit points	Elective 6 Credit points
Semester 2 24 Credit points	FIT3194 Artificial intelligence project 2 6 Credit points	FIT3203 Intelligent agents 6 Credit points	Technical elective unit 6 Credit points	Level 3 Elective unit 6 Credit points

█ Foundation studies █ Professional practice studies █ Specialist studies █ Applied studies █ Free elective studies
█ Industrial training (compulsory MQA requirement for students who do not participate in the IBL program)

Approved technical elective units

FIT3192 Emerging and advanced topics in artificial intelligence **FIT3183** Malicious AI and dark side security

Please refer to page 12 for a list of Level 1, 2 and 3 electives. Students are also allowed to opt for other electives offered across the University. This course map is intended as a rough guide. Units listed may vary depending on intake, availability and the latest requirements.



Scan to view all possible course progressions.



“

Monash's strong industry connections and research opportunities allowed me to gain real-world exposure, preparing me for the challenges of the workforce. Looking back, my time at Monash was not just about acquiring knowledge but also about developing skills, building meaningful connections, and growing both personally and professionally.”

LIM JIA HUI

*Bachelor of Computer Science in Data Science
AI and Data Analyst, Deloitte*

Jia Hui's goal is to use AI and data-driven solutions to create a positive impact on society. She believes that AI should not be seen as a tool to replace human capabilities, but rather as a means to enhance and simplify our lives. She aspires to develop AI-driven systems that improve efficiency, accessibility, and decision-making across various industries, from healthcare to finance and beyond.

	3 years
	February, July and October
	RM47,040 Malaysian student RM54,720 International student 2026 fees per year
	Professionally accredited
	Industrial training

CAREER PATHS

Graduates with data science skills are in high demand. Possible careers could include:

- big data engineer
- business intelligence developer
- data scientist
- data architect
- data engineer
- data analyst
- machine learning specialist
- research scientist
- software developer.

You'll be able to work in a wide range of industries, such as:

- digital humanities
- consulting
- cybersecurity
- law
- scientific research
- marketing
- robotics
- engineering
- business analytics
- banking.

BACHELOR OF COMPUTER SCIENCE IN DATA SCIENCE

KPT/JPT (R/0613/6/0076) 09/29 - MQA/FA12435

This is the era of big data and artificial intelligence. Data science represents a cutting-edge discipline which applies scientific methods, mathematics, algorithms and artificial intelligence to extract and visualise intelligent insights from huge volumes of data.

In the fast-progressing world of the Information Age these insights, whether delivered via autonomous integrated systems or in traditional reports, have the potential to fuel innovation and transform decision making. Data scientists deal with the challenges of big data – its interpretation, management and use – in fields as diverse as marketing, information systems, engineering, finance, arts, humanities, science and medicine.

Monash brings a breadth of expertise to bear on issues relating to big data. If you aspire to solve real-world problems based on the information challenges of big data, then specialising in data science will equip you with the practical skills to excel in your chosen career.

Professionally accredited

This course is accredited by the Australian Computer Society.

Areas of study

- Mathematical statistics
- Principles of data science
- Modelling for data analysis
- Business intelligence and data warehousing
- Data analytics and visualisation
- Big data management and processing
- Deep learning and artificial intelligence
- Malicious AI and dark side security.

What you'll learn

Studying data science, your learning experience will cover:

- technical skills in areas such as programming and databases
- modelling, visualisation and analysis, including using graphics and interactive visualisations for professional practice
- legal and ethical issues associated with collecting and interpreting data, and how to respond to them
- advanced data science knowledge via electives, including machine learning and deep learning, business applications of data science, big data management and countering malicious cyberattacks
- soft skills in communication, key to conveying your findings to future stakeholders.

Course structure

This course consists of 14 compulsory (core) units in computer science, data science and mathematics, two restricted electives chosen from an approved list of data science topics, eight free elective units, and an industry attachment. The free electives can be taken as a sequence in a specific field of study within the school or from a discipline offered by another school. A capstone project spanning both semesters of the third year concludes your studies.

Elective units

LEVEL ONE

- Introduction to software engineering
- Programming fundamentals in Java

LEVEL TWO

- Operating systems
- Object-oriented design and implementation
- Mobile application development
- Introduction to cybersecurity
- Programming paradigms
- Software quality and testing
- Software engineering process and management

LEVEL THREE

- Computer architecture
- Deep learning
- Advanced data structures and algorithms
- Artificial Intelligence
- Software engineering: Architecture and design
- Big data management and processing
- Business intelligence and data warehousing
- Malicious AI and dark side security
- Parallel computing
- Industry-based learning (equivalent to three units, i.e. 18 points of level three elective units).

What your course will look like

YEAR 1/LEVEL 1		UNITS		
Semester 1 24 Credit points	FIT1045 Introduction to programming 6 Credit points	FIT1058 Foundations of computing 6 Credit points	FIT1047 Introduction to computer systems, networks and security 6 Credit points	Elective 6 Credit points
Semester 2 24 Credit points	FIT1008 Fundamentals of algorithms 6 Credit points	FIT1055 IT professional practice and ethics 6 Credit points	FIT1043 Introduction to data science 6 Credit points	Elective 6 Credit points
YEAR 2/LEVEL 2		UNITS		
Semester 1 24 Credit points	FIT2004 Algorithms and data structures 6 Credit points	FIT2094 Databases 6 Credit points	Elective 6 Credit points	Elective 6 Credit points
Semester 2 24 Credit points	FIT2014 Theory of computation 6 Credit points	FIT2086 Modelling for data analysis 6 Credit points	FIT2179 Data visualisation 6 Credit points	Elective 6 Credit points
Summer semester	FIT3199 Industry work experience			
YEAR 3/LEVEL 3		UNITS		
Semester 1 24 Credit points	FIT3163 Data science project 1 6 Credit points	FIT3152 Data analytics 6 Credit points	Technical elective unit 6 Credit points	Elective 6 Credit points
Semester 2 24 Credit points	FIT3164 Data science project 2 6 Credit points	Technical elective unit 6 Credit points	Elective 6 Credit points	Elective 6 Credit points

█ Foundation studies █ Professional practice studies █ Specialist studies █ Applied studies █ Free elective studies
█ Industrial training (compulsory MQA requirement for students who do not participate in the IBL program)

Approved technical elective units

FIT3003 Business intelligence and data warehousing **FIT3154** Advanced data analysis **FIT3181** Deep learning **FIT3183** Malicious AI and dark side security.

Please refer to page 14 for a list of Level 1, 2 and 3 electives. Students are also allowed to opt for other electives offered across the University. This course map is intended as a rough guide. Units listed may vary depending on intake, availability and the latest requirements.



Scan to view all possible course progressions.



Monash's curriculum is meticulously updated to align with industry standards and the evolving job market. I was able to confidently ace technical interviews with the knowledge and skills acquired during my studies. The syllabus truly adheres to industry requirements, keeping us at the forefront of technological advancements."

CHONG MING SHENG

Bachelor of Computer Science in Data Science
Vice President, Robogals Monash Malaysia, 2023
Transformation Excellence Analyst, Accenture

As part of Accenture's Technology Strategy and Advisory team, Ming Sheng works at the intersection of technology and business. Currently, he is a quality engineer for a life sciences IT project with a leading pharmaceutical company. Ming Sheng is deeply curious about how data science can be harnessed to improve patient care and outcomes. He aims to address complex medical challenges and contribute meaningfully to society.

	4 years
	February, July and October
	RM54,720 Malaysian student RM64,800 International student 2026 fees per year
	Professionally accredited
	Industrial training

CAREER PATHS

Graduates may find employment in the following positions:

- applications developer
- internet developer
- programming specialist
- cloud engineer
- DevOps engineer
- software engineer
- software architect
- data engineer
- AI/machine learning engineer.

BACHELOR OF SOFTWARE ENGINEERING (HONOURS)

KPT/JPT (R2/0612/6/0026) 11/32 - MQA/SWA13363

Software engineering is driving the next wave of technological breakthroughs. As a software engineer, your skills will drive emerging fields from AI-powered healthcare and autonomous transportation to smart cities, robotics, and next-generation cyber-physical systems, shaping the technologies of tomorrow.

Leading companies and governments rely on smart, secure, and reliable software and on the engineers who build it. In this specialisation, you'll apply engineering principles to design, develop, and enhance software systems that power emerging technologies such as AI, automation, cloud platforms, digital twins, and next-generation cyber-secure applications.

Software engineering goes beyond coding. It's about architecting scalable solutions, ensuring safety and reliability, and shaping the technologies that will define the future.

As modern systems grow more complex, collaboration is key. Our studio-based learning equips you with teamwork, communication, and project-management skills to excel in real-world, multidisciplinary development teams.

Professionally accredited

This course is accredited by the Australian Computer Society and is the only software engineering program accredited by Engineers Australia.

Course structure

The course has a common first year, comprising parts A and B, which focuses on the role of the engineer in the future while developing your foundational skills for engineering. In your second year, you'll specialise in software engineering through parts C, D and E.

PART A. ENGINEERING FUNDAMENTALS AND DESIGN STUDIES

This will develop your understanding of natural and physical sciences, mathematics, numerical analysis, statistics, and computer and information sciences that underpin all engineering disciplines.

PART B. BREADTH STUDIES

This will develop the engineering techniques, tools and resources for the conduct, design and management of engineering design processes and projects, both in the industrial setting and in the development of research experiments.

PART C. SPECIALIST STUDIES

This will provide in-depth knowledge of the specific engineering methods of a branch of engineering and will integrate the specific engineering methods and discipline knowledge into practice.

PART D. PROFESSIONAL PRACTICE

This will develop your skills in readiness for the engineering workplace. You will develop skills in effective team membership and team leadership, the use and management of commercially relevant data, and the legal responsibilities of engineers.

PART E. ELECTIVE STUDIES

This will enable you to further deepen your knowledge of engineering or broaden your knowledge in another approved field.

Technical elective units

LEVEL THREE

- Parallel computing
- Data analytics
- Big data management and processing
- Advanced data structures and algorithms
- Business intelligence and data warehousing
- Artificial intelligence
- Data visualisation
- Malicious AI and dark side security
- Entrepreneurship.

LEVEL FOUR

- IT research methods
- Industry-based learning (can be used to replace Industrial training and Software engineering studio project (12 points) and one software engineering technical elective (6 points)).

LEVEL FIVE

- Introduction to data science
- Machine learning
- Data processing for big data
- Modelling discrete optimisation problems
- Natural language processing
- Deep learning.

Internship

You will be placed into an internship program related to software engineering after accumulating at least 120 credit points.

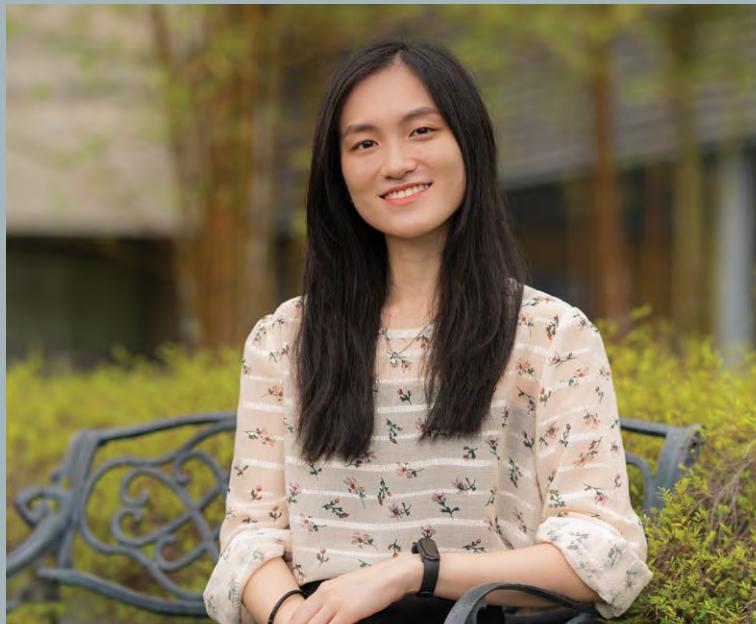
What your course will look like

YEAR 1/LEVEL 1 UNITS				
Semester 1 24 Credit points	ENG1005 Engineering mathematics 6 Credit points	ENG1014 Engineering numerical analysis 6 Credit points	ENG1011 Engineering methods 6 Credit points	First year engineering breadth study/Elective 6 Credit points
Semester 2 24 Credit points	ENG1012 Engineering design 6 Credit points	ENG1013 Engineering smart systems 6 Credit points	Elective 6 Credit points	Elective 6 Credit points
YEAR 2/LEVEL 2 UNITS				
Semester 1 24 Credit points	MAT1830 Discrete mathematics for computer science 6 Credit points	FIT2094 Databases 6 Credit points	FIT2099 Object-oriented design and implementation 6 Credit points	Level 1, 2 or 3 elective or technical elective 6 Credit points
Semester 2 24 Credit points	FIT2101 Software engineering process and management 6 Credit points	FIT2100 Operating systems 6 Credit points	FIT2085 Fundamentals of algorithms for engineers 6 Credit points	Level 1, 2 or 3 elective or technical elective 6 Credit points
YEAR 3/LEVEL 3 UNITS				
Semester 1 24 Credit points	FIT3197 Software quality and testing 6 Credit points	FIT3077 Software engineering: Architecture and design 6 Credit points	FIT2173 Software security 6 Credit points	Level 3 or 4 technical elective 6 Credit points
Semester 2 24 Credit points	FIT3196 Computer architecture and networks 6 Credit points	FIT3184 Cloud computing 6 Credit points	FIT3170 Software engineering practice 6 Credit points	Level 3 or 4 technical elective 6 Credit points
Summer	ENG0002 Industrial training (12 weeks)			
YEAR 4/LEVEL 4 UNITS				
Semester 1 24 Credit points	FIT4002 Industry experience studio project 12 Credit points	FIT4701 Final year project A 6 Credit points	FIT4043 Advanced topics in software engineering 6 Credit points	Level 3, 4 or 5 technical elective 6 Credit points
Semester 2 24 Credit points		FIT4702 Final year project B 6 Credit points	Level 4 or 5 technical elective 6 Credit points	Level 3, 4 or 5 technical elective 6 Credit points

■ Core studies ■ Professional practice ■ Elective studies

Please refer to page 12 for a list of technical electives.

This course map is intended as a rough guide. Units listed may vary depending on intake, availability and the latest requirements.



I built a strong foundation of knowledge and skills from the high-quality learning materials, which are highly applicable and beneficial in the industry. I was challenged to perform independent learning while being assured that I could easily acquire support and advice from my lecturers. Besides the technical knowledge, the independence and self-motivation that I gained are valuable skills to survive in the industry.”

KHOO LIN SZE

Bachelor of Software Engineering (Honours)

Currently pursuing a Doctor of Philosophy at Monash

	1 year
	February and July
	RM46,560 Malaysian student RM54,240 International student 2026 fees per year
	Professionally recognised

CAREER PATHS

Graduates with advanced computer science knowledge and skills could chart careers as:

- machine learning engineer
- AI engineer
- cybersecurity specialist
- data scientist
- research scientist
- consultant
- computer vision engineer
- digital health consultant.

BACHELOR OF COMPUTER SCIENCE (HONOURS)

KPT/JPT (R/481/6/0783) 10/27 - MQA/SWA12120

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. You'll undertake an independent research project on your selected topic, working closely with a supervisor who'll provide you with individual guidance and academic counselling. The course offers a pathway to higher level research in computer science.

Course structure

This course consists of a combination of coursework and research. In the coursework component, you'll develop advanced theoretical and/or technical knowledge of computer science and research methodologies appropriate to your field. In the research component, you'll plan and execute a research project under the individual guidance of an academic supervisor.

Course requirements

This course comprises 48 points. Units are six credit points each unless otherwise indicated.

A. COURSEWORK (24 points)

You're required to complete:

- Research methods in information technology
- three elective units (18 points) from the following*:
 - level four or five units approved by the faculty honours coordinator
 - a reading unit doing an elective in selected topics approved by your thesis supervisor and honours coordinator.

B. RESEARCH (24 points)

- Honours thesis part 1
- Honours thesis part 2
- Honours thesis part 3
- Honours thesis final

Progression to further studies

Graduating with honours won't just enhance your employment opportunities. It also means that you'll gain a pathway degree equivalent to a master by coursework, and you'll be well prepared to pursue a PhD.



“

Monash's rigorous curriculum, combined with opportunities for practical application and research projects, prepared me to tackle real-world challenges in the field of AI and data science.”

NIKIN GEETHILA MATHARAARACHCHI

Bachelor of Computer Science
Bachelor of Computer Science (Honours)
Founder and CEO, Synapse AI Labs

Nikin's goal is to drive innovation in the field of artificial intelligence and data science, with a focus on creating impactful solutions. As the founder of Synapse AI Labs, he spearheads the development of their flagship product, Kommon Poll, which leverages advanced machine learning techniques to analyse keyword performance across various online media platforms.

He is currently pursuing his PhD in Artificial Intelligence with Monash.

NEW KNOWLEDGE

NEW OPPORTUNITIES

People from across the globe are drawn to our graduate programs, renowned for their breadth, depth and flexibility.

Whether you've been in the industry for a few years or have just finished your bachelor's, let our graduate degrees propel you towards your professional goals.

To broaden your skills and expand your career prospects, our courses cover a comprehensive range of units – from the fundamentals to the specialised. What's more, they give you the freedom to explore a range of areas before honing in on a discipline you're interested in.

CHOOSE YOUR MASTER'S



Artificial Intelligence



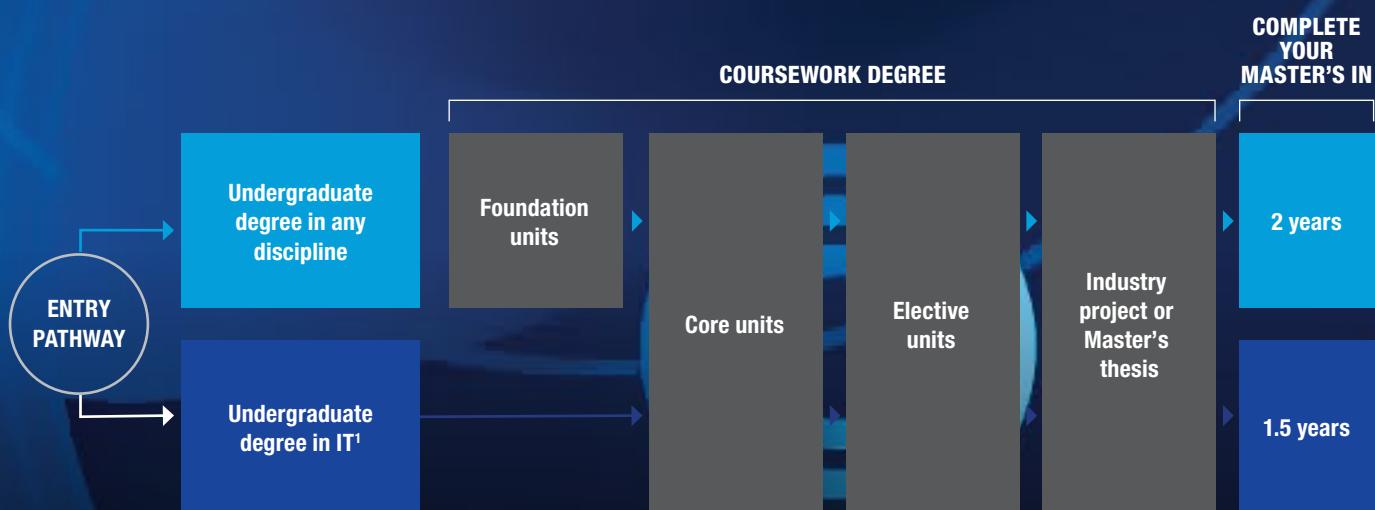
Business Information Systems



Data Science

YOUR GRADUATE DEGREE PATHWAY

Most of our graduate degrees start with foundation and core units. Then, through electives, you can explore specific topics to refine your expertise. The duration of your course will depend on which path you pursue, as shown below.



1 The credit exemption for the foundation units is subject to approval by the course coordinator based on the units studied in your undergraduate degree.

ARTIFICIAL INTELLIGENCE

AI has the ability to transform every aspect of our lives – from performing complex surgery to informing business decisions. With the field shaping the world at a rapid pace, society desperately needs experts in AI.

POTENTIAL CAREERS



MACHINE LEARNING ENGINEER

Designs, implements and deploys models and systems that give AI its 'intelligence' – allowing computers to learn, communicate and make decisions.



AI SECURITY SPECIALIST

Boosts the efforts against growing cyberattacks by harnessing the power of AI to support security operations and thwart potential threats.



AI SPECIALIST

Creates programs and infrastructures that help machines think and act without receiving explicit instructions – to enhance business outcomes and drive innovation.



DATA ANALYST

Gathers data from various sources and translates it into trustworthy recommendations to improve an organisation's business decisions.



AI RESEARCHER

Leads studies in AI, advancing the science and technology of intelligent machines, and creating greater real-world applications for this innovation.



ROBOTICS ENGINEER

Plans, develops and tests robot applications. Other exciting functions in this role include debugging robotics programs, creating back-ups and designing end-of-arm tooling.

MASTER OF ARTIFICIAL INTELLIGENCE

KPT/JPT (N/0613/7/0003) 10/29 - MQA/SWA16039

Artificial intelligence (AI) has the ability to transform every aspect of our lives. With the field advancing at a rapid pace, now more than ever the world needs experts in AI.

Delivered by some of the best minds in the field, this course gives you the specialist knowledge and adaptability to move to the forefront of AI transformation. It empowers you to design, develop, and analyse AI-based products and intelligent systems for the advancement of everything from healthcare, entertainment and education to transportation, manufacturing and financial services.

What you'll learn

- Analyse the lifecycle of an AI and machine learning system in relation to the data and computing resources in an organisation
- Apply contemporary theories and innovations in AI, machine learning and data analysis to common problems
- Plan an AI-based project in a new area of application, using knowledge of AI system lifecycles and their requirements for data, computing resources and user modelling
- Investigate, analyse, document and communicate the core criteria of developing AI capabilities in a global organisation
- Demonstrate ways to implement AI to a standard consistent with senior professional practice
- Review and evaluate AI-based projects
- Record and convey ethical and legal issues, privacy and security norms, and other key considerations when using and developing AI.

Course structure

PART A. FOUNDATIONS FOR ADVANCED ARTIFICIAL INTELLIGENCE STUDIES (24 credit points)

You'll complete four advanced preparatory units:

- Introduction to databases
- Algorithms and programming foundations in Python
- Introduction to computer architecture and networks
- Mathematical foundations for data science.

PART B. CORE MASTER'S STUDIES (48 credit points)

You'll complete:

- Fundamentals of artificial intelligence
- Project management
- IT research and innovation methods
- Machine learning
- Deep learning
- Modelling discrete optimisation problems
- Multi agent systems and collective behaviour.

Choose one of the following:

- Natural language processing
- Malicious AI.

PART C. ADVANCED PRACTICE (24 credit points)

You have two options:

- **Industry experience:** A program of coursework involving advanced study and an industry experience studio project.
- **Master's thesis:** A research pathway including a thesis. If you wish to use this course as a pathway to a PhD degree you should take this option.

⌚ 1.5 – 2 years (Full-time)
3 – 4 years (Part-time)*

➡] February and July

\$ RM64,080 Malaysian student
RM74,160 International student
2026 fees for full course

✿ Coursework

* Part-time study is not available for international students.

PRIOR QUALIFICATIONS

If you have a bachelor's degree or equivalent in a cognate discipline relating to IT, or an engineering or science degree with a substantial IT components, you may be exempted from completing foundation units and graduate in 1.5 years on full-time study. If your bachelor's degree is not necessarily in IT, you will complete a foundation semester and graduate in 2 years on full-time study. The foundation units are offered at no cost.

Bursaries

Are you a Monash graduate? Get a 10% tuition fee waiver when you successfully enrol in this course. Visit monash.edu.my/scholarships for more details.



Monash excels in delivering high-quality education, offering substantial research opportunities and providing a supportive learning environment. The prestige associated with a Monash degree has been beneficial in my job search, aligning well with my career aspirations in the field of artificial intelligence."

CHAN JIA ZHENG

Bachelor of Computer Science
Master of Artificial Intelligence
Currently pursuing a Doctor of Philosophy at Monash

Jia Zheng is passionate about using AI to create positive societal impact, particularly in improving healthcare diagnostics or advancing environmental sustainability.

BUSINESS INFORMATION SYSTEMS

Whether it's for day-to-day operations or strategic decision-making, information drives business. It's why systems that manage information are integral to organisations – as are specialists in the area.

POTENTIAL CAREERS



MANAGEMENT AND ORGANISATION ANALYST

Help organisations boost performance, efficiency, and long-term success.



BUSINESS ANALYST

Bridge business and technology. Work with stakeholders to uncover problems, analyse needs, and design digital solutions.



SYSTEMS ANALYST

Improve how organisations work by designing smarter systems and helping teams use them effectively.



IT MANAGER

Lead and coordinate technology strategies that keep businesses running efficiently and securely.



INFORMATION MANAGEMENT SPECIALIST

Organise and optimise information so that businesses can access insights when they need them most.



IT CONSULTANT

Advise businesses on the best technologies, strengthen cybersecurity, and drive digital transformation.

MASTER OF BUSINESS INFORMATION SYSTEMS

KPT/JPT (R2/481/7/0743) 06/28 - MQA/SWA0163

Power business decisions with data and technology.

From everyday operations to strategic innovation, information is at the heart of every organisation. Business Information Systems specialists combine business insight and digital skills to help companies make smarter, faster, and more impactful decisions. You'll be prepared for careers in big data analytics, business intelligence, systems design, planning and management, as well as knowledge and information management.

What you'll learn

You should be equipped to:

- explain and discuss the major theoretical and professional issues related to business information systems
- deeply analyse a business problem, design an IT solution for it and measure performance
- engage in business information systems work to a standard aligned with senior professional practice
- demonstrate social, ethical and communication skills in an industry setting while managing ambiguity and complexity
- convey your research findings and the rationales behind your solutions to diverse stakeholders
- investigate information system problems with skills developed through independent research and a thesis, or by using research methods for academic or professional purposes.

Course structure

PART A. FOUNDATIONS FOR ADVANCED BUSINESS INFORMATION SYSTEMS

(24 credit points)

You'll complete four advanced preparatory units:

- Fundamentals of business information systems
- Information systems analysis, design and systems thinking
- Introduction to Python programming
- Introduction to databases.

PART B. CORE MASTER'S STUDIES

(48 credit points)

- Project management
- IT research and innovation methods
- Digital transformation, strategy and governance
- Advanced business information systems analysis and design
- Business intelligence and analytics
- Responsible digitalisation
- One elective unit (6 credit points) from the level five units approved by the faculty coordinator.

Choose one of the following:

- IT for management decision making
- Digital continuity.

PART C. ADVANCED PRACTICE

(24 credit points)

You have two options:

- **Industry experience:** A program of coursework involving advanced study and an industry experience studio project.
- **Master's thesis:** A research pathway including a thesis. If you wish to use this course as a pathway to a PhD degree you should take this option.



1.5 – 2 years (Full-time)

3 – 4 years (Part-time)*

Classes are held on weekday evenings.



February and July



RM64,080 Malaysian student

RM74,160 International student

2026 fees for full course



Coursework



Professionally recognised

* Part-time study is not available for international students.

PRIOR QUALIFICATIONS

If you have a bachelor's degree or equivalent in a cognate discipline relating to IT or information systems or with an information systems major, you may be exempted from completing foundation units and graduate in 1.5 years on full-time study. If your bachelor's degree is not necessarily in IT, you will complete a foundation semester and graduate in 2 years on full-time study. The foundation units are offered at no cost.

Bursaries

Are you a Monash graduate?

Get a 10% tuition fee waiver when you successfully enrol in this course.

Visit monash.edu.my/scholarships for more details.



Monash struck the perfect balance between in-demand industry skills and business acumen through real-world case studies. Learning from lecturers who are established industry leaders and connecting with an extensive alumni community gave me valuable knowledge and insights, along with a strong professional network that continues to support me today."

YIP SHAWN

Bachelor of Science (Genomics and Bioinformatics)
Master of Business Information Systems
Product Manager, MoneyLion

As a firm believer in IT for social good, Shawn has always been passionate about using technology to create meaningful, positive change. By leveraging his skillset as a product manager and the knowledge he's gained from his studies at Monash, he aims to build user-centric products that address real-world issues and contribute to a better quality of life for individuals and communities.



DATA SCIENCE

Sought-after worldwide, data experts extract gold from mass information. With the insights they uncover, these professionals drive innovation and transformation across many sectors.

POTENTIAL CAREERS



DATA SCIENTIST

Uncover patterns, trends, relationships and other insights from big data to inform business decisions, drive innovation and solve challenging problems.



DATA ANALYST

Sift through and translate complex business data into insights that will help your organisation make better decisions.



DATABASE AND SYSTEMS ADMINISTRATOR

Manage, maintain and secure the databases and information systems of an organisation, ensuring efficient operation, availability, integrity and security of data and IT infrastructure.



DATA ARCHITECT

Develop blueprints for building, testing and maintaining databases.



CHIEF DATA OFFICER

Oversee the organisation-wide collection, storage, analysis and management of data to achieve your business' high-level mission.



QUANTITATIVE ANALYST

Design and execute complex mathematical models to inform an organisation's financial decisions and reduce its risks.

MASTER OF DATA SCIENCE

KPT/JPT (N/0613/7/0002) 10/29 - MQA/SWA16038

With expertise that's sought-after worldwide in the information age, data scientists extract meaningful insights from vast volumes of data.

These professionals drive innovation and transformation across many sectors with the information they uncover, playing a critical role in advancing industry, commerce, governance and research.

This course teaches you how to explore data and discover its potential – how to find innovative solutions to real problems in science, business and government, from technology start-ups to global organisations. You'll master skills in data management, data analytics and data processing, gaining the competencies needed to excel in this fast-growing field.

Industry standards

We offer the most up-to-date material while maintaining a solid core of established theory and platforms, including Python and R (two of the most popular open-source programming languages for data analysis), plus Hadoop and Spark (for distributed processing).

What you'll learn

You'll be equipped to:

- analyse the data lifecycle within an organisation
- apply major data analysis and exploration theories to common contexts and challenges
- plan data science projects in new application areas
- work on the core issues and requirements to enhance an organisation's data analysis capabilities
- demonstrate advanced, professional-level understanding of data science
- apply modern data science theories through independent research or professional projects
- address ethical and legal considerations in data science, including privacy, security, and community concerns.

Course structure

PART A. FOUNDATIONS FOR ADVANCED DATA SCIENCE STUDIES (24 credit points)

You'll complete four advanced preparatory units:

- Introduction to databases
- Algorithms and programming foundations in Python
- Introduction to computer architecture and networks
- Mathematical foundations for data science.

PART B. CORE MASTER'S STUDIES (48 credit points)

You'll complete:

- Project management
- IT research and innovation methods
- Foundations of data science
- Data exploration and visualisation
- Data wrangling
- Statistical data modelling
- Data processing for big data.

Choose one of the following:

- Machine learning
- Malicious AI.

PART C. ADVANCED PRACTICE (24 credit points)

You have two options:

- **Industry experience:** A program of coursework involving advanced study and an industry experience studio project
- **Master's thesis:** A research pathway including a thesis. If you wish to use this course as a pathway to a higher degree by research you should take this option.



1.5 – 2 years (Full-time)

3 – 4 years (Part-time)*

Part-time classes are usually held on weekdays.



February and July



RM64,080 Malaysian student

RM74,160 International student
2026 fees for full course



Coursework

* Part-time study is not available for international students.

PRIOR QUALIFICATIONS

If you have a bachelor's degree or equivalent in a cognate discipline relating to IT, or a business, engineering or science degree with a substantial IT components, you may be exempted from completing foundation units and graduate in 1.5 years on full-time study. If your bachelor's degree is not necessarily in IT, you will complete a foundation semester and graduate in 2 years on full-time study. The foundation units are offered at no cost.

Bursaries

Are you a Monash graduate?

Get a 10% tuition fee waiver when you successfully enrol in this course.

Visit  monash.edu.my/scholarships for more details.



Monash has a strong reputation in IT-related industries, and its computer science graduates are well-regarded by employers. The coursework is well-structured and the learning environment is supportive. A highlight is the cross-campus teaching team; we can post questions on the Ed forum and receive quick responses from any team member. This is a new experience for me and a highly efficient way to get help with assignments."

TAN FAN HWA

Master of Data Science



IT FOR SOCIAL GOOD

We're home to researchers who stand at the forefront of innovation in data science, cybersecurity, artificial intelligence and other IT fields. As a Monash graduate researcher, you'll work with the brightest minds to enhance your research potential - and shape the future of our world.

Technology skills are valuable beyond business. They also play an integral part in addressing key challenges of the age such as Thriving Communities, Geopolitical Security and Climate Change.

So when you graduate with an IT degree, you won't just be equipped for career success – but also to make a positive long-term impact in the world.



Professor Wong Kok Sheik is encrypting content to prevent hackers from accessing our personal information.

SCAN TO WATCH



PREDICTING HEART FAILURE

We're leading a nationwide pilot study at Ministry of Health cardiac centres to test a mobile app we've developed to predict early worsening outcomes in heart failure patients. This app will help to enhance the quality of patient care with proactive medical therapy.



IDENTIFYING BRAIN DISORDERS

We're developing deep learning algorithms to identify neuroimaging biomarkers for brain disorders and prediction of individual differences in behaviours and personality traits.



TACKLING FRAUD

Online document verification has reduced digital fraud but increased physical document tampering. We're using image processing and machine learning to detect tampering in physical documents by combining techniques in image processing and machine learning.



MAXIMISING ENERGY EFFICIENCY

We're working on energy-sustainable paradigms for 5G and Beyond 5G networks to maximise the efficiency of harvested energy while minimising grid power consumption.



DETECTING CRIMINAL ACTIVITY

To identify potential suspicious behaviours that may lead to criminal intent, we're designing an active surveillance system to analyse video feed content in real time.



MASTER OF PHILOSOPHY

KPT/JPT (N/0610/7/0003) 5/31 - MQA/SWA17592

Join the global conversation about the most prominent theories and ideas in your field through the independent investigation of research questions that you have formulated.

The degree allows you to develop in-depth knowledge, expertise and skills through the application of research to business or IT challenges, with support from a minimum of two supervisors throughout your enrolment. You'll gain experience in the design and implementation of research and make a contribution to an existing body of knowledge by applying, clarifying or interpreting that knowledge.

Areas of research

- Artificial intelligence
- Cybersecurity
- Data science
- Digital health
- Software engineering.

Progression to further studies

If you have demonstrated exceptional progress and met the requirements, you may apply to transfer into a PhD, subject to approval.

 2 years (full-time)
4 years (part-time)*

 Throughout the year
(subject to availability of supervision)

 Research

 RM48,480 Malaysian student
RM54,720 International student
2026 fees per year

* Part-time study is not available for international students.

DOCTOR OF PHILOSOPHY

KPT/JPT (N/0610/8/0004) 08/31 - MQA/SWA17708

The opportunity to take up independent research through the Monash Doctoral Program is one of the most challenging and rewarding experiences we can offer you.

The program consists of an extensive, independent research project in your discipline of choice, supported by a minimum of two academic supervisors throughout your candidature. Your study will result in a research thesis which makes a valuable contribution to the current body of knowledge on your chosen topic.

Areas of research

- Artificial intelligence
- Computer vision and pattern recognition
- Cybersecurity
- Data science
- Digital health
- Human-machine interaction
- Image, video and speech processing
- Learning analytics
- Machine learning
- Mobile networks
- Software engineering.

 3 – 4 years (full-time)
6 – 8 years (part-time)*

Your PhD research project is to be conceived from the outset as clearly achievable within three years equivalent full-time, and you're expected to complete your degree within three to four years equivalent full-time.

 Throughout the year
(subject to availability of supervision)

 Research

 RM48,480 Malaysian student
RM54,720 International student
2026 fees per year

* Part-time study is not available for international students.



I chose Monash because it is the highest globally ranked university in Malaysia and for its inter-campus collaboration and exchange opportunities. I enjoyed working with knowledgeable and supportive supervisors, collaborating with experts around the world, and visiting other institutions, which greatly enriched my research experience.”

DR HANRUI WANG

Doctor of Philosophy
Postdoctoral Researcher, National Institute of Informatics, Japan

At Monash, Hanrui developed a diffusion-based adversarial purification method to protect face authentication systems from adversarial attacks. His methodologies offer comprehensive tools for security evaluation and contribute to mitigating adversarial threats in real-world applications.



ENTRY REQUIREMENTS

ENGLISH PROFICIENCY TESTS

Monash University accepts:

- IELTS (Academic)/IELTS One Skill Retake (Academic)/IELTS Online – Overall band score of 6.5 with no band less than 6.0. www.ielts.org
- TOEFL iBT/TOEFL iBT Paper Edition – A total score of 79 with 12 in Listening, 13 in Reading, 21 in Writing and 18 in Speaking. www.ets.org
- Pearson Test of English (Academic) – Overall score of 58 with no Communicative Skills lower than 50. www.pearsonpte.com
- C1 Advanced/C2 Proficiency – Overall score of 176 with no skill score lower than 169. www.cambridgeenglish.org
- Monash English (selected courses)

Higher scores are required for the Doctor of Philosophy. Visit monash.edu.my/research-english-req

Tests must be taken within 24 months prior to the course commencement date.

FEES

All tuition fees and course durations specified in this guide are in Malaysian Ringgit and only apply to courses studied at the Malaysian campus. The tuition fees quoted are for 48 credit points and are applicable to courses commencing in 2026. Tuition fees for courses commencing in 2027 will be different. Monash University Malaysia reserves the right to adjust the annual tuition fees in future years of your course. Any adjustment will be applied on the first day of January each year.

Effective 1 July 2025, the Malaysian Government has expanded the Sales and Service Tax (SST) framework to include education services for international (non-Malaysian) students. This means a 6% service tax will apply to tuition and other related education fees charged by private higher education providers, including Monash University Malaysia. The fees listed in this guide exclude the service tax.

GENERAL FEES

Application (once only)	AUD37 (My.App portal) RM100 (other payment methods) Malaysian citizen
	AUD40 (My.App portal) RM106 (other payment methods) Non-Malaysian citizen

Registration (once only) RM200

General amenities (per semester) RM100

International student pass

Visit monash.edu.my/student-pass

Need help with your application?

Contact us:

 mum.enquiry@monash.edu

 +60 3 5514 6000

 Live Chat (Weekdays from MYT 9am to 5pm)
ask.monash.edu.my

Course	Study mode	Duration	Intakes	2026 fees	Prerequisites and additional requirements
Bachelor of Computer Science		3 years	February, July and October	Malaysian student RM47,040 (per year) International student RM54,720 (per year)	English (Monash's minimum requirements apply) Higher level Mathematics (Australian Year 12 equivalent)
Bachelor of Computer Science in Artificial Intelligence					
Bachelor of Computer Science in Data Science					
Bachelor of Computer Science (Honours)		1 year	February and July	Malaysian student RM46,560 (per year) International student RM54,240 (per year)	English (Monash's minimum requirements apply)
Bachelor of Software Engineering (Honours)		4 years	February, July and October	Malaysian student RM54,720 (per year) International student RM64,800 (per year)	English (Monash's minimum requirements apply) Higher level Mathematics and one of Chemistry or Physics (Australian Year 12) <i>Meeting the Monash course prerequisites are also subject to the 10 year rule.</i>
Master of Artificial Intelligence	Coursework	1.5-2 years (full-time) 3-4 years (part-time)	February and July	Malaysian student RM64,080 (full course) International student RM74,160 (full course)	
Master of Business Information Systems	Coursework	1.5-2 years (full-time) 3-4 years (part-time)	February and July	Malaysian student RM64,080 (full course) International student RM74,160 (full course)	
Master of Data Science	Coursework	1.5-2 years (full-time) 3-4 years (part-time)	February and July	Malaysian student RM64,080 (full course) International student RM74,160 (full course)	
Master of Philosophy	Research	2 years (full-time) 4 years (part-time)	Throughout the year. Subject to availability of supervision.	Malaysian student RM48,480 (per year) International student RM54,720 (per year)	
Doctor of Philosophy	Research	3-4 years (full-time) 6-8 years (part-time)	Throughout the year. Subject to availability of supervision.	Malaysian student RM48,480 (per year) International student RM54,720 (per year)	

1 The Malaysian Qualification Agency (MQA) accepts a minimum D Grade in A Level to be equivalent to the STPM Pass grade. For more information, visit monash.edu.my/study/entry-requirements/academic/undergraduate/calculating-entry-scores

2 The undergraduate entry requirements published in this guide are for students who commenced the MUFY program in 2025.

3 Diploma of Higher Education Studies and Monash College Diploma Part 2 provide a pathway into the second year of the corresponding undergraduate studies.

4 The Monash College Diploma Part 2 entry requirements published in this guide are for students commencing their undergraduate destination degree in 2026.

5 Please refer to priorstudy.monash.edu/prior-study/ for the full entry score.

HOW TO APPLY

Undergraduate/Coursework degrees

1 Apply monash.edu.my/apply-online

2 Your application is assessed

3 Accept your offer monash.edu.my/accept

Malaysian students

4 Arrange for accommodation (if required)

5 Participate in orientation monash.edu.my/orientation

International students

4 Apply for your student pass monash.edu.my/student-pass

5 Your student pass is approved

6 Apply for single entry visa (if required)*

7 Plan your arrival monash.edu.my/lets-begin

8 Participate in orientation monash.edu.my/orientation

Research degrees

1 Check your eligibility and find your supervisors

2 Submit an Expression of Interest monash.edu.my/EOI

3 Receive an invitation to apply and lodge a formal application monash.edu.my/apply-graduate-research

4 Your application is assessed

5 Accept your offer

*Please refer to the Education Malaysia Global Services's website for more information on SEV required countries: visa.educationmalaysia.gov.my/guidelines/sev-required-countries.html

QUALIFICATION	GLOBAL		AUSTRALIA					CANADA	CHINA	HONG KONG	INDIA		INDONESIA				MALAYSIA			SRI LANKA	VIETNAM	
			MONASH				ATAR	UNSW Foundation Studies	Ontario Secondary School Diploma	Gaoao	Hong Kong Diploma of Secondary Education	All India Senior School Certificate Examination	Indian School Certificate Examination	SMA3 ⁵				STPM	UEC	Program Matrikulasi (Matriculation Program)	Foundation in Science and Technology, Sunway College	
	GCE A Level ¹	International Baccalaureate (IB) Diploma	Monash University Foundation Year ²	Diploma of Higher Education (DHEs) ³	Monash College Diploma Part 2 ⁴	ATAR								KKM 65	KKM 70	KKM 75	KKM 80				Sri Lankan General Education (Advanced Level)	
9	28	70%	60%	60%	80	7.5	81.6%	70%	18	75%	70%	83%	84%	85%	88%	8.5	≤4.2	2.67	70%	11	8.28	

Requirements

Successful completion of a relevant Australian bachelor's degree (or equivalent) with an average of at least 70% overall or equivalent qualification.

10	30	76.25%	N/A	60%	85	8	84.8%	75%	19	80%	75%	85%	87.5%	88%	90%	9.1	≤3.4	3	75%	12	8.42
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Entry level 1: 96 points to complete I (Duration: 2 years full-time, 4 years part-time)

- An Australian bachelor degree or equivalent, not necessarily in IT, with a minimum WAM 60 or equivalent.
- Meet the English language requirements of the University (Monash English is accepted).

Entry level 2: 72 points to complete I (Duration: 1.5 years full-time, 3 years part-time)

- An Australian bachelor degree or equivalent in a cognate discipline relating to IT, or an engineering or science degree with a substantial IT component including Python programming, data structures and algorithms, databases, computer architecture, operating systems and networks, and mathematics (including calculus, linear algebra and probability and statistics), with a minimum WAM 60 or equivalent.
- Meet the English language requirements of the University (Monash English is accepted).

Entry level 1: 96 points to complete (Duration: 2 years full-time, 4 years part-time)

- An Australian bachelor degree (or equivalent), not necessarily in IT, with a minimum WAM 60 or equivalent.
- Meet the English language requirements of the University (Monash English is accepted).

Entry level 2: 72 points to complete (Duration: 1.5 years full-time, 3 years part-time)

- An Australian bachelor degree (or equivalent) in a cognate discipline relating to information systems or with an information systems major, with completed studies in: foundational programming, database, systems analysis and design plus an understanding of the enterprise IT applications, including transactional, managerial and analytical applications, with a minimum WAM 60 or equivalent.
- Meet the English language requirements of the University (Monash English is accepted).

Entry level 1: 96 points to complete (Duration: 2 years full-time, 4 years part-time)

- An Australian bachelor degree (or equivalent), not necessarily in IT, with a minimum WAM 60 or equivalent.
- Meet the English language requirements of the University (Monash English is accepted).

Entry level 2: 72 points to complete (Duration: 1.5 years full-time, 3 years part-time)

- An Australian bachelor degree (or equivalent) in a cognate discipline relating to IT, or a business, engineering or science degree with an IT major including python programming, databases, algorithms, computer architecture, operating systems and networks, and mathematics (including calculus, linear algebra and probability and statistics), with a minimum WAM 60 or equivalent.
- Meet the English language requirements of the University (Monash English is accepted).

- A bachelor's degree of at least four years in a relevant discipline, which includes a research thesis or project, with a minimum overall average grade of an honours degree equivalent to the Second Class Honours Division B with mark of 65 or above; or
- A master's degree in a relevant discipline which includes a research thesis or project equivalent to at least 25 percent of one year of full-time study, with a minimum overall average grade of an honours degree equivalent to the Second Class Honours Division B with mark of 65 or above; or
- A qualification, or combination of qualifications and relevant professional experience, deemed equivalent by the GRC (or delegate).

- A bachelor's degree of at least four years in a relevant discipline, which includes a research thesis or project, with a minimum overall average grade of an honours degree equivalent to the Second Class Honours Division A; or
- A master's degree in a relevant discipline which includes a research thesis or project equivalent to at least 25 percent of one year of full-time study, with a minimum overall average grade of an honours degree equivalent to the Second Class Honours Division A; or
- A qualification, or combination of qualifications and relevant professional experience, deemed equivalent by the GRC (or delegate).
- Meet the English language requirements of the University.

Entry requirements are subject to change. Please refer to monash.edu.my for the latest updates.

CONTACT US

Business hours

Monday to Friday 9.00am – 5.00pm

Counselling hours for course enquiries

Monday to Friday 9.00am – 5.00pm

Closed on weekends and public holidays.

Enquiries

T +60 3 5514 6000

F +60 3 5514 6001

E mum.enquiry@monash.edu

Address

Monash University Malaysia
Jalan Lagoon Selatan
47500 Bandar Sunway
Selangor Darul Ehsan
Malaysia

monash.edu.my

 MonashMalaysia

The information in this brochure was correct at the time of publication (November 2025). Monash University Malaysia reserves the right to alter this information should the need arise.

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monash.edu.my/study/register

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monash.edu.my/apply-online



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