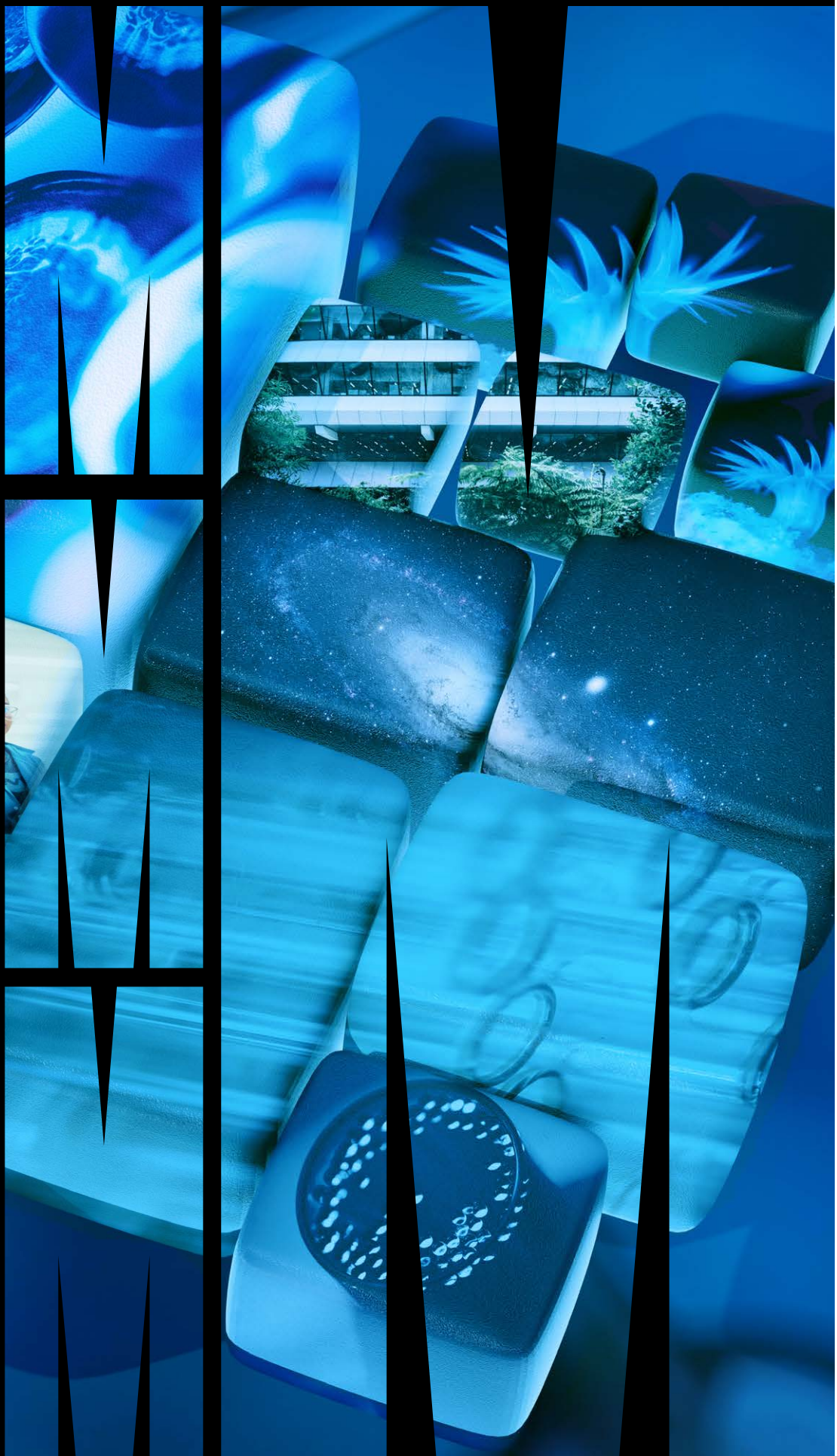
MONASH University

2027
SCIENCE
GRADUATE
COURSE GUIDE

SCIENCE GRADUATE



MONASH SCIENCE AT A GLANCE

100+
PARTNER UNIVERSITIES AROUND THE GLOBE

2 CAMPUS PARTNERSHIPS

INDIA – MUMBAI
CHINA – SUZHOU

9 CAMPUSES ACROSS 4 COUNTRIES

MELBOURNE
– CLAYTON
– CAULFIELD
– DOCKLANDS
– PARKVILLE
– PENINSULA
– ALFRED

ITALY – PRATO

MALAYSIA – KUALA LUMPUR

INDONESIA – JAKARTA

A MEMBER OF
GROUP OF EIGHT AUSTRALIA

OVER 115 TEACHING PARTNERS IN 30 COUNTRIES

TOP 1% OF UNIVERSITIES IN THE WORLD

UNIVERSITY-WIDE RANKINGS

#36
IN THE WORLD
(QS World University Rankings 2026)

#38
IN THE WORLD
(US News and World Report Best Global University Rankings, 2025-2026)

#49
IN THE WORLD
(QS Sustainability Rankings 2026)

#58
IN THE WORLD
(Times Higher Education World University Rankings, 2026)

#63
IN THE WORLD
(Times Higher Education World Reputation Rankings, 2025)

#76
IN THE WORLD
(Shanghai Ranking's Academic Ranking of World Universities 2025)

MONASH UNIVERSITY recognises that its Australian campuses are located on the unceded lands of the people of the Kulin Nations, and pays its respects to their Elders, past and present.

TOP 100 IN THE WORLD FOR

BIOLOGICAL SCIENCES
CHEMISTRY
EARTH AND MARINE SCIENCES
ENVIRONMENTAL SCIENCES
GEOLOGY
MATHEMATICS
NATURAL SCIENCES
PHYSICS AND ASTRONOMY

(2026 QS World University Rankings by Subject)

LIFE SCIENCES
PHYSICAL SCIENCES

(2026 Times Higher Education World University Rankings by Subject)

ATMOSPHERIC SCIENCES
BIOLOGICAL SCIENCES
EARTH SCIENCES
ECOLOGY
FOOD SCIENCE AND TECHNOLOGY
PHYSICS

(2025 Shanghai Ranking's Global Ranking of Academic Subjects)

BIOLOGY AND BIOCHEMISTRY
CHEMISTRY
ENERGY AND FUELS
ENVIRONMENT/ECOLOGY
GEOSCIENCES
MATHEMATICS
METEOROLOGY AND ATMOSPHERIC SCIENCES
PHYSICS
POLYMER SCIENCE
SPACE SCIENCE

(US News and World Report Best Global University Subject Rankings, 2025-2026)

MELBOURNE, VICTORIA

ONE OF THE WORLD'S MOST LIVEABLE CITIES

Melbourne is a very diverse city, demonstrated through our events, sport, festivals, neighbourhoods and food.

It's a vibrant and welcoming city underpinned with a rich multicultural history. Melbourne is an exceptional destination to meet, connect, share and learn. We've got it all.

Our Australian base is a vibrant, multicultural city that offers an abundance of cultural festivities, international sporting events, cafés and restaurants with cuisines from around the world, beautiful parks and beaches, and an eclectic mix of music and arts. You couldn't pick a better place to live. As one of the world's most liveable cities[1], you can expect excellence in public transport and healthcare, as well as opportunities for casual work while studying. Plus, Melbourne is renowned as a welcoming environment for international students, providing a home away from home[1].

1. Melbourne ranks #1 in Australia for liveability – and #4 in the world in the 2025 Global Liveability Index, released by the Economist Intelligence Unit (EIU).

OUR COURSES

COURSE INFORMATION FAST FACTS

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

	Location
	Duration (years)
	Intakes

Tap or click the course titles throughout this guide and you'll be taken directly to that course on our website.

WELCOME

Are you ready to take your passion for science to the next level?

I'm thrilled to share the remarkable benefits that await you on choosing a postgraduate degree at Monash Science. Science knows no borders – a postgraduate degree opens doors to global opportunities. It is your passport to becoming a true expert in your field. Delve deep into specialised subjects and gain a profound understanding that will set you apart in the competitive world of science.

Whether your interest lies in quantum physics, environmental studies, green and sustainable technologies, a postgraduate degree with us will empower you to explore your chosen area with unmatched depth.

A postgraduate degree isn't just about expanding your knowledge – it's about expanding your horizons. Collaborate with fellow passionate scientists, engage in cross-disciplinary projects, and exchange ideas that spark innovation. The diverse academic environment of a postgraduate program in our Faculty cultivates creativity and offers fresh perspectives that can lead to unexpected breakthroughs.

Whether you envision a career in industry, research, or academia, a postgraduate science degree gives you a competitive edge. Employers seek individuals with advanced knowledge and critical thinking skills, and a master's degree showcases your commitment to excellence.

You'll have a wide array of career pathways to choose from, and your degree will be the foundation upon which you build your success.

Beyond academic and professional benefits, a postgraduate science degree fosters personal growth. The challenges you overcome, the discoveries you make, and the skills you develop will transform you into a resilient, adaptable, and resourceful individual. Your journey with us will empower you to tackle complex problems with confidence and to embrace continuous learning throughout your life.

I invite you to explore this guide and learn more about the exciting postgraduate programs we offer as you embark on a voyage of intellectual and personal enrichment.

PROFESSOR JORDAN NASH
Dean, Faculty of Science

Discover our Graduate Internships:
go.monash.edu/sci-grad-internship

INDUSTRY ENGAGEMENT AND INTERNSHIPS

Engagement with industry is at the heart of all Monash courses, and we're committed to delivering industry-relevant programs to ensure strong graduate outcomes for our students.

INTERNSHIPS, FIELDWORK AND EXPERIENTIAL LEARNING

Monash is committed to providing you with the best possible opportunity to apply academic theory to real-world situations through our accredited internship and fieldwork programs. These programs offer you the chance to either work within an organisation or carry out fieldwork and research both locally and internationally for a period of between four weeks and a full semester. We see this as a crucial component of a well-rounded education, which will enable you to better understand workplace culture, to actively engage in the application of concepts, and to develop networks and connections which can assist you in establishing your career.

LEARN FROM LEADING PRACTITIONERS

Our highly-regarded academic Faculty comprises some of the world's leading and most active scientific minds. You'll also have the opportunity to learn directly from industry experts and practitioners who've risen to the top of their own profession, and who are passionate about passing their knowledge and experience on to a new generation of leaders. Monash's teaching staff are widely sought-after by industry, government and the media for their input across all disciplines of science. They combine world-class research with robust industry networks to ensure you graduate with both the conceptual and practical skills necessary for a sustained and successful career.

MASTER OF BEHAVIOUR AND SYSTEMIC CHANGE

Find out more: **go.monash.edu/mbsc**

COURSE CODE: S6011

Are you inspired to make the world a better place, but not sure how?

Can you see that people need to do things differently to address the grand challenges of our time? If you are passionate about creating impactful change, want to build new skills and acquire new tools and methods in delivering this change, this course is for you.

The first course of its kind in the southern hemisphere, the Master of Behaviour and Systemic Change is a practical, impact-oriented degree. It brings together powerful, transferable, change-oriented theories from behavioural psychology and economics, social and political sciences and interdisciplinary sustainability studies. The course equips students to tackle the grand challenges of our time – climate change, geopolitical security and the health of our communities.

Behavioural and systemic change approaches sit at the core of the course. These core studies provide you with a comprehensive toolkit, equipping you to deliver solutions to societal challenges.

GRADUATE CERTIFICATE OF BEHAVIOUR CHANGE
GRADUATE CERTIFICATE OF INNOVATION FOR SUSTAINABILITY

Not sure whether a master's degree is for you? Try some units in a graduate certificate first.

The graduate certificate provides you with a foundation in Behaviour Change or Innovation for Sustainability by allowing you to sample several of the master units on offer. Successful completion can provide credit and entry into the master's degree. These qualifications are only available to domestic students.

Find out more: **go.monash.edu/gcbc**

Find out more: **go.monash.edu/gcis**

AT A GLANCE

Clayton (On-campus) Full time & part time

This program is on-campus at Clayton, however many units are offered in flexible modes, including online. All students, regardless of study mode, are required to attend 3 x 3-day mandatory on-campus masterclasses throughout the course.

1.5 years (full time) / **3 years** (part time)

February (First semester)
July (Second semester)

MINIMUM ENTRY REQUIREMENTS (DOMESTIC STUDENTS) QUALIFICATIONS

ENTRY LEVEL 1
72 POINTS TO COMPLETE

1.5 years full time – 3 years part time

An Australian bachelor degree (or equivalent) in a cognate discipline including humanities and social sciences, public health, sustainability, climate change, law, business, science, with at least 60% (credit) average, or equivalent qualification and experience approved by the faculty.

OR

An Australian bachelor degree (or equivalent) and an Australian graduate certificate/diploma (or equivalent) with at least 60% (credit) average in each qualification, or equivalent qualification, and experience approved by the faculty.

ENTRY LEVEL 2
48 POINTS TO COMPLETE

1 year full time – 2 years part time

An Australian bachelor honours degree (or equivalent) in a cognate discipline including humanities and social sciences, public health, sustainability, climate change, law, business, science, with at least 60% (credit) average, or equivalent qualification and experience approved by the faculty.

COURSE PROGRESSION MAP

Year 1 Sem 1	**BAS5500** The challenge of change	**ENS5510** Innovation to influence system change	**ENS5520** Understanding human behaviour to influence change	**BAS5550** Designing impactful change projects
Year 1 Sem 2	**Students complete one of the following units:** **ENS5530** Leading change for sustainable development **OR** **BEX5411** Creativity and entrepreneurship	**BAS5515** Facilitating systemic change	**BAS5525** Advanced understanding of behaviour and decision making	**BAS5555** Advanced evaluation of change projects
Year 2 Sem 1	**Part B unit**	**Part B unit**	Students complete one of the following: • **ENS5910** Sustainability consultancy project (12 points) **OR** • **ENS5930** Sustainability internship (12 points) **OR** • **Two 6 points units from Part B**	

Part A. Core studies Part B. Discipline studies

"Behaviour change and systems change are two sides of the same coin. If we have any chance of creating equitable and sustainable societies, we need to achieve both – this course really gets to the heart of that."

DR FILIA GARIVALDIS
Master of Behaviour and Systemic Change
Course Director

"I thoroughly enjoyed this course. The teachers are knowledgeable, passionate and generous in imparting their deep understanding of their respective areas of specialisation. The course provided insight into the risks and opportunities inherent in decarbonisation and shifts toward sustainable economies for business, individuals and systems."

RACHEL
Graduate Certificate of Innovation for Sustainability graduate
Senior Advisor, Australian Trade and Investment Commission

MASTER OF ENVIRONMENT AND SUSTAINABILITY

Find out more:
go.monash.edu/MEnvSus

COURSE CODE: S6002

You're passionate about changing the world for the better. You understand that solving today's complex sustainability challenges requires collaboration and a holistic approach. You've come to the right place.

The Master of Environment and Sustainability will build on your passion and teach you how to develop interdisciplinary solutions, so that you can drive meaningful change for a more sustainable and equitable world.

Building on your existing skills and experience, the first part of the course establishes an interdisciplinary foundation that allows you to analyse the interdependence of nature, society and the economy. You'll specialise in a vital field by choosing one of five specialisations.

Then you'll apply your specialist and interdisciplinary knowledge and skills through immersion internships, consultancy engagements, industry-linked projects, or a research thesis that advances sustainability knowledge.

The Master of Environment and Sustainability allows you to specialise in one of five areas:

- **Corporate environmental and sustainability management**
- **Environment and governance**
- **Environmental security**
- **International development and environment**
- **Leadership for sustainable development.**

AT A GLANCE

Clayton (On-campus) Full time & part time

2 years / 1.5 years / 1 year
(full time) depending on prior qualifications.
See entry requirements

February (First semester)
July (Second semester)

MINIMUM ENTRY REQUIREMENTS QUALIFICATIONS

ENTRY LEVEL 1
96 POINTS TO COMPLETE

2 years full time, 4 years part time

An Australian bachelor degree (or equivalent) with at least 60% (credit) average, or equivalent qualification and experience approved by the faculty.

ENTRY LEVEL 2
72 POINTS TO COMPLETE

1.5 years full time, 3 years part time

An Australian bachelor degree (or equivalent) in a cognate discipline including business, environmental science, humanities, science or social sciences, with at least 60% (credit) average, or equivalent qualification and experience approved by the faculty.

OR

An Australian bachelor degree (or equivalent) and an Australian graduate certificate/diploma (or equivalent) in a cognate discipline including business, environmental science, humanities, science or social sciences with at least 60% (credit) average in each qualification, or equivalent qualification and experience approved by the faculty.

ENTRY LEVEL 3
48 POINTS TO COMPLETE

1 year full time, 2 years part time

An Australian bachelor honours degree (or equivalent) in a cognate discipline including business, environmental science, humanities, science or social sciences with at least 60% (credit) average, or equivalent qualification and experience approved by the faculty leading the specialisation.

COURSE PROGRESSION MAP

Year 1 Sem 1	**ENS5010** Global challenges and sustainability		**Specialisation preparatory studies**
Year 1 Sem 2	**ENS5020** Perspectives on sustainability		
Year 2 Sem 1	**Specialist studies core unit**	**Specialist studies core unit**	**Students complete either research pathway OR coursework and project/internship below:** **Research pathway:** • **ENS5901** Research thesis in environment and sustainability A • **ENS5902** Research thesis in environment and sustainability B **OR** **Coursework and project/internship:** One of the following units: • **ENS5910** Sustainability Consultancy Project • **ENS5920** Environment and sustainability project • **ENS5930** Sustainability internship and • **12 points of units chosen from the program-specific unit list for the relevant specialisation**
Year 2 Sem 2	**Specialist studies core unit**	**Specialist studies elective unit**	

Part A. Environment and sustainability core studies | Part B. Specialisation preparatory studies | Part C. Specialist studies | Part D. Advanced practice

LEARN FROM THE BEST

"Our Master of Environment and Sustainability is a flagship interdisciplinary course that draws upon world leading experts from Arts, Science, and the Monash Business School. Our students and staff are part of an award winning program dedicated to tackling current and emerging challenges of global significance – from biosecurity to economic development."

PROFESSOR ANNETTE BOS
Master of Environment and Sustainability
Course Director

GRADUATE CERTIFICATE OF INNOVATION FOR SUSTAINABILITY

Not sure whether a master's degree is for you?
Try some units in a graduate certificate first.

The graduate certificate provides you with a foundation in Innovation for Sustainability by allowing you to sample several of the master units on offer. Successful completion can provide credit and entry into the master's degree. This qualification is only available to domestic students.

Find out more: **go.monash.edu/gcis**

MASTER OF FINANCIAL MATHEMATICS

Find out more:
go.monash.edu/MFinMath

COURSE CODE: S6001

Talented mathematicians are highly sought-after by banks and other financial institutions to help manage the increasingly complex and risky financial sector.

The Master of Financial Mathematics is a mathematics course designed for application in a business context. It is designed for graduates from across the globe with an aptitude and passion for mathematics and statistics, as well as a keen interest in finance and insurance. This is not a course for generalists; this is a highly specialised degree for students seeking a future in the world of professional quantitative finance.

You will be taught by mathematicians who are leading researchers in areas such as probability, stochastic processes and statistics, computational mathematics and machine learning, and with connections across the financial and insurance industries. You will have access to the state-of-the-art teaching facilities, including a Bloomberg data terminal. Industry projects and placements, being a core component of the degree, will provide you with an opportunity to gain valuable workplace experience and kickstart your career.

AT A GLANCE

Clayton (On-campus) Full time & part time

2 years / 1.5 years / 1 year
(full time) depending on prior qualifications.
See entry requirements

February (First semester)
July (Second semester)

MINIMUM ENTRY REQUIREMENTS QUALIFICATIONS

ENTRY LEVEL 1
96 POINTS TO COMPLETE

2 years full time, 4 years part time

An Australian bachelor degree (or equivalent) with a strong mathematical content[1] with at least a 65% average.

1. Completion of units of mathematics with an emphasis on multivariable calculus, linear algebra, probability, statistics and differential equations.

ENTRY LEVEL 2
72 POINTS TO COMPLETE

1.5 years full time, 3 years part time

An Australian bachelor degree (or equivalent) in mathematics with at least a 65% average.

OR

An Australian graduate certificate/diploma (or equivalent) with a strong mathematical content[2] with at least a 65% average.

2. Completion of units of mathematics with an emphasis on multivariable calculus, linear algebra, probability, statistics and differential equations.

ENTRY LEVEL 3
48 POINTS TO COMPLETE

1 year full time, 2 years part time

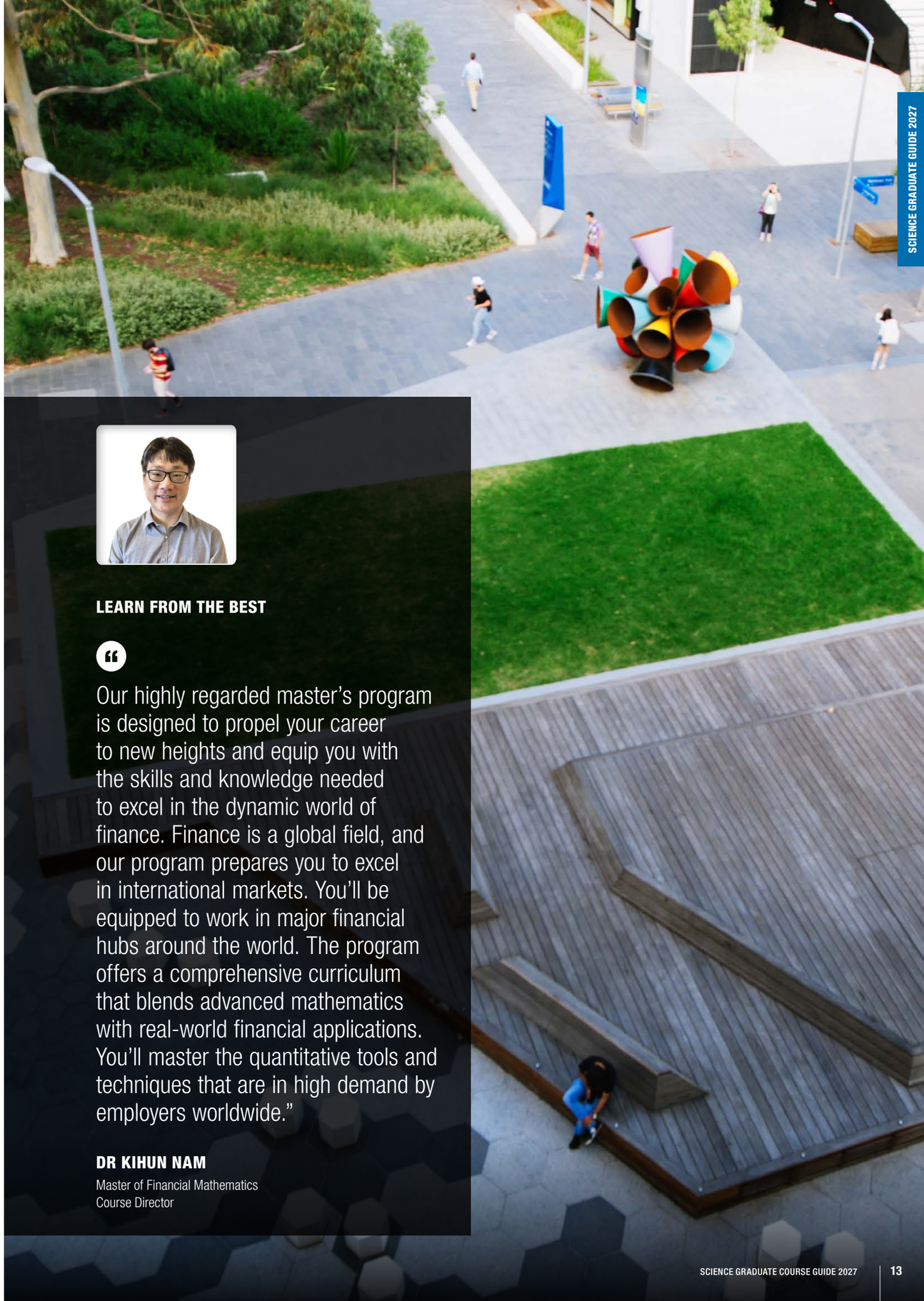
A four-year Australian honours degree (or equivalent) in mathematics with at least 65% average.

Students who do not have the required mathematical background may gain conditional entry to the program after the completion of the following short courses offered by the School of Mathematics: Multivariable Calculus, Linear Algebra with Applications, and Mathematics of Uncertainty.

COURSE PROGRESSION MAP

Year 1 Sem 1	**MTH3251** Financial mathematics	One of: **MTH3241** Random processes in the sciences engineering; **MTH3260** Statistics of stochastic processes	**Additional preparatory studies unit**	**Additional preparatory studies unit**
Year 1 Sem 2	**MTH5510** Quantitative risk management	One of: **MTH5520** Interest rate modelling; **MTH5530** Computational methods in finance; **MTH5550** Quantitative trading and market microstructure; **MTH5560** Partial differential equations for finance	**Discipline elective studies unit**	**Discipline elective studies unit**
Year 2 Sem 1	**MTH5210** Stochastic calculus and mathematical finance	One of: **MTH5520** Interest rate modelling; **MTH5530** Computational methods in finance; **MTH5550** Quantitative trading and market microstructure; **MTH5560** Partial differential equations for finance	One of: **MTH5520** Interest rate modelling; **MTH5530** Computational methods in finance; **MTH5550** Quantitative trading and market microstructure; **MTH5560** Partial differential equations for finance	**Discipline elective studies unit**
Year 2 Sem 2	One of the following options: • **MTH5840** Minor industry placement (12 points) or **MTH5820** Minor industry research project (12 points) plus two units, not previously completed from the list of Part B program-specific units • **MTH5830** Industry placement (24 points) • **MTH5810** Industry research project (24 points)			

Part A. Orientation studies Part B. Specialist studies Part C. Applied professional practice



LEARN FROM THE BEST

“Our highly regarded master’s program is designed to propel your career to new heights and equip you with the skills and knowledge needed to excel in the dynamic world of finance. Finance is a global field, and our program prepares you to excel in international markets. You’ll be equipped to work in major financial hubs around the world. The program offers a comprehensive curriculum that blends advanced mathematics with real-world financial applications. You’ll master the quantitative tools and techniques that are in high demand by employers worldwide.”

DR KIHUN NAM
Master of Financial Mathematics
Course Director

MASTER OF FOOD SCIENCE AND AGRIBUSINESS

Find out more:
go.monash.edu/MFSA

COURSE CODE: S6004

We are facing enormous world-wide challenges in the coming decades, including a rapidly growing population and one that is ageing quickly.

The challenge is to achieve an adequate supply of food to meet United Nations Sustainable Development Goals such as 'zero hunger' and 'good health & wellbeing' – all under sustainable conditions. To meet these challenges calls for a rethink of how we produce, process, market, and consume food.

The course is for students and professionals who wish to apply the latest knowledge and practices in the science and business of food at all operational and stakeholder levels, including personal entrepreneurship.

Graduates will become part of a network of professionals who develop and manage the supply of foods to meet individualised and population-based needs, with direct consequences for human wellbeing and enterprise.

AT A GLANCE

Clayton (On-campus) Full time & part time

2 years / 1.5 years / 1 year
(full time) depending on prior qualifications.
See entry requirements

February (First semester)
July (Second semester)

MINIMUM ENTRY REQUIREMENTS QUALIFICATIONS

ENTRY LEVEL 1
96 POINTS TO COMPLETE

2 years full time, 4 years part time

An Australian bachelor degree (or equivalent) in science, engineering, dietetics or health, with at least 60% (credit) average, or equivalent qualification and experience approved by the faculty.

ENTRY LEVEL 2
72 POINTS TO COMPLETE

1.5 years full time, 3 years part time

An Australian bachelor degree (or equivalent) in food science or food engineering, and at least 60% (credit) average overall, or equivalent qualification and experience approved by the faculty.

ENTRY LEVEL 3
48 POINTS TO COMPLETE

1 year full time, 2 years part time

An Australian bachelor honours degree (or equivalent) in food science or food engineering and at least 60% (credit) average overall, or equivalent qualification and experience approved by the faculty.

COURSE PROGRESSION MAP

Year 1 Sem 1	**FSC5010** Food chemistry and biochemistry	**CHE3133** Food engineering	**FSC5030** Food microbiology and safety	**FSC5080** Food science and technology in practice
Year 1 Sem 2	**MKF5801** Customer focused innovation	**BEX5060** Challenges in global agribusiness	**FSC5071** Food security in a changing world	**FSC5040** Food, nutrition and health
Year 2 Sem 1	**Advanced food science and agribusiness studies (24 points)**			
Year 2 Sem 2	**Applied practice (24 points).** Students complete one of the following options; Research project, Internship or Coursework			

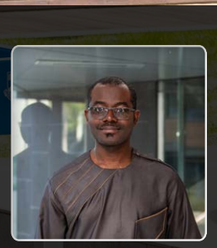
Part A. Core food science foundation studies **Part B.** Core food agribusiness studies **Part C.** Advanced food science and agribusiness studies **Part D.** Advanced practice

GRADUATE CERTIFICATE OF FOOD SCIENCE AND AGRIBUSINESS

Not sure whether a master's degree is for you?
Try some units in a graduate certificate first.

The graduate certificate provides you with a foundation in Food Science and Agribusiness by allowing you to sample several of the master units on offer. Successful completion can provide credit and entry into the master's degree. This qualification is only available to domestic students.

Find out more:
go.monash.edu/GCAgribus



LEARN FROM THE BEST

"There is a global challenge to achieve an adequate supply of food, especially protein. This is captured within the UN Sustainable Development Goal of 'zero hunger'. Our master's program covers all disciplines of food science and agribusiness, and their applications to addressing future global challenges in food supply."

ASSOCIATE PROFESSOR DOMINIC AGYEI
Master of Food Science and Agribusiness
Course Director

MASTER OF GENOME ANALYTICS

Find out more:
go.monash.edu/MGenoAnalytics

COURSE CODE: S6005

The Monash Master of Genome Analytics – the only course of its kind in Australia – will provide you with expert training in bioinformatics, genetics, genomics, and diagnostics.

The program's multidisciplinary structure and focus on industry and clinical application will provide you with hands-on experience to prepare you for your career. You will be part of a unique graduate cohort able to meet the growing demand for expertise in the analysis of genome sequence data.

As a graduate of this degree, you will become a holistically-trained expert, workplace-ready, and equipped with the knowledge and skills to help revolutionise the future of healthcare. Through the identification of predispositions to disease, the origin of infertility and birth defects, and other genetic disorders, genome analysis is saving lives – but it could be saving many more.

OTHER STUDY OPTIONS

Not sure whether a master's degree is for you?

The graduate certificate and the graduate diploma provide you with a foundation in Genome Analytics by studying several of the master's units on offer. Successful completion can provide credit and entry into the master's degree. These qualifications are only available to domestic students.

GRADUATE CERTIFICATE OF GENOME ANALYTICS
go.monash.edu/GCGenoAnalytics

GRADUATE DIPLOMA OF GENOME ANALYTICS
go.monash.edu/GDGenoAnalytics

AT A GLANCE

Clayton (On-campus) Full time & part time

2 years / 1.5 years
(full time) depending on prior qualifications.
See entry requirements

February (First semester)
July (Second semester)
(for students with a related undergraduate degree)

Applicants for 2-year version commence in July
Applicants for 1.5 year version commence in February

MINIMUM ENTRY REQUIREMENTS QUALIFICATIONS

ENTRY LEVEL 1
96 POINTS TO COMPLETE

2 years full time, 4 years part time

An Australian bachelor degree (or equivalent) with at least first year Biology, or related discipline studies and at least 60% (credit) average overall, or equivalent qualification and experience approved by the faculty leading the specialisation.

ENTRY LEVEL 2
72 POINTS TO COMPLETE

1.5 years full time, 3 years part time

An Australian bachelor degree (or equivalent) in genetics, or a cognate discipline such as bioinformatics, biomedical sciences or molecular biology that includes knowledge of fundamental genetics concepts with at least 60% (credit) average, or equivalent qualification and experience.

COURSE PROGRESSION MAP

Year 1 Sem 1	**GNA2042** Human genetics	**GNA2022** The dynamic cell	**GNA3030** Molecular, cellular and developmental genetics	**GNA5010** Advanced genetics and biotechnology
Year 1 Sem 2	**GNA5040** Genomics and its applications	**GNA5022** Sequencing technologies	**GNA5200** Clinical applications of genomics (12 points)	
Year 2 Sem 1	**GNA5012** Applied bioinformatics	**GNA5011** Genome function	**GNA5120** Genome curation (12 points)	
Year 2 Sem 2	**Students complete either a) or b) or c) below:** **a) Research thesis unit:** • **GNA5900** Genomics research thesis (24 points) **OR** **b) Coursework and advanced case studies:** • **GNA5042** Cancer genomics • **GNA5920** Advanced case studies (12 points) **OR** **c) Coursework and internship:** • **GNA5042** Cancer genomics • **GNA5930** Internship (12 points)			

Part A. Genomics foundation studies **Part B.** Core studies in Genomics **Part C.** Specialist studies **Part D.** Advanced specialist studies

MASTER OF GEOGRAPHICAL INFORMATION SCIENCE AND TECHNOLOGY

Find out more:
go.monash.edu/mgist

COURSE CODE: S6007

The Master of Geographical Information Science and Technology provides industry-relevant training to allow you to pursue or further your career in global and Australian geospatial industry.

You will learn the principles, techniques and applications of geographical information systems (GIS) and technology in a contextual environment from experts at the cutting edge of this field.

The course positions you at the forefront of a rapidly evolving geospatial landscape where core GIS expertise intersects with advanced spatial data science, analytics and decision intelligence.

Through advanced training in spatial data science methods and geospatial technologies, including GIS technology, remote sensing, GNSS, quality assurance and decision support systems, you'll gain the technical and analytical capabilities needed to turn complex data into powerful, real-world solutions.

As a graduate of this degree, you will step directly into competitive national and international roles, making this one of the most portable and employable qualifications available today.

LEARN FROM THE BEST

"Our master's program allows you to immerse yourself in the world of spatial data management, spatial analysis, modelling and visualisation, discovering the power of GIS tools for tackling real-world challenges. From terrain analysis to ecosystem service valuation, the course unfolds like an adventure, blending theory with hands-on examples that come to life. Unleash your GIS potential and navigate the landscapes of environmental research with confidence.

DR XUAN ZHU
Master of Geographical Information and Technology Course Director

AT A GLANCE

Clayton (On-campus or online) Full time & part time

2 years / 1.5 years
(full time) depending on prior qualifications.
See entry requirements

February (First semester)
July (Second semester)
Applicants for 2-year version commence in February
Applicants for 1.5 year version commence in July

MINIMUM ENTRY REQUIREMENTS (DOMESTIC STUDENTS) QUALIFICATIONS

ENTRY LEVEL 1
96 POINTS TO COMPLETE

2 years full time, 4 years part time

An Australian bachelor degree or equivalent with at least a minor in environmental science, earth science, geographical science, atmospheric science, biological science, civil engineering, social science, geography, urban and regional planning, archaeology or business and commerce and at least 60% (credit) average overall, or qualification, experience or employment in a related industry approved by the faculty.

ENTRY LEVEL 2
72 POINTS TO COMPLETE

1.5 years full time, 3 years part time

An Australian bachelor degree (or equivalent) with a major in environmental science, earth science, geographical science, atmospheric science, biological science, civil engineering, social science, geography, urban and regional planning, archaeology or business and commerce including at least one unit covering the fundamentals of GIS and technology, with at least 60% (credit) average overall, or equivalent qualification and experience approved by the faculty.

INDUSTRY PREPARED

As part of your study, you will have the opportunity to undertake supervised independent research or an industry-based internship.

COURSE PROGRESSION MAP

Year 1 Sem 1	**EAE4051** Fundamentals of geographical information science	**EAE4067** Remote sensing	**FIT9132** Introduction to databases	**EAE2522** Earth surface dynamics **OR** **FIT9136** Introduction to Python programming
Year 1 Sem 2	**EAE5051** Spatial databases	**EAE5052** Spatial data interoperability and integration	**EAE5053** Advanced spatial analysis and modelling	**EAE5054** Research methods and project management
Year 2 Sem 1	**24 points of extended studies in one of the following streams** **Stream 1.** Advanced GIS & technology **Stream 2.** Data science for GIS & technology **Stream 3.** Environmental and sustainability studies		**Students complete either a) or b) below:** **a) Research pathway** • **EAE5015** Research thesis in GIS and technology Part A (12 points) • **EAE5016** Research thesis in GIS and technology Part B (12 points) **b) Career skills pathway** • **EAE5017** GIS and technology internship (12 points) **AND** • **EAE5018** Professional practice in GIS and technology (12 points) **OR** • **12 points from units listed under Part C not previously completed**	
Year 2 Sem 2				

Part A. Foundation Studies in GIS&T **Part B.** Advanced Studies in GIS&T **Part C.** Extended Studies in GIS&T **Part D.** Advanced Practice in GIS&T

MASTER OF GREEN CHEMISTRY AND SUSTAINABLE TECHNOLOGIES

Find out more:
go.monash.edu/MGrnChemSTech

COURSE CODE: S6006

There is an increasing demand for graduates with expertise in green chemistry to lead the transformation of industries where chemistry and chemical engineering play a crucial role.

The Master of Green Chemistry and Sustainable Technologies program will provide you with core specialist studies in green technologies, focused on applications in different contexts, and integrated with sustainability principles covering both technical, business and societal and cultural issues.

As a student in this program, you will have the opportunity to design and implement new products and processes that will highlight the role that chemistry has to play in addressing the United Nations Sustainable Development Goals.

GRADUATE CERTIFICATE OF GREEN CHEMISTRY AND SUSTAINABLE TECHNOLOGIES

Not sure whether a master's degree is for you? Try some units in a graduate certificate first.

The graduate certificate provides you with a foundation in Green Chemistry and Sustainable Technologies by studying several of the master's units on offer. Successful completion can provide credit and entry into the master's degree. This qualification is only available to domestic students.

Find out more:
go.monash.edu/GCGrnChemSTech

AT A GLANCE

Clayton (On-campus) Full time & part time

2 years / 1.5 years / 1 year
(full time) depending on prior qualifications.
See entry requirements

February (First semester)
July (Second semester)

MINIMUM ENTRY REQUIREMENTS (DOMESTIC STUDENTS) QUALIFICATIONS

ENTRY LEVEL 1
96 POINTS TO COMPLETE

2 years full time, 4 years part time

An Australian bachelor degree (or equivalent) with at least first year Chemistry studies1 and at least 60% (credit) average overall, or equivalent qualification and experience approved by the faculty leading the specialisation.

1. knowledge of topics in composition and nomenclature of matter; physical, chemical, electrochemical properties of matter; drivers of molecular interactions and stability; quantifying chemical reactions; principles of chemical analysis.

ENTRY LEVEL 2
72 POINTS TO COMPLETE

1.5 years full time, 3 years part time

An Australian bachelor degree (or equivalent) in a cognate discipline including chemistry, chemical engineering, biomedical science, materials science, biochemistry, or biotechnology (with at least 12 points or equivalent of second level chemistry) with at least 60% (credit) average, or equivalent qualification and experience approved by the faculty leading the specialisation.

ENTRY LEVEL 3
48 POINTS TO COMPLETE

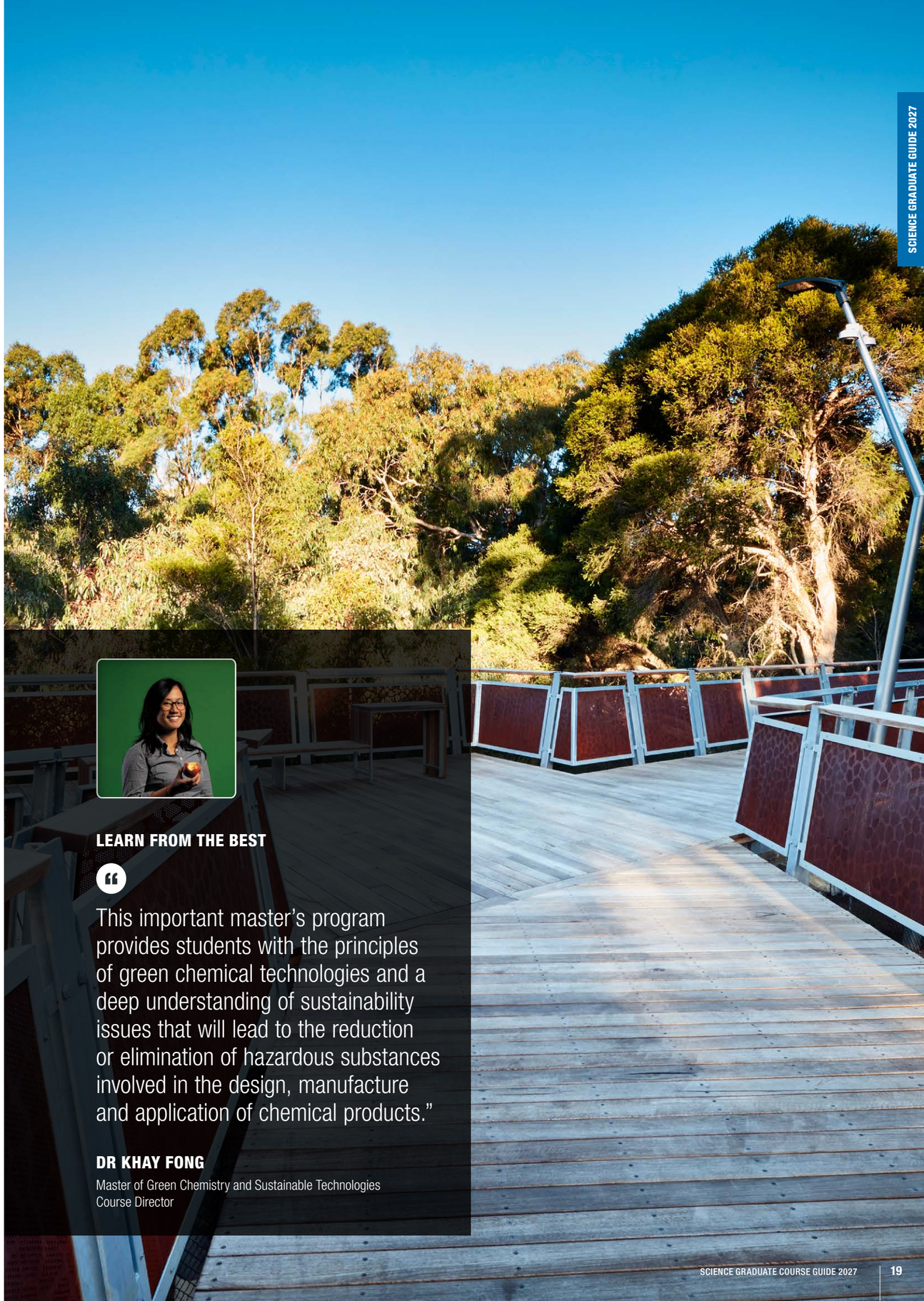
1 year full time, 2 years part time

An Australian bachelor honours degree (or equivalent) in the cognate discipline of Chemistry or Biochemistry with at least 60% (credit) average, or equivalent qualification and experience approved by the faculty leading the specialisation.

COURSE PROGRESSION MAP

Year 1 Sem 1	**GCH5010** Introduction to green chemistry	**GCH5020** Business model design for innovative and sustainable technologies	**Core further studies in chemistry**	
Year 1 Sem 2	**GCH5030** Green chemistry consultancy project (12 points)			
Year 2 Sem 1	**GCH5110** Designing safer chemicals	**Specialist studies in green chemistry and sustainable technologies**	**Students complete either a. or b. below:**	
Year 2 Sem 2	**GCH5120** Green chemical synthesis and applications		**a. Coursework:** • **ENS5930** Sustainability internship (12 points) **OR** • **GCH5920** Sustainability project (12 points) **AND** • **12 points of electives from the Part C not previously completed.**	**b. Research:** • **GCH5900** Research project in green chemistry (24 points) **OR** • **GCH5901** Research project in green chemistry A (12 points) **AND** • **GCH5902** Research thesis in green chemistry B (12 points)

Part A. Core Green and sustainable technologies foundation studies
Part B. Core further studies in chemistry
Part C. Specialist studies in green and sustainable technologies
Part D. Advanced practice in green and sustainable technologies



LEARN FROM THE BEST

"This important master's program provides students with the principles of green chemical technologies and a deep understanding of sustainability issues that will lead to the reduction or elimination of hazardous substances involved in the design, manufacture and application of chemical products."

DR KHAY FONG
Master of Green Chemistry and Sustainable Technologies
Course Director

MASTER OF MATHEMATICS

Find out more:
go.monash.edu/MMath

COURSE CODE: S6003

The Master of Mathematics is designed for graduates with a bachelor's degree and a strong foundation in mathematics.

From governments to financial and research institutions, employers today are seeking people with advanced knowledge and skills in mathematics who are able to play a critical role in strategic and analytical decision-making and problem-solving.

Students who have a passion for mathematics and are considering a future in academia will enjoy this program's blend of coursework and project work. This degree is also a perfect choice for anyone who wants to expand their mathematical horizons and learn how to apply their newfound expertise in a wide range of settings.

GRADUATE CERTIFICATE OF MATHEMATICS

Not sure whether a master's degree is for you? Try some units in a graduate certificate first.

The graduate certificate provides you with a foundation in Mathematics by studying several of the master's units on offer. Successful completion can provide credit and entry into the master's degree. This qualification is only available to domestic students.

Find out more:
go.monash.edu/gcmaths

LEARN FROM THE BEST

"Our program offers a dynamic blend of theory and practical application, led by world-renowned experts. Immerse yourself in advanced topics like pure mathematics, statistics and computational mathematics. Whether you aspire to excel in academia, industry, or research, our Master of Mathematics degree will equip you with the tools to excel.

DR GREG MARKOWSKY

Master of Mathematics
Course Director

AT A GLANCE

Clayton (On-campus) Full time & part time

2 years / 1.5 years / 1 year
(full time) depending on prior qualifications.
See entry requirements

February (First semester)
July (Second semester)

MINIMUM ENTRY REQUIREMENTS (DOMESTIC STUDENTS) QUALIFICATIONS

ENTRY LEVEL 1
96 POINTS TO COMPLETE

2 years full time, 4 years part time

An Australian bachelor degree (or equivalent) with at least a 65% average or equivalent qualification and experience approved by the faculty; and a 65% average over 4 units in mathematics of which at least 2 are at level 2.

ENTRY LEVEL 2
72 POINTS TO COMPLETE

1.5 years full time, 3 years part time

An Australian bachelor degree (or equivalent) in mathematics with at least a 65% average or equivalent qualification and experience approved by the faculty.

OR

An Australian graduate certificate/diploma (or equivalent) with at least a 65% average or equivalent qualification and experience approved by the faculty; and a 65% average over 8 units in mathematics.

ENTRY LEVEL 3
48 POINTS TO COMPLETE

1 year full time, 2 years part time

A four-year Australian honours degree (or equivalent) in mathematics with at least 65% average or equivalent qualification and experience approved by the faculty.

COURSE PROGRESSION MAP

Year 1 Sem 1	**Foundation studies**	**Foundation studies**	**Foundation studies**	**Foundation studies**
Year 1 Sem 2	**Discipline studies**	**Discipline studies**	**Discipline studies**	**Discipline studies**
Year 2 Sem 1	**Advanced studies**	**Advanced studies**	**Advanced studies**	**Advanced studies**
Year 2 Sem 2	**MTH5000** Mathematics master project (24 points) **OR MTH5835** Mathematics industry placement (24 points)			

Part A. Foundation studies **Part B.** Discipline studies **Part C.** Advanced studies

MASTER OF SCIENCE

Find out more:
go.monash.edu/MSci

COURSE CODE: S6000

Deepen your knowledge and skills through advanced coursework and industry application to advance your career or pursue further research. The Master of Science is an expert master's course that prepares you for professional employment or for PhD studies.

An advanced program for science graduates with an undergraduate degree in a related discipline, you will be able to choose from four specialisations, leading to a specialist award upon course completion.

SPECIALISATIONS

ASTROPHYSICS

Studies will be chosen from a variety of topics including: computational astrophysics (compulsory); observational astronomy; general relativity and cosmology; exoplanets; stars; nuclear astrophysics; high energy astrophysics; and data analysis and machine learning.

ATMOSPHERIC SCIENCE

Studies will be chosen from a variety of topics including: statistics for climate dynamics; dynamical meteorology; the general circulation; atmospheric modelling; atmospheric boundary layers; and ocean circulation and dynamics.

EARTH SCIENCE

Studies will be chosen from a variety of topics including: ore deposits; mineralogy; petrology; geochemistry; geochronology; advanced structural geology; tectonics and geodynamics; geology from geophysics; field geology; geographic information systems; remote sensing; spatial data analysis; hydrogeology and environmental geochemistry; physical geography; climate change; water security; and environmental pollution.

PHYSICS

Studies will be chosen from a variety of topics including: quantum mechanics (compulsory); condensed matter physics; statistical mechanics; quantum field theory; classical electrodynamics and field theory; quantum computing and information theory; quantum fluids and many body theory; data analysis and machine learning; general relativity; x-ray optics and synchrotron science; and special topics in contemporary physics.

In addition to coursework studies, you will complete research projects in your chosen discipline, as well as have the option to undertake elective coursework in subject areas relevant to career development in your specialisation.

AT A GLANCE

Clayton (On-campus) Full time & part time

2 years / 1.5 years
(full time) depending on prior qualifications.
See entry requirements

February (First semester)
July (Second semester)
Applicants for 1.5 year version commence in February.
Applicants for 2-year version commence in July

Qualification: Master of Science in Astrophysics, Master of Science in Atmospheric Science, Master of Science in Earth Science, Master of Science in Physics

MINIMUM ENTRY REQUIREMENTS (DOMESTIC STUDENTS) QUALIFICATIONS

ENTRY LEVEL 1
96 POINTS TO COMPLETE

2 years full time, 4 years part time

An Australian bachelor degree (or equivalent) in a cognate science discipline with at least a 65% average in the intended master's specialisation or equivalent qualification and experience approved by the faculty.

ENTRY LEVEL 2
72 POINTS TO COMPLETE

1.5 year full time, 3 years part time

An Australian bachelor degree (or equivalent) with at least a major and specific topic knowledge in the intended master's specialisation with at least 65% (high credit) average, or equivalent qualification and experience approved by the Faculty of Science.

ENTRY LEVEL 3
48 POINTS TO COMPLETE

1 year full time, 2 years part time

A four-year Australian honours degree (or equivalent) in a cognate science discipline with at least a 65% (high credit) average in the intended master's specialisation or equivalent qualification and experience approved by the Faculty of Science.

COURSE PROGRESSION MAP

Year 1 Sem 1	**Part A Foundation Studies**	**Part A Foundation Studies**	**Part A Foundation Studies**	**Part A Foundation Studies**
Year 1 Sem 2	**Part B Advanced studies**		**Part B Advanced studies**	
Year 2 Sem 1	**Part C Research Project or Work Integrated Learning**			
Year 2 Sem 2	**Part D Extended studies**		**Part D Extended studies**	

Part A. Foundation studies **Part B.** Advanced studies **Part C.** Research Project or Work Integrated Learning **Part D.** Extended studies

GRADUATE RESEARCH DEGREES

Find out more:
go.monash.edu/sci-grad-res

DOCTORATE (PHD)

By undertaking a PhD in Science, you will become a member of a dynamic community of scholars committed to innovation and discovery and contribute to the advancement of knowledge within your area of expertise. Monash Science PhD graduates are highly employable, with many pursuing careers in academia and industry around the world.

Find out more: **go.monash.edu/sci-PhD**

MASTER OF PHILOSOPHY (SCIENCE)

The Master of Philosophy will provide you with the opportunity to show independent thought and demonstrate your ability to carry out research in your chosen discipline. It can be taken in any of the Faculty's principal areas of research, including biological sciences, chemistry, earth sciences, atmospheric sciences, environmental sciences, mathematical sciences, astronomical sciences and physics.

Find out more: **go.monash.edu/sci-MPhil**

HOW TO APPLY

HERE ARE THE STEPS YOU NEED TO TAKE:

Check your eligibility at:
monash.edu/graduate-research/study/apply
Apply via **myapp.monash.edu**

APPLY FOR A RESEARCH PROGRAM AND A SCHOLARSHIP

- Applications for admission to a research degree can be made at any time.
- Candidates applying for research scholarships need to submit an application as per the applicable deadlines.

Hear from some of our PhD alumni:
go.monash.edu/sci-phd-stories

HOW TO APPLY
CREDIT AND FEES

HOW TO APPLY

monash.edu/admissions/apply/online

ELIGIBILITY

The entry requirements for admission will differ across the various coursework master's degree within the Faculty of Science.

Please check your eligibility for admission prior to submitting an application. **monash.edu/study/courses**

ENGLISH LANGUAGE REQUIREMENTS

All students must meet English language requirements.

Find out more: **monash.edu/admissions/entry-requirements/english-language**

CAN I RECEIVE CREDIT FOR PREVIOUS STUDY?

Dependent upon the specific master's coursework degree, you may be eligible to receive:

- up to 48 credit points (equivalent to one year of full time study), for previous honours or graduate level studies in a cognate discipline or equivalent qualification/experience approved by the Faculty.
- or up to 24 credit points for previous undergraduate studies in a cognate discipline or equivalent qualification/experience approved by the Faculty.

Applications for credit are assessed on a case-by-case basis. Studies must have been completed within 10 years prior to the year of course commencement.

For more information, visit: **monash.edu/admissions/credit**

International students who complete a two-year course may be eligible for a post-study work visa. For more information, visit **www.immi.gov.au**

GRADUATE TUITION FEES

Graduate courses attract fees for both domestic and international students. For details of course fees, visit **monash.edu/fees**

When you study at a university in Australia you may be eligible for government-funded loans and assistance.

What support you're entitled to depends on a range of factors such as where the course is taking place, your visa status, and other things – so make sure you understand the differences.

Find out more:
monash.edu/study/fees-scholarships/loans-and-assistance

MONASH GRADUATE COURSES DISCOUNT

Monash is offering alumni, who completed their undergraduate studies in the last five years, a 10% discount on full-fee courses.

The 10% discount is applied to your course fees for each semester, and applies to the first 48 credit points of a master's program. The discount is for both domestic and international students and applies to a wide range of graduate courses across all 10 faculties.

Find out more: **monash.edu/students/admin/fees/discounts/alumni**

SCHOLARSHIP OPPORTUNITIES

A variety of scholarships and grants are available for prospective and continuing coursework graduate students.

The number of scholarship and grant offers made in any one year varies. Scholarships are available from Monash University, the Australian Government and other organisations. Prospective students should examine all the scholarships on offer to see what they could be eligible for.

Find out more: **monash.edu/scholarships**

STUDY GRANTS

International applicants will be automatically assessed for an International Study Grant offer.

International Study Grants are limited, and students must apply for a Monash course first. Study Grant offers will be considered by the university as part of the course assessment. We encourage you to apply early.

Find out more: **monash.edu/study/fees-scholarships/international-study-grants**

AUSTRALIA AWARDS SCHOLARSHIPS

The Australia Awards are an initiative of the Australian Government to promote knowledge, education links and enduring ties between Australia and our neighbours through Australia's extensive scholarship programs. Monash University offers a range of courses suited to the development needs of the Australia Awards and its scholarship holders.

Find out more: **monash.edu/fees/australia-awards**

MONASH University

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monash.edu/science

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Graduate study options
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FUTURE STUDENT ENQUIRIES
Australian citizens, permanent residents and New Zealand citizens
monash.edu/students/support/connect

International students
T Australia freecall: 1800 MONASH (666 274)
T +61 3 9903 4788 (outside Australia)
E study@monash.edu

GROUP OF EIGHT AUSTRALIA