MONASH University

ENGINEERING

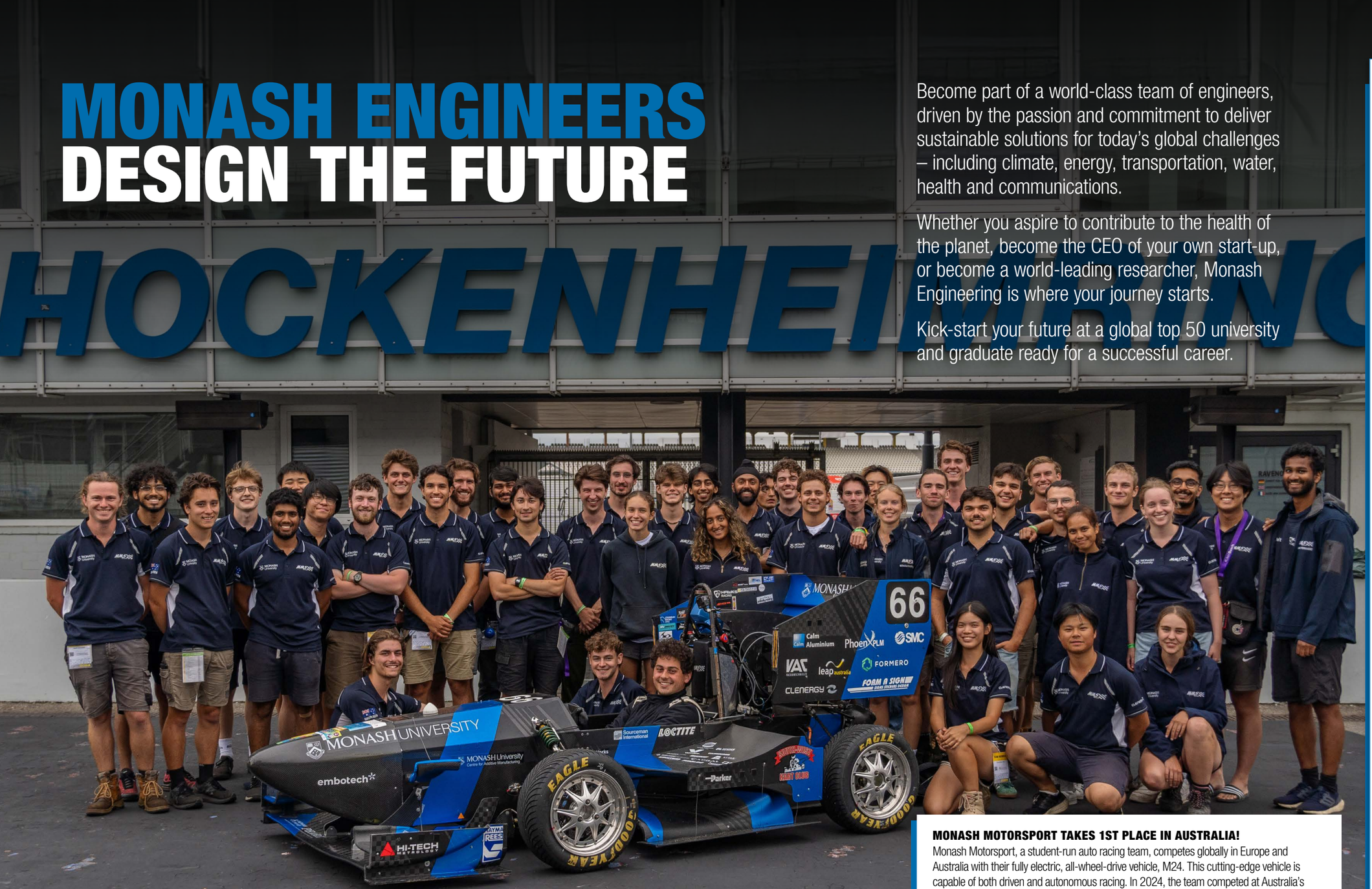
UNDERGRADUATE COURSE GUIDE
2026

MONASH ENGINEERS
DESIGN THE FUTURE

Become part of a world-class team of engineers, driven by the passion and commitment to deliver sustainable solutions for today's global challenges – including climate, energy, transportation, water, health and communications.

Whether you aspire to contribute to the health of the planet, become the CEO of your own start-up, or become a world-leading researcher, Monash Engineering is where your journey starts.

Kick-start your future at a global top 50 university and graduate ready for a successful career.



MONASH MOTORSPORT TAKES 1ST PLACE IN AUSTRALIA!
Monash Motorsport, a student-run auto racing team, competes globally in Europe and Australia with their fully electric, all-wheel-drive vehicle, M24. This cutting-edge vehicle is capable of both driven and autonomous racing. In 2024, the team competed at Australia's FSAE-A competition, facing off against teams from Australia, New Zealand, Taiwan and Saudi Arabia.

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.

CONTENTS

ENGINEERING SPECIALISATIONS

COURSE INFORMATION FAST FACTS

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

- Location
- Duration
- Intakes
- Requirements[1]
- Specialist course

1 Entry scores listed in the fast facts section are for domestic students only. For international entry requirements see page 30.

WORLD RANKINGS

#37
IN THE WORLD QS WORLD UNIVERSITY RANKINGS 2025

#59
IN THE WORLD FOR ENGINEERING AND TECHNOLOGY
Times Higher Education, 2025

TOP 100
IN 10 ENGINEERING SUBJECTS GLOBALLY
Academic Ranking of World Universities, 2024

GRADUATE OUTCOMES

98%
STUDENTS WHO DO A CO-OP INTERNSHIP RECEIVE A JOB OFFER FROM THE COMPANY

93.3%
MONASH ENGINEERING GRADUATES ARE IN FULL-TIME EMPLOYMENT WITHIN 4 MONTHS
2023 Graduate Outcomes Survey (QILT)

38K+
ENGINEERING ALUMNI FROM MORE THAN 90 COUNTRIES
2025

ENGINEER YOUR DEGREE

FOUR-YEAR DEGREE TAILORED TO YOUR FUTURE

START WITH A COMMON FIRST YEAR

Be immersed in engineering from day one. You'll gain a solid foundation of scientific and design fundamentals, whilst discovering which specialisation best aligns with your goals and interests.

10 SPECIALISATIONS

In second year you will select your specialisation, enabling you to focus on your area of interest.[1]

MINORS

Option to add a minor from another engineering discipline or emerging field in your third year.

INDUSTRY EXPERIENCE

Graduate job-ready with professional development and industry experience that is built into the course.

QUALIFIED AND ACCREDITED

Recognised by Engineers Australia and the Washington Accord, our graduates are accredited to work in Australia and other countries including Canada, China, India, Japan, Singapore, UK and USA.

ENGINEERS AUSTRALIA

DOUBLE YOUR QUALIFICATIONS

DOUBLE DEGREE

Complement and extend your engineering degree by gaining a double degree with only one extra year of study.[2]

ACCELERATED MASTERS

The Master's Accelerated pathway gets you on a fast-track to a postgraduate qualification in just 4.5 years.

EXPAND YOUR EXPERTISE

INDUSTRY PLACEMENTS

Apply your knowledge and skills in the real world with one of the many Monash Industry Experience programs.

STUDENT TEAMS

Join one of our world-renowned student teams. Compete in local and international competitions whilst working alongside team sponsors and industry partners.

EXPLORE RESEARCH

Take a deeper dive to gain research experience via final year projects and other research opportunities.

GLOBAL EXCHANGE

Take the opportunity to study abroad at more than 100 partner universities.

1 Biomedical engineering specialisation is selected from the first year.
2 Additional 2.25 years for engineering and laws double degree.

WITH ALL THE SUPPORT YOU NEED. REALISE YOUR FULL POTENTIAL.

WORLD-CLASS FACILITIES

Thrive in our dynamic and interactive learning spaces, state-of-the-art fabrication facilities and collaborative makerspaces.

LEARN FROM THE BEST

Learn the latest engineering concepts from professors and lecturers who are leaders in their fields. Your labs and hands-on workshops are also supported by teaching associates with recent experience as students themselves.

GENEROUS SCHOLARSHIPS

Monash celebrates academic excellence and diversity, and we offer a range of scholarships and awards to help ensure money and circumstances aren't barriers to you getting a world-leading engineering education.

MENTORING AND SUPPORT

- Peer mentors for all first-year students
- Women in Engineering at Monash (WEM) student team and Women in Engineering mentoring program
- Mentoring, support and outreach programs for Indigenous students
- LGBTIQ+ mentoring and support (GLEAM)

VIBRANT AND INCLUSIVE CAMPUS

Feel alive in a multicultural environment with exceptional social, cultural and sporting facilities, a huge range of food choices, medical and wellbeing services and a comprehensive orientation program.

LIFE-LONG CONNECTIONS

Build your networks through student teams, clubs and societies and our Monash Engineering alumni network of more than 38,000 graduates from 90 countries.

A CAREER IN ENGINEERING

Engineers are creative, imaginative, analytical and technical, with excellent teamwork skills. As an engineer, you'll apply science and mathematics in a practical way to design and develop new technologies and improve existing ones.

CONSIDER A CAREER IN ENGINEERING IF YOU:

- are curious about how things work
- have an interest in improving the quality of human life
- like analysing and solving problems
- enjoy designing and building things
- like working with lots of different people in multidisciplinary teams
- are interested in maths and science
- are goal-oriented
- enjoy challenges

WHAT DO ENGINEERS DO?

Engineers solve problems, figure out how things work and create solutions. They're key to the development of society and solving the challenges faced by our world, such as climate change, natural resource depletion, food shortages, clean drinking water supply and increased energy demands. Engineers possess a rare combination of skills and qualities that place them in demand in many industries. An engineer's career is diverse, interesting, and can be anywhere in the world.

As a qualified engineer, you'll also be equipped to work in many areas outside of engineering, such as management, banking and consulting. Problem-solving and planning skills, combined with a focus on the future and continuous improvement, make engineers excellent business leaders.

UNLIMITED CAREER OPTIONS

Engineers design, build and test everything we use to create a liveable and sustainable world. Their unique skills are needed in nearly every industry. With hundreds of different types of engineering jobs, the possibilities are endless.

Some of our graduates have gone on to successful careers as:

- Biomaterials and nanotechnology engineers in medical development companies
- Global development engineers for non-governmental organisations (NGOs)
- Chemical process engineers in the food and agriculture industry
- Project manager, consultant, or industrial designer in building and construction
- Computer scientist and wireless network engineer in telecommunications
- Artificial Intelligence and software engineers in the defence force
- Capital works engineer in sustainability, water and energy field
- Executive Director of access and operations in a global mining company
- Robotics and avionics engineers for an international space agency
- Director of transport modelling and mapping for a government infrastructure authority
- Entrepreneur and business owner in a start-up tech company
- CEO and Chief Engineers in the automotive industry.

As a Monash Engineering graduate, you'll be a highly sought-after industry professional when you first enter the workforce and throughout your career.

$120K

AVERAGE AUSTRALIAN ENGINEERING SALARY

Adzuna Job Report, 2024.

93.3%

ENGINEERING GRADUATES ARE IN FULL-TIME EMPLOYMENT WITHIN FOUR MONTHS

2023 Graduate Outcomes Survey – Longitudinal, Quality Indicators for Learning and Teaching (QILT).

JOBS IN ENGINEERING ARE PREDICTED TO GROW OVER THE NEXT FIVE YEARS – TWICE AS FAST AS NON-STEM JOBS

Employment Outlook – March 2022, Australian Government.

"I'M CURRENTLY IN MY DREAM JOB AS A THERMOFLUIDS ENGINEER AT ROCKET LAB, HELPING TO DESIGN AND BUILD ROCKETS.

I contribute to the design, analysis, and testing of the rocket's fluid systems. The work I do is challenging, but incredibly rewarding – I love having the opportunity to push the envelope of technology and work with an extremely talented team."

ALEXANDER COLLINS
Thermofluids Analyst, Rocket Lab
Bachelor of Mechanical Engineering (Honours)
and Bachelor of Science Graduate

"Engineering allows me to bridge my passion for sustainability with climate action and human-centric design, enabling me to implement real change towards sustainable outcomes. Through my work, I assess and support the optimisation of building performance in their energy use, water consumption, and carbon footprint, as well as their wider environmental and social impacts. There's so much potential for positive change and social impact in the built environment. I hope I can be a part of the driving force behind the vision for healthy, comfortable, purpose-built and sustainable buildings."

SARAH YIN
Graduate Building Physics and Sustainability Engineer, Inhabit
Bachelor of Materials Engineering (Honours)
and Bachelor of Science Graduate

"At Boeing, I'm working to implement process improvements in our manufacturing process. We look to stabilise our production of composite aerospace parts through lean manufacturing principles, aiming to reduce waste and improve safety. My job has taken me from Port Melbourne to Washington and Utah in the United States and has been hugely engaging from both behind the desk and on the production floor."

BEN WANG
Industrial Engineer, Boeing
Bachelor of Mechanical Engineering (Honours)
and Bachelor of Industrial Design Graduate

"I work in the area of developing and implementing climate technologies aimed at the decarbonisation of industries. A focal point of my research lies in the integration of Direct Air Capture (DAC) technology with biomanufacturing processes, ultimately geared towards the sustainable conversion of captured carbon into valuable bioproducts. I aim to not only contribute to the scientific climate solutions but also create tangible progress towards a sustainable future."

EVANGELINE LEONG
Industry PhD Candidate, Monash University
Bachelor of Chemical Engineering (Honours)
and Bachelor of Biomedical Science Graduate

WORLD-CLASS FACILITIES

The engineering precinct at Monash University provides facilities that will enhance your personal learning experience.

MONASH MAKERSPACE

The Monash Makerspace is a facility with the latest equipment for our students, staff, alumni and industry partners to come together to build, design and create, and encourage entrepreneurial activities.

Linked to The Generator, Monash's entrepreneurial platform, students can access support to allow them to turn ideas into reality.

Other student collaboration, design and technical lab spaces:

- Design and Build Studios: equipped with industry-standard simulation, prototyping, fabrication, and manufacturing facilities for student projects.
- ChemBio makerspace: purpose-built for student teams to conduct wet-lab chemical and biological experiments.
- Digital Makerspace: equipped with high-performance tools to support IT and engineering student teams in cultivating their technology, coding, and AI projects.
- SAMPLE Labs: a Student Analytical Makerspace and Pilot Lab Environment that has pilot, analytical, digital twin wet labs for students and industry.
- Industry Innovation Studio: for students completing the Industry Innovation Program (IIP) to design, assemble and test industry projects.

WOODSIDE BUILDING FOR TECHNOLOGY AND DESIGN

The Woodside Building for Technology and Design features the latest dynamic and interactive learning spaces, labs, and technology. The five-storey, smart-technology-enabled building is one of the world's most efficient and innovative teaching spaces. It fosters innovation and collaboration, allowing students to explore, design, construct, and investigate new technologies required for a sustainable energy future.

MONASH INNOVATION LABS

The Monash Innovation Labs is a vibrant ecosystem where industry partners, researchers, and students collaborate, with purpose-built infrastructure to spark insights and fast-track innovations.

The Industry Innovation, Co-operative Education, and Industry Doctoral programs are coordinated in the Monash Innovation Labs, providing students with opportunities to connect with industry, gain work experience, and boost employability.

MONASH TECHNOLOGY PRECINCT

The Monash Technology Precinct connects the university's top talent, government initiatives, and industry partners with powerful research infrastructure. The precinct has been recognised by the Global Institute for Innovation Districts (GIID) as an example of how effective land planning and zoning activities can enable innovation and foster a thriving, multipurpose ecosystem.

Monash is also home to world-class research facilities including:

- New Horizons Research Centre
- Monash Centre for Additive Manufacturing (MCAM)
- Woodside FutureLab
- The TITAN Microscope
- X-ray Analytical Platform
- National Drop Weight Impact Testing Facility
- Monash Robotics Lab
- The Living Lab
- Australian Synchrotron.

TAKE A VIRTUAL TOUR AROUND SOME OF MONASH ENGINEERING'S FACILITIES

youtu.be/PysO9jpQUE8

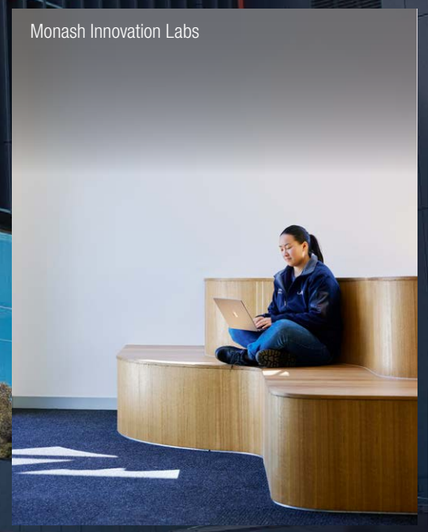
Woodside Building for Technology and Design

SAMPLE Labs

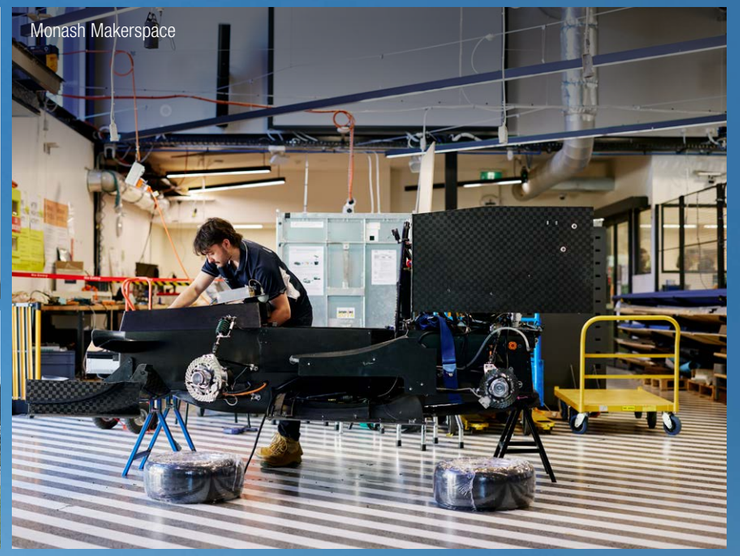
New Horizons Research Centre

Living Lab

Design and Build Studios

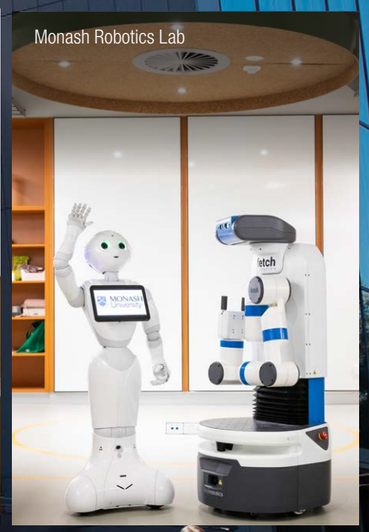


Monash Innovation Labs



Monash Makerspace

Monash Smart Manufacturing



Monash Robotics Lab

360° interactive lecture room

GRADUATE WORK-READY

Connect with industry on campus, undertake an internship or enhance your professional skills in the way that works best for you. Whether you want to unlock your leadership potential or start thinking like an entrepreneur, you'll have access to programs that prepare you for leadership, success and—most importantly—life.

Whilst academic capability is essential, employers are looking for graduates who are highly-skilled, well-rounded individuals. Many place interpersonal and communication skills, critical reasoning and problem-solving, together with passion, at the top of their list.

Gain industry and professional experience, in the way that works best for you. Connect with industry on campus, undertake an internship with one of our partner organisations or collaborate on a real project for a company.

PROFESSIONAL PRACTICE

Industry experience is embedded into your degree, providing a competitive edge to your engineering journey. The professional practice curriculum allows you to choose from four units to align your industry experience with your interests and career aspirations: a classroom-taught unit, working in student teams, engaging in Industy Experience (IE) or participating in a Co-op internship.

monash.edu/engineering/professional-practice

CO-OPERATIVE EDUCATION PROGRAM (CO-OP)

The Co-op program gives you a kick-start on your future engineering career. Undertake 3 or 6 month full-time or part-time, paid internships with our industry partner organisations and gain practical, hands-on engineering skills that complement your studies. With Co-op internships, you'll graduate job-ready with the skills, employment experience and a new professional network that sets you up for success.

monash.edu/engineering/coop

CAREER READY SERIES

Extend your learning beyond the classroom and stand out in the crowded job market. The series provides professional development events and activities focused on fine-tuning your employability skills. It includes opportunities to engage with industry and alumni and to participate in tailored workshops to maximise your graduate employment prospects.

monash.edu/engineering/career-ready-series

CONTINUOUS PROFESSIONAL DEVELOPMENT (CPD)

The CPD unit is a compulsory requirement for Engineering students. You'll create an online collection of all work, volunteering, and personal and professional development opportunities you experience throughout your time studying your degree. There are many opportunities to help you complete the minimum of 420 CPD hours required. When you graduate, your CPD Completion Certificate makes an impressive addition to your resume, and it also supports Engineers Australia certification.

monash.edu/engineering/CPD

INDUSTRY INNOVATION PROGRAM (IIP)

The IIP is a scholarship-based industry training program where you gain valuable work experience while staying on campus. Work on a 3 or 6 month project based at the Monash Innovation Labs in collaboration with an industry partner. Obtain professional project experience and develop innovation, problem-solving and employability skills to further your career.

monash.edu/industry-innovation-program

RESEARCH EXPERIENCE

You can experience Monash's world-leading research while studying your degree. Participate in innovative, multidisciplinary research through student teams, your Final-Year Project (FYP), or the Research, Experimentation and Discovery (RED) program, working alongside researchers who are leaders in their field and contribute to real research projects.

monash.edu/flagship-rich-experiences/red

MENTORING

Mentoring can offer support and encouragement to help you succeed, enjoy your studies and gain insights into a career in engineering. The Friends and Mentors in Engineering (FaME) group mentoring program helps new students settle into university, make friends and get the most out of studying and life at Monash. The Alumni, Student and Women in Engineering mentoring programs are available in your final years of study. Meet successful industry alumni who've had a similar student journey as you, seek career advice and learn from their experiences.

monash.edu/engineering/mentoring

ENTREPRENEURIAL PROGRAMS

Creativity and entrepreneurialism are at the centre of engineering design education at Monash. You can access dedicated, collaborative design and build spaces to turn an idea into reality. The University's entrepreneurial initiative, The Generator, provides experiential education, mentors and seed funding to support you and your startup or social enterprise on your entrepreneurial journey.

monash.edu/entrepreneurship

GLOBAL EXCHANGE AND STUDY ABROAD

Spending part of your degree overseas on exchange will expose you to new ways of learning and living. You'll build an international network, develop independence and enjoy a cross-cultural experience. Monash has exchange agreements with more than 150 universities in over 30 countries. You can also study at the Malaysia campus, and Monash Malaysia students can apply to spend a semester at Clayton, Australia. Or experience the transformative impact of Monash's Global Immersion Guarantee (GIG).

monash.edu/study-abroad/outbound

INDUSTRY EXPERIENCE TO SET YOU UP FOR SUCCESSS

Monash Engineering students had the opportunity to travel to Seattle, United States, for a summer internship at Amazon Prime Air, where they contributed to developing the next-generation drone delivery system. Working alongside technical mentors, managers, and fellow interns, they developed innovative solutions while gaining hands-on experience with cutting-edge technology and tools at a leading global technology company.

Chris Yu, a recent Robotics and Mechatronics Engineering (AI) and Computer Science graduate who interned at Amazon, is now employed there as a Software Developer. In his fifth year, he undertook a Co-op internship to gain a clearer understanding of his career aspirations.

"I worked on a project to securely log and compress video images from drone flights so they can be transferred over PCIEs and stored for future use. The stand-out moment of my internship was producing my first demo. Following the research, I developed existing code and ran performance tests to identify and nominate a candidate solution. The proposed solution I produced was vital and will contribute to the final product in the next major release. After my time at Amazon, working alongside some incredible people, it has motivated me to strive for better – there's a lot I want to achieve in my lifetime."

"The Monash students have worked and contributed to our perception system and how we code it, our flight safety calculations, and also our business system programs where Prime Air has to integrate into the Amazon ecosystem - not a simple thing. Their fresh view has been fantastic. The feedback from our managers and leaders is: the students were able, with instruction, to bolt in and to work through projects and add value to us. And hopefully, we added value to their experience along the way."

DAVID CARBON
Vice President
Prime Air at Amazon

prime air

STUDENT TEAMS AND CLUBS

Student-led teams, clubs and societies can give you a head start and prepare you for your career, providing opportunities to put theory into practice in a design-build-compete environment. Develop hands-on skills, solve real problems and compete on the world stage. Form lasting friendships, industry connections and develop your professional skills whilst pursuing areas you're passionate about.

Joining a student team will set you up for career success. It's how you distinguish yourself from the crowd and demonstrate to future employers that you can translate your studies into practice. You'll get to experience authentic, real-world projects and challenges. Work in diverse, multidisciplinary teams to deliver innovative products or drive change to make the world a better place.

Our student-run clubs and societies provide opportunities to connect with like-minded people, learn new skills and network with professional engineers to expand your circles and employment opportunities. Build strong links with the local engineering industry and take advantage of innovative facilities and leading research. Some of the groups are:

MONASH ENGINEERING STUDENTS' SOCIETY (MESS)

MESS is a not-for-profit organisation that'll enrich your Monash experience through social, academic and industry experiences that are engaging and fun. MESS also produces an annual engineering careers guide, a useful resource to help you secure a job after you graduate.

MONASH MOTORSPORT (MMS)

Join MMS and help conceive, design, build and race a formula-style racing car. MMS has a mission to create the most competitive and well-designed formula-style race cars possible. They also developed Australia's first competition-ready Formula Student driverless car.

MONASH HIGH POWERED ROCKETRY (HPR)

HPR is a student team dedicated to the design, analysis and construction of high-powered rockets. They compete in the world's largest rocketry competition, the Spaceport America Cup.

MONASH SUSTAINABLE BUILDINGS

A multidisciplinary team of Engineering, Science, and Art Design and Architecture students whose mission is to create practical net-zero designs that give back to the environment and community. The team has competed in and won international competitions for their sustainable and innovative designs.

ROBOGALS MONASH

Robogals Monash is a not-for-profit organisation that aims to encourage more young women to pursue STEM career opportunities, with a focus on engineering. Robogals offers opportunities to strengthen your communication and leadership skills, and gives volunteers access to professional development opportunities within an international organisation.

MONASH DEEPNEURON (MDN)

MDN is a student-led team dedicated to advancing Artificial Intelligence (AI) and High-Performance Computing (HPC) for real-world impact. Through cutting-edge projects, workshops, and initiatives, the team explores Machine Learning, Deep Learning, Neural Networks, and Generative AI. With a strong focus on outreach and education, MDN aims to make AI and HPC more accessible, fostering understanding and innovation for all.

Other engineering clubs, teams and societies you can be involved with are:

- Engineers Without Borders
- Gay and Lesbian Engineers at Monash (GLEAM)
- Materials Engineering and Science Society
- Mechatronics Engineering Clayton Club
- Monash Aerospace and Mechanical Engineering Club
- Monash Association of Civil Engineering Students
- Monash Automation
- Monash Biomedical Engineering Student Society
- Monash Boring Excavating Student Team (BEST)
- Monash BrewLab
- Monash Carbon Capture and Conversion (MC^3)
- Monash Connected Autonomous Vehicle
- Monash Engineering and Pharmaceutical Science Society
- Monash Environmental Engineering Society
- Monash Forge
- Monash Human Power
- Monash Motorsport Malaysia
- Monash Pilot Processes
- Monash Railway Express
- Monash SynBio Tech
- Monash Uncrewed Aerial Systems
- Monash Young MedTech Innovators
- Precious Plastic Monash
- Shell Eco Marathon Team Monash
- Society of Monash Electrical Engineers
- Society of Monash University Chemical Engineers
- Sustainable Water Monash
- Transport Engineers at Monash.

Discover more info
monash.edu/engineering/student-experience/teams-and-clubs

MONASH NOVA ROVER

Design and build the next generation Mars and Lunar rovers. The team compete in the University Rover Challenge at the Mars Desert Research Station in the United States and the Australia Rover Challenge.

MONASH NOVA ROVER GETS A VISIT FROM NASA

Scan or visit:
monash.edu/engineering/nasa-visits-monash-nova-rover

EMPOWER YOUR FUTURE

WOMEN IN ENGINEERING AT MONASH

Engineering is for everyone. Diversity makes engineering stronger, more creative, and more responsive to the most pressing needs of diverse communities and industries in our rapidly changing world.

At Monash University, we believe that engineering is a pathway for anyone passionate about creating real-world solutions, and we are committed to supporting young women every step of the way.

Our supportive programs start before you're even at University. The MEG program for high school girls will give you the chance to meet like-minded girls and discover what you're interested in and help you to decide if you want to study engineering.

Once you start your Engineering degree at Monash you'll be part of a supportive community that empowers you to thrive. Build connections with peers and mentors, take part in student clubs or teams, and participate in networking and other events that will continue to support you long after graduation, helping you achieve success in a world that needs your skills and innovation.

MEG PROGRAM

Monash Engineering Girls (MEG) is an exciting program for high school girls passionate about maths, science, technology, and design. If you're creative, enjoy problem-solving, and love working in teams, engineering might be your perfect fit.

Join MEG in Year 9 and stay until Year 12, where you'll participate in special activities and have access to exclusive events that introduce you to different types of engineering and help you discover which one suits you best. Along the way, you'll connect with like-minded peers and current Monash Engineering students and lecturers, gaining insight into what it's really like to study engineering at Monash.

For more information or to join the MEG program, visit:

monash.edu/engineering/meg

SUPPORTIVE AND CONNECTED COMMUNITY

There's many programs, events and opportunities for you to connect with your peers and lecturers, learn from a mentor who's walked the path before you or hear from accomplished women in engineering and be inspired.

The student-run clubs, teams and societies such as Women in Engineering at Monash, Robogals, GLEAM provide opportunities to join with like-minded people, learn new skills and network with women in STEM to expand your circles – and your opportunities.

WEM

Women in Engineering at Monash or WEM is a student-run club that supports, inspires and connects a network of women-identifying engineers at Monash. The society delivers a variety of events and industry guides to give you easy access to information that helps you make the most of your uni experience, and make a smooth transition into the workplace.

womeninengatmonash.com

MENTORING PROGRAM

The Women in Engineering (WIE) mentoring program fosters connections and provides development opportunities that help women to thrive in their engineering studies and careers. The program is open to penultimate or final year engineering students to expand your networks, gain critical insights into the field, grow professionally, and get a headstart on your career. It's also a great opportunity for our mentors, alumni and industry professionals, to empower the next generation of engineering professionals that identify as women.

monash.edu/engineering/women-in-engineering-mentoring

SEE WHAT MONASH ENGINEERING GIRLS (MEG) IS LIKE.

Scan or visit

youtu.be/_W5dbZowJyI

COMMITMENT TO DIVERSITY AND INCLUSION

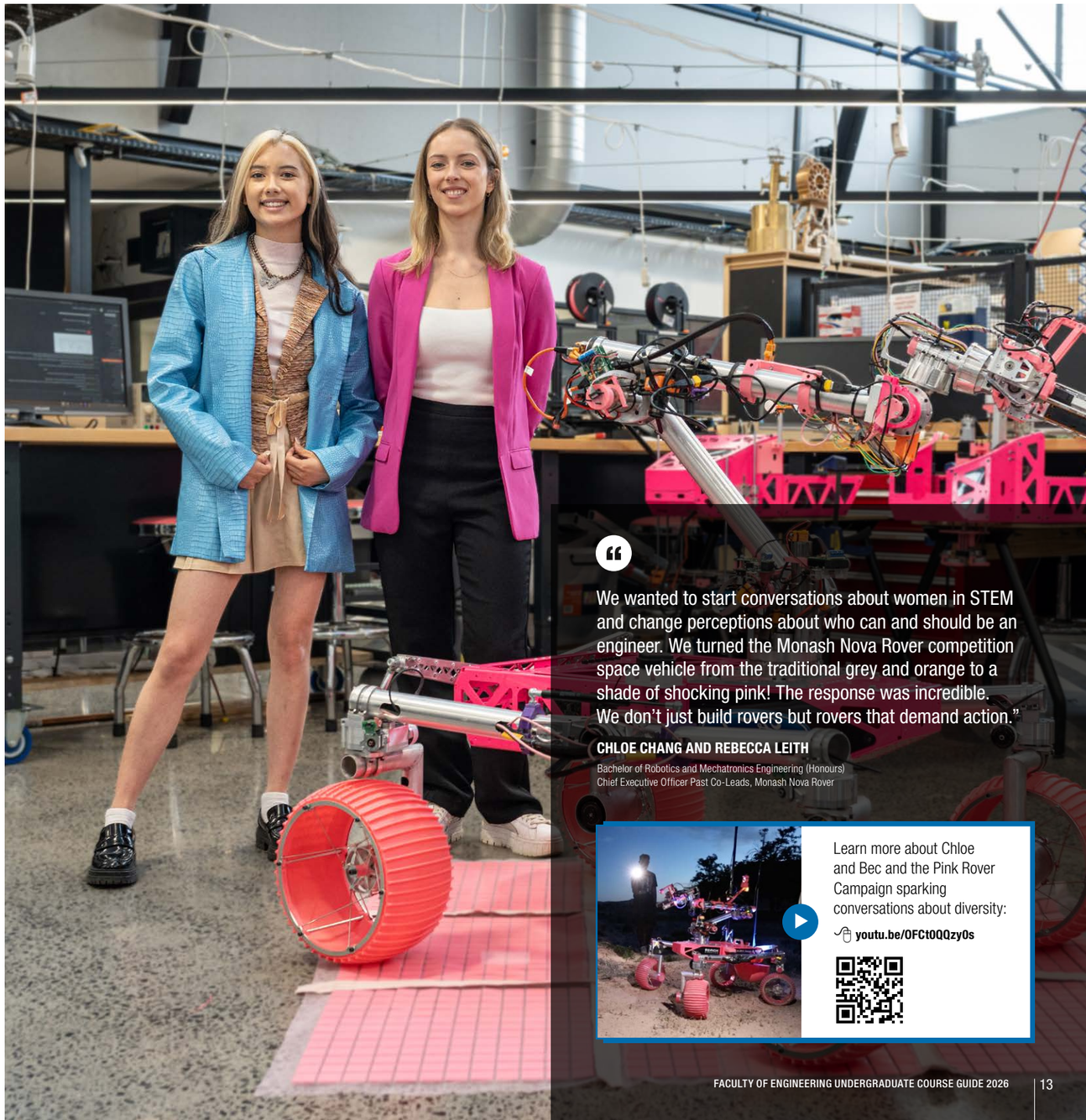
Monash is committed to inspiring and supporting young women to pursue a career in engineering and other STEMM fields. We are proud to hold five SAGE Cygnet awards as part of our work towards Athena SWAN Silver accreditation – a globally recognised program for advancing gender equity, diversity, and inclusion.

This year 24% of students studying engineering at Monash identify as women, compared to the national average of approximately 18 percent.[1] We are dedicated to gender equity and expanding initiatives to support women in engineering to achieve their full potential.

SCHOLARSHIPS

Monash offers a number of dedicated scholarships for Women in Engineering. There's no need to complete a separate application, it's automatically assessed. We want women interested in engineering to be able to access our world-leading education, regardless of their background or economic status.

1 Engineers Australia



"We wanted to start conversations about women in STEM and change perceptions about who can and should be an engineer. We turned the Monash Nova Rover competition space vehicle from the traditional grey and orange to a shade of shocking pink! The response was incredible. We don't just build rovers but rovers that demand action."

CHLOE CHANG AND REBECCA LEITH

Bachelor of Robotics and Mechatronics Engineering (Honours)
Chief Executive Officer Past Co-Leads, Monash Nova Rover

Learn more about Chloe and Bec and the Pink Rover Campaign sparking conversations about diversity:

youtu.be/OFCt0QQzy0s

OUR COURSES

BACHELOR OF ENGINEERING (HONOURS) DEGREE

At Monash you can become a fully qualified and accredited engineer in just four years. Our world-leading team of engineers will immerse you in engineering from day one. Your degree kicks off with a common first year, where you'll gain an understanding of scientific and design fundamentals, and the interaction between engineering and society. You'll also explore the ten engineering disciplines[1] before deciding which to specialise in from second year. See pages 17-25.

Professional and leadership skills, hands-on learning and industry experience are all part of the curriculum, so you can graduate work-ready. See page 8.

If you are completing a single degree course, you can complement your specialisation with a minor[2] in emerging engineering fields and expand your career opportunities. See page 27.

We also offer you the opportunity to broaden your options with a double degree, which can be completed in just one additional year.[3] See page 15.

OTHER GRADUATE STUDY OPTIONS

Whether you want to gain a professional edge, or are looking to explore your specialisation at an advanced level or pursue research interests, graduate study will take your qualification and career outcomes to the next level.

- Master of Advanced Engineering
- Master of Advanced Study (Engineering Research)
- Master of Engineering
- Master of Professional Engineering
- Master of Engineering Science by Research
- Master of Transport and Mobility Planning
- Graduate Research Degree (PhD)
- Industry Doctoral Program

For more information on all the graduate study options available visit:

monash.edu/engineering/postgraduate-study

MASTER'S ACCELERATED PATHWAY

BACHELOR OF ENGINEERING (HONOURS) AND MASTER OF ENGINEERING

Graduate with a bachelor's degree plus an expert master's degree in just four and a half years. This accelerated pathway program is designed for high-achieving students to be on track to earn both a Bachelor of Engineering (Honours) and a Master of Engineering degree. You'll receive outstanding practical and theoretical preparation for a career in engineering, with a rich selection of specialist electives and strong links to industry.

The master's will extend your technical knowledge and provide you with advanced leadership and complex problem-solving skills. It is designed to foster innovative thinking, entrepreneurship, and professional development. The Master's Accelerated Pathway fast-tracks you to a graduate qualification, saving you on fees, study time, and improving your employment outcomes.

monash.edu/engineering/masters-accelerated-pathway

1 The common first year is not available for the biomedical engineering specialisation. Apply directly to the Bachelor of Biomedical Engineering if you intend to choose this specialisation.
2 Minors are for single degree course only and not available in some specialisations. See: **monash.edu/engineering/minors** for details.
3. Additional 2.25 years for engineering and laws double degree.

"As a double degree student with a major in Earth Science, I developed a strong passion for sustainability and a desire to tackle the issues surrounding climate change. The breadth and diversity of the topics included in the Engineering course, combined with the co-curricular opportunities on offer, really piqued my curiosity. My ultimate goal is to combine what I've learnt from both my degrees to work on renewable energy solutions that can help the world shift to more sustainable, cleaner ways of living."

JEANNE CHANG

Bachelor of Robotics and Mechatronics Engineering (Honours) & Bachelor of Science Graduate
Geotechnics Vacation Student, Arup
Teaching Associate, Monash University

DOUBLE YOUR CAREER OPTIONS

Earn two degrees with only one[1] extra year of study and broaden your career opportunities. Combining engineering with another degree gives you a distinct set of skills and helps you stand out in today's competitive job market, offering diversity, more career choices and flexibility.

	Architectural Design	Arts	Biomedical Science	Commerce	Computer Science	Design[2]	IT	Laws (Honours)[1]	Pharmaceutical Science[3]	Science
Aerospace		●		●				●		●
Chemical		●	●	●				●	●	●
Civil	●	●	●	●				●		●
Electrical and computer systems		●	●	●	●		●	●		●
Environmental		●		●						●
Materials		●	●	●				●		●
Mechanical		●	●	●		●		●		●
Robotics and Mechatronics		●		●	●		●			●
Software		●		●	●		●			●

ARCHITECTURAL DESIGN

The building industry needs engineers with architectural expertise. Combining architectural design with civil engineering fosters creative solutions for social and engineering challenges. Graduates gain skills to design, renovate, and improve structures, making them highly valuable to firms globally.

ARTS

Combining an engineering degree with an arts degree provides complementary skills in technology and communications. You'll develop the transferable skills employers are looking for: communication, teamwork, research and critical thinking.

BIOMEDICAL SCIENCE

A double degree in engineering and biomedical science prepares you to meet the growing demand for technological solutions in the evolving field of biological sciences, where engineering increasingly integrates with advances in biomedical science.

COMMERCE

Do you dream of making it big in the business world? Many CEOs of major corporations have engineering qualifications. People with sound business skills and a strong technological background are consistently in demand across many industries and organisations.

COMPUTER SCIENCE

Computer science tackles growing information challenges. Industry needs experts to extract and analyse data from engineering processes/devices. Blending theory and practice to solve engineering problems and drive innovation across the IT spectrum.

DESIGN[2]

Have an eye for form and function? Enjoy building things? Combine mechanical engineering with design as a product design engineer. Create ergonomic, functional products by integrating engineering, creativity, and manufacturing expertise.

INFORMATION TECHNOLOGY

The connection between engineering and IT will only grow with technological advancements. IT supports engineering across all disciplines, and industry needs graduates skilled in both. This double degree develops creative problem-solving skills to apply IT in engineering.

LAWS (HONOURS)[1]

An engineering and laws double degree connects technology with legal expertise, equipping engineers to navigate legal, corporate, and political implications. Graduates can practise as solicitors or join legal teams in engineering, manufacturing, or technology firms.

PHARMACEUTICAL SCIENCE[3]

There's an increasing demand for pharmaceutical scientists with the expertise to take products from the design and formulation stage through to manufacturing. This double degree combines chemical engineering and pharmaceutical science to produce graduates capable of covering the full spectrum of pharmaceutical product design and development processes.

SCIENCE

Engineering is concerned with the application of science; however, many engineers are fascinated by scientific investigation and eager to enhance their understanding of the pure sciences. You may choose to combine engineering with food science, technology, explore the fundamentals of the cosmos through astrophysics or the human body.

For more information, visit **monash.edu/engineering/double-degrees**

1 Additional 2.25 years for engineering and laws double degree.
2 Industrial design only.
3 Formulation science only.

FACULTY OF ENGINEERING UNDERGRADUATE COURSE GUIDE 2026

Clayton

4.5 years full-time[2]
9 years part-time

February and July

ATAR: 90.25[1]
IB: 35.50[1]
MG: 80

Specialist and Expert master's

UNDERGRADUATE SPECIALISATIONS[2]

- Aerospace
- Chemical
- Civil
- Electrical and computer systems
- Environmental
- Materials
- Mechanical
- Robotics and mechatronics

MASTER'S SPECIALISATIONS[2]

- Biological engineering
- Civil engineering
- Electrical engineering
- Energy transition engineering
- Engineering management
- Materials engineering
- Mechanical engineering
- Power systems engineering
- Renewable Energy
- Smart Manufacturing

CRICOS: 001722B

1 The scores provided are to be used as a guide only, and are either the lowest selection rank to which an offer was made in 2025 or an estimate (E).
MG: Monash Guarantee
2 Refer to the website for available specialisations at the master's level.

MASTER'S ACCELERATED PATHWAY

Graduate with both a Bachelor's and a Master's degree by adding just one extra semester to your study.

In the Master's Accelerated Pathway, you can earn both a Bachelor of Engineering (Honours) and a Master of Engineering in as little as 4.5 years.

With the perfect blend of practical and theoretical learning, you'll explore your passions and build real-world skills through hands-on experiences, work placements and industry connections.

Starting with a fully accredited Bachelor's degree, you'll have the flexibility to tailor your studies and drive your future career path.

The Master's program takes your knowledge even further, developing your expertise, leadership abilities and problem-solving skills. Whether you want to deepen your Bachelor's specialisation – or explore new areas like Renewable energy or Smart manufacturing – you'll be ready to create innovative, sustainable solutions that enrich your community and your career.

You may also be eligible for one of our generous scholarships, which can help you save time and money while advancing your career prospects.

CAREER OPTIONS

- Specialist engineer or consultant within your chosen professional field
- Engineering management role in private or public sector
- Entrepreneur or founder of your own start up company.

Discover more at
monash.edu/engineering/masters-accelerated-pathway

"The Master's was appealing as a way to differentiate myself from other job applicants as I entered the increasingly competitive professional world, especially with the low time commitment. I found myself aligning most closely with Mechanical, in part because it is what I was most capable of and also what I found myself enjoying most."

CHARLES MCNAMARA
Bachelor of Mechanical Engineering (Honours) and Master of Mechanical Engineering Graduate
Graduate Rail Engineer, WSP

AEROSPACE ENGINEERING

Aerospace engineering is concerned with the design, airworthiness, development and maintenance of flight vehicles. It's a multidisciplinary combination of aerodynamics, aero-structures, avionics, propulsion, materials engineering and computational simulation.

As an aerospace engineer, you'll have the skills to tackle many of tomorrow's global challenges. You may be involved in the creation of a more environmentally-friendly aircraft, or even help build a vehicle capable of exploring our solar system and beyond. Project work includes the use of wind tunnels for aerodynamic testing, computational modelling for predicting structural behaviour, advanced manufacturing, materials and structural testing.

CAREER OPTIONS

When you graduate you could work in aircraft design and maintenance, aerospace control systems, aerodynamics, sustainable energy and conservation, lightweight materials, big data analytics, or new manufacturing techniques. You could join a large aerospace company or a manufacturer that contracts to the aerospace industry. Or work at an airline, a government aerospace laboratory or research centre. Formula One teams also employ aerospace engineers. With the establishment of the Australian Space Agency, you could work with one of the many new space launch or satellite startups in Australia. You could also follow in the footsteps of Monash aerospace alumni and work at an international space agency or multinational. Your training will also equip you to pursue a career in management, consulting or finance. Join a thrilling profession in the midst of developing the next generation of flight vehicles.

The Airbus A380, the Falcon Heavy rocket, and the Mars Perseverance Rover are just some of the advances led by aerospace engineers. Career specialisations include:

- aircraft design and testing
- avionics and control systems
- airport operations and management
- aircraft fleet management
- satellite and launch systems engineering
- research and development
- defence industries
- renewable energy
- transportation aerodynamics
- building and structure design and testing.

Clayton

4 years full-time
8 years part-time

February and July

ATAR: 85.1[1]
IB: 32.5[1]
MG: 75

Specialist

DEGREE AWARDED
Bachelor of Aerospace Engineering (Honours)

DOUBLE DEGREES

- Arts
- Commerce
- Laws (Honours)
- Science

MINORS

- Artificial intelligence in engineering[2]
- Computational engineering
- Medical technology
- Micro and nano technologies
- Mining engineering
- Networks for connectivity
- Power and energy systems engineering
- Renewable energy engineering
- Smart manufacturing
- Sustainable engineering[3]
- Telecommunications infrastructure
- Transport

CRICOS: 001722B

1 The scores provided are to be used as a guide only, and are either the lowest selection rank to which an offer was made in 2025 or an estimate (E).
MG: Monash Guarantee.
2 Available in Malaysia and Clayton Campus
3 Only available at Malaysia campus

"What I like most about studying Aerospace is that I now have a greater appreciation for the history of flight vehicle design and the innovation that's still occurring. Now, every time I step onto a plane I can see the real-world application of the content I am studying, which has inspired me to pursue work within the aviation industry after graduation."

KARINA FINLAYSON
Bachelor of Aerospace Engineering (Honours) and Bachelor of Science Graduate
Graduate Engineer, Qantas

Discover more at
monash.edu/engineering/specialisations/aerospace

FACULTY OF ENGINEERING UNDERGRADUATE COURSE GUIDE 2026

BIOMEDICAL ENGINEERING

Clayton

4 years full-time
8 years part-time

February

ATAR: 85.45[1]
IB: 32.75[1]
MG: 80

Specialist

DEGREE AWARDED
Bachelor of Biomedical Engineering (Honours)

CRICOS: 001722B

1 The scores provided are to be used as a guide only, and are either the lowest selection rank to which an offer was made in 2025 or an estimate (E).
MG: Monash Guarantee

Discover more at
monash.edu/engineering/specialisations/biomedical

Scan me or visit
monash.edu/engineering/change-makers/hannah-and-maria

Biomedical engineers apply engineering design skills to medical and biological sciences for the purpose of improving people's health. X-rays, cardiac pacemakers, ventilators and artificial joints – these are just some of the critical technologies used everyday to save lives and promote better health outcomes, and were all designed by biomedical engineers.

As a biomedical engineer, you'll bridge the gap between medicine and technology to improve diagnostics, monitoring and therapy, and create new medical instruments and devices. Whether you design new 3D-printed prosthetics, use biomaterials to repair and regenerate cells, apply AI principles to advanced monitoring tools, or build your own start-up in the med-tech field, you'll make a powerful impact on patients' treatment, recovery and quality-of-life as a biomedical engineer.

At Monash, you'll be equipped with strong clinical, technical and regulatory foundations in professional biomedical engineering practice, taught by leading academics in physiology, anatomy, molecular biology, materials science, electrical, biomedical, mechanical and chemical engineering.

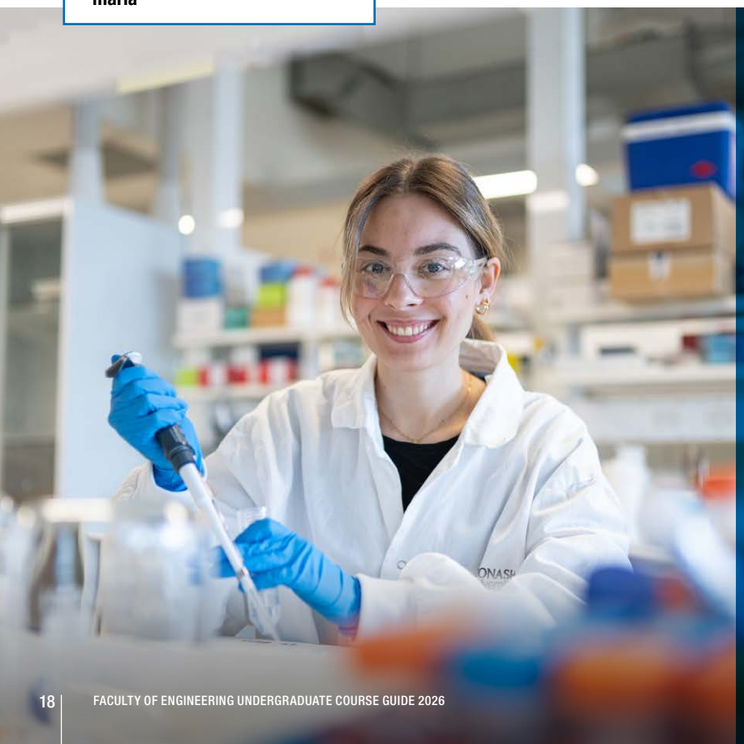
With our network of industry partners, you'll have opportunities to build your career and gain practical experience before you graduate, while the Australian-first Victorian Heart Hospital, located on the Clayton campus offers exciting opportunities to pursue biomedical engineering research.

Play a leading role in transforming 21st century healthcare, and change millions of lives around the world for the better by studying biomedical engineering.

CAREER OPTIONS

When you graduate as a biomedical engineer, you'll find exciting and rewarding opportunities in the following areas:

- medical equipment and device design and manufacturing
- medical and healthcare services
- pharmaceutical design and manufacturing
- biomedical instrumentation industries
- prosthetics
- research and development
- med-tech entrepreneurship
- engineering consultancy.



"I chose biomedical engineering because it felt like the perfect fusion of my passions and interests. Throughout high school, I was fascinated by science, particularly the human body. However, as I progressed, I found myself increasingly drawn to the analytical and problem-solving aspects of mathematics and physics. I stumbled upon biomedical engineering and realised it offered the ideal blend of my two passions. Allowing for the potential for making meaningful contributions at the intersection of science, engineering, and healthcare."

MARIA ZARCO-VERA
Bachelor of Biomedical Engineering (Honours) and Diploma of Liberal Arts
President, Monash Biomedical Engineering Student Society
Biomedical Engineering Industry Advisory Committee, Monash University
Biomedical Engineering Student-Staff Committee, Monash University

CHEMICAL ENGINEERING

Clayton, Malaysia

4 years full-time
8 years part-time

February and July

ATAR: 85.1[1]
IB: 32.5[1]
MG: 75

Specialist

DEGREE AWARDED
Bachelor of Chemical Engineering (Honours)

DOUBLE DEGREES
- Arts
- Biomedical Science
- Commerce
- Laws (Honours)
- Pharmaceutical Science
- Science

MINORS
- Artificial intelligence in engineering[3]
- Computational engineering
- Environmental engineering
- Intelligent Manufacturing[4]
- Micro and nano technologies
- Mining engineering
- Renewable energy engineering
- Sensory systems in Industry 4.0[4]
- Smart manufacturing
- Sustainable energy transition[4]
- Sustainable engineering

CRICOS: 001722B

1 The scores provided are to be used as a guide only, and are either the lowest selection rank to which an offer was made in 2025 or an estimate (E).
MG: Monash Guarantee
2 Refer to page 16 for Master's Accelerated Pathway entry requirements.
3 Available in Malaysia and Clayton campus
4 Only available at Malaysia campus

Chemical engineering blends chemistry with engineering and other fields including biological science, environmental science, nanotechnology, pharmaceutical science, mathematical modelling, artificial intelligence and digitalisation, mineral processing, management and economics. Many everyday items involve chemical engineering during some stage of their production: pharmaceuticals, computer chips, mobile phones, catalysts, food and water, and our fossil fuel and renewable energy sources, to name just a few.

Chemical engineers invent, develop, design and improve the sustainability of processes that convert raw materials and wastes into useful products, with minimal environmental impact. They're also involved with pollution control, energy generation and conservation, recovering energy from waste and renewable resources, and protection of the environment.

A selection of high-achieving students are given the opportunity to undertake integrated industrial training in their final year. You'll have the benefit of expert industry lecturers teaching several units in third and fourth year, in addition to frequent industry guest lecturers in all year levels. You can also take your studies further with the Master of Biological Engineering[2] accelerated pathway. Advance your skills and career opportunities with one extra semester of study.

CAREER OPTIONS

As a chemical engineer, you can:

- develop alternative fuels and renewable sources for chemicals, pharmaceuticals and power production
- design, develop or improve industrial processes and equipment for large-scale chemical and biochemical manufacturing
- design processes to capture carbon to combat global warming
- plan and test methods of manufacturing
- improve energy efficiency or reduce water and resource consumption at manufacturing sites
- develop sustainable methods for the upcycling of byproducts and waste from manufacturing processes
- devise green production processes that are safe, efficient, profitable and environmentally sound
- research naturally-occurring chemical reactions so that these processes can be copied for human benefit
- conduct environmental impact studies
- develop and implement lower emission production technologies
- research and develop new processes and products including mathematical modelling, artificial intelligence and digitalisation
- design, develop and use advanced and renewable materials.

"My experience in the Industry Innovation Program was a highlight of my degree as I was able to travel to Tasmania with a team of students to assist in the commissioning of a pyrolysis plant. Additionally, the opportunity also allowed me to work in industry and gain a deeper understanding of the workings of industry and how they communicate with one another to get a huge project completed on time."

VANNASTRA TOUCH
Bachelor of Chemical Engineering (Honours)
and Bachelor of Pharmaceutical Science Graduate
Research Assistant, Varden Process

Discover more at
monash.edu/engineering/specialisations/chemical

Scan to watch
youtube.com/shorts/353oMWDE4Tk

CIVIL ENGINEERING

Clayton, Malaysia

4 years full-time
8 years part-time

February and July

ATAR: 85.1[1]
IB: 32.5[1]
MG: 75

Specialist

DEGREE AWARDED
Bachelor of Civil Engineering (Honours)

DOUBLE DEGREES
- Architectural Design
- Arts
- Biomedical Science
- Commerce
- Laws (Honours)
- Science

MINORS
- Artificial intelligence in engineering[3]
- Computational engineering
- Environmental engineering
- Intelligent Manufacturing[3]
- Medical technology
- Micro and nano technologies
- Mining engineering
- Networks for connectivity
- Power and energy systems engineering
- Renewable energy engineering
- Smart manufacturing
- Sustainable engineering
- Telecommunications infrastructure
- Transport

CRICOS: 001722B

1 The scores provided are to be used as a guide only, and are either the lowest selection rank to which an offer was made in 2025 or an estimate (E).
MG: Monash Guarantee
2 Available in Malaysia and Clayton campus
3 Only available at Malaysia campus

Civil engineers design and maintain infrastructure systems and processes that allow humans and nature to coexist with minimal impact. Modern society couldn't function without them. We need civil engineers to design the buildings we live and work in, the roads and bridges we use to travel on, and the water we need to live. We need them to construct larger commercial and industrial complexes. We need them for water supply an pollution control.

We need them to sustainably manage existing civil infrastructure such as roads, bridges and buildings. Civil engineering is more than just hard hats. At Monash we help you prepare for your civil engineering career early, learning the fundamentals and exploring emerging technologies, such as AI, 3D printing and robotics. You will also have the opportunity to gain industry experience in the major fields.

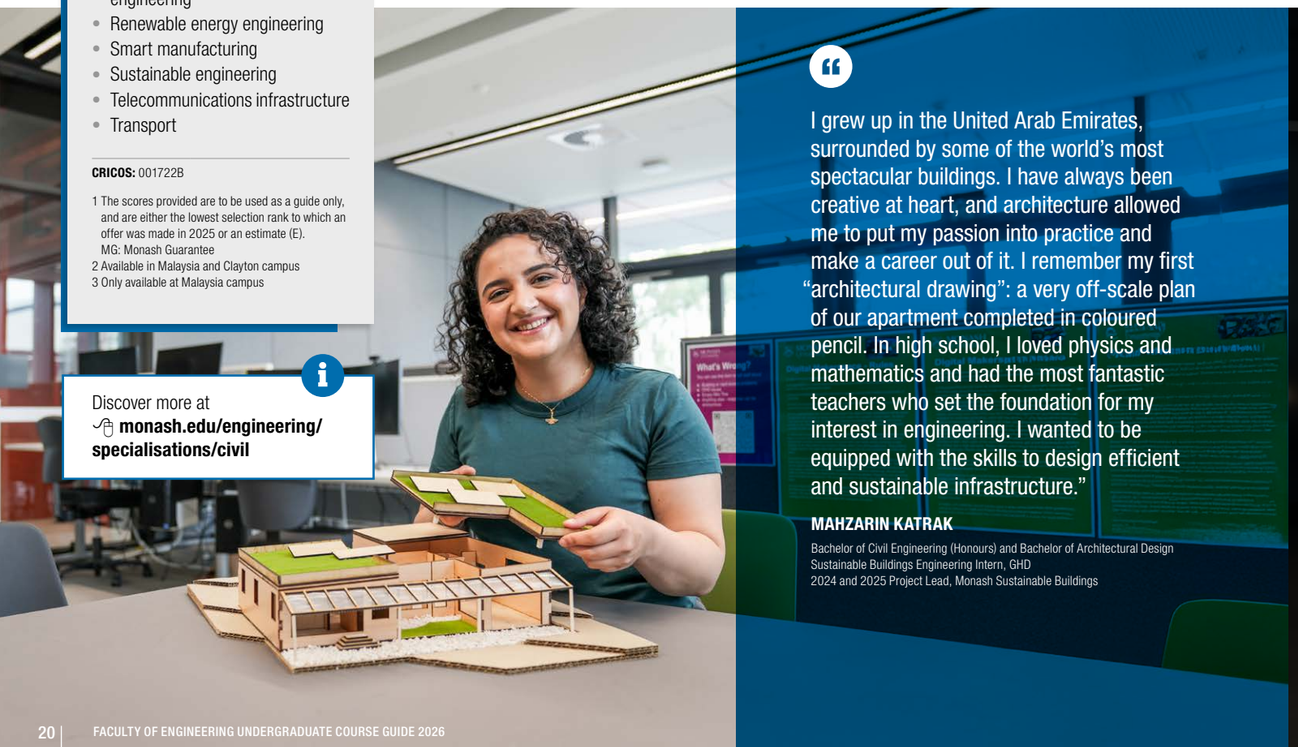
As a civil engineer, you can be involved in:

- **Structures** – design and oversee construction of buildings, bridges, airports, railways, commercial complexes, towers, offshore platforms, and tunnels. Ensure structures remain sound under extreme conditions such as heavy traffic, high winds and earthquakes.
- **Water** – plan and manage water supply and drainage systems for communities, agriculture, and industry. Develop projects to control flood waters, design dams, spillways, and pipe networks. Manage rivers and develop systems to collect and treat wastewater, and develop urban water systems.
- **Transport** – plan for the future travel needs of cities and rural areas. Investigate alternative and sustainable transport technologies including electric and autonomous connected vehicles to make existing road and traffic systems safer, more efficient, and user-focused.
- **Geomechanics** – design and analysis of foundations and support structures, slopes, waste containment facilities, dams and tunnels, as well as engineering of geomaterials for infrastructure projects.

CAREER OPTIONS

Graduating as a civil engineer, you'll find challenging and rewarding opportunities in the following areas:
- private industry and government infrastructure
- humanitarian engineering and sustainable development
- construction and mining
- roads and traffic industries
- marine and resort developments property and land development consulting firms
- environmental and renewable energy sectors.

Discover more at
monash.edu/engineering/specialisations/civil



"I grew up in the United Arab Emirates, surrounded by some of the world's most spectacular buildings. I have always been creative at heart, and architecture allowed me to put my passion into practice and make a career out of it. I remember my first "architectural drawing": a very off-scale plan of our apartment completed in coloured pencil. In high school, I loved physics and mathematics and had the most fantastic teachers who set the foundation for my interest in engineering. I wanted to be equipped with the skills to design efficient and sustainable infrastructure."

MAHZARIN KATRAK
Bachelor of Civil Engineering (Honours) and Bachelor of Architectural Design
Sustainable Buildings Engineering Intern, GHD
2024 and 2025 Project Lead, Monash Sustainable Buildings

ELECTRICAL AND COMPUTER SYSTEMS ENGINEERING

Clayton, Malaysia

4 years full-time
8 years part-time

February and July

ATAR: 85.1[1]
IB: 32.5[1]
MG: 75

Specialist

DEGREE AWARDED
Bachelor of Electrical and Computer Systems Engineering (Honours)

DOUBLE DEGREES
- Arts
- Biomedical Science
- Commerce
- Computer Science
- Information Technology
- Laws (Honours)
- Science

MINORS
- Artificial intelligence in engineering[2]
- Computational engineering
- Intelligent manufacturing[3]
- Medical technology
- Micro and nano technologies
- Mining engineering
- Networks for connectivity
- Power and energy systems engineering
- Renewable energy engineering
- Smart manufacturing
- Sustainable engineering
- Telecommunications infrastructure
- Transport

CRICOS: 001722B

1 The scores provided are to be used as a guide only, and are either the lowest selection rank to which an offer was made in 2025 or an estimate (E).
MG: Monash Guarantee
2 Available in Malaysia and Clayton campus
3 Only available at Malaysia campus

Electrical and computer systems engineering is an extremely diverse field, encompassing biomedical, computer systems, electronics, electrical power, AI, robotics and telecommunications. Electrical and computer systems engineers investigate, plan, design, develop, construct, test, market and maintain a wide range of products and systems.

Monash will give you the hands-on training and theoretical insight you need for an exciting future as an electrical and computer systems engineer.

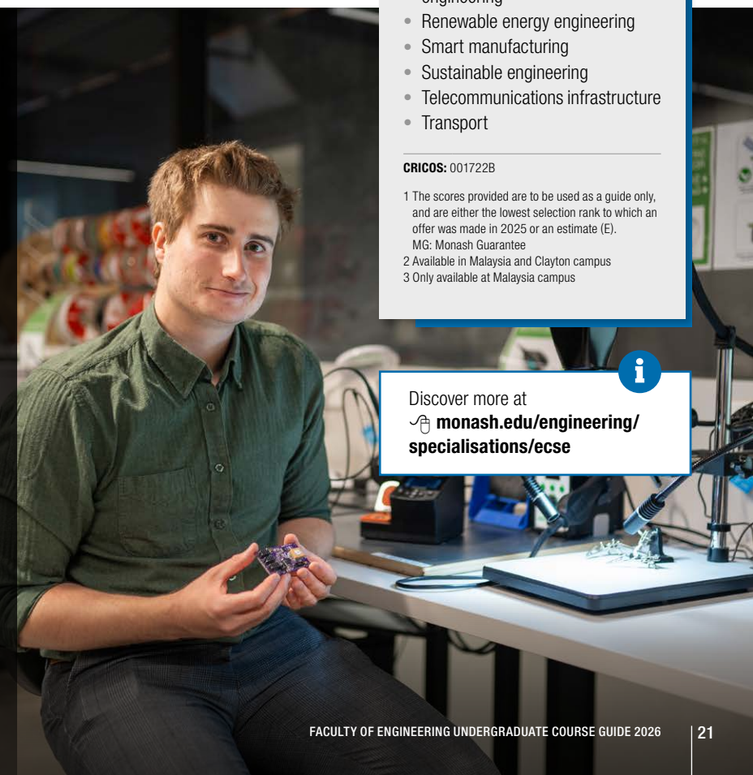
You'll experience industry-standard reprogrammable chips in the laboratories from first year onwards. By third year you'll be building miniaturised machines with very powerful processing on board. In fourth year you may apply this knowledge to a 'product' of your own.

CAREER OPTIONS

As an electrical and computer systems engineer, you can design and develop digital products such as smartphones, virtual reality systems or computer games, or maybe robotic medical devices to assist in surgery and rehabilitation. Many Monash graduates work in large public and private telecommunications, manufacturing and electrical-power companies. Others work for defence and intelligence organisations. You could also work in banking and finance, or with any organisation that creates, stores, encodes and transmits big data or manages complex systems. You could work locally or internationally in a wide range of industries, including:
- power generation
- industrial and power electronics
- wireless communications
- artificial intelligence
- optical communications
- the 'Internet of Things'
- embedded systems
- computer programming
- robotics
- healthcare.

"I have always had a passion for tinkering and understanding how things work. I was given a Jaycar soldering kit for my birthday when I was young, and the rest is history. I enjoy the intricacy and versatility of electronics. Electricity seems like such an abstract concept, and yet it has allowed the development of modern society."

CHRISTOPHER GAILEY
Bachelor of Electrical and Computer Systems Engineering (Honours) and Bachelor of Science
Flight Systems Lead, Monash High Powered Rocketry (HPR)



Discover more at
monash.edu/engineering/specialisations/ecse

ENVIRONMENTAL ENGINEERING

Clayton

4 years full-time
8 years part-time

February and July

ATAR: 85.1[1]
IB: 32.5[1]
MG: 75

Specialist

DEGREE AWARDED
Bachelor of Environmental Engineering (Honours)

DOUBLE DEGREES
- Arts
- Commerce
- Science

MINORS
- Artificial intelligence in engineering[2]
- Civil engineering
- Computational engineering
- Medical technology
- Micro and nano technologies
- Mining engineering
- Networks for connectivity
- Power and energy systems engineering
- Renewable energy engineering
- Smart manufacturing
- Telecommunications infrastructure
- Transport

CRICOS: 001722B

1 The scores provided are to be used as a guide only, and are either the lowest selection rank to which an offer was made in 2025 or an estimate (E). MG: Monash Guarantee.
2 Available in Malaysia and Clayton campus

Few branches of engineering have such a profound impact on our health, quality of life and the future wellbeing of the planet as environmental engineering. It's all about the implementation and management of solutions and programs in keeping with the principles of sustainable development and humanitarian engineering. It involves reducing energy and resource use and both minimising and managing waste and pollution, while providing the community with the development opportunities it needs to grow.

Environmental engineering encompasses water and air-pollution control, recycling, water supply, waste disposal, land management, transport and the built environment, process engineering and public health issues.

CAREER OPTIONS

Environmental problems exist in all countries and industries, so your opportunities are broad and far-reaching. You could work in air-pollution control, water supply, land management, impact assessment, hazardous-waste management, energy production, stormwater and wastewater management, environmental management systems and much more.

Organisations employing environmental engineers include:
- power generation
- engineering consulting firms
- industries that need cleaner production systems
- private and municipal agencies that supply drinking water and treat wastewater
- companies treating and disposing of hazardous waste
- environmental agencies and companies responsible for mine-site rehabilitation
- organisations helping to account for carbon and implementing low-carbon solutions
- government agencies monitoring and regulating environmental issues
- universities that teach and conduct sustainability research
- not for profit and international agencies that aid developing nations.

Discover more at
monash.edu/engineering/specialisations/environmental

"As part of the Global Immersion Guarantee, I traveled to Indonesia, to learn about energy security in almost every aspect of life, from the legal system, and religion to everyday infrastructure. Doing this alongside students studying different degrees, showed me how each strand of life was interconnected and how important specifically, environmental engineering was in terms of the natural environment and utilising it to create the most efficient ecosystem for life."

RACHELLE PATTURAJAN
Bachelor of Environmental Engineering (Honours)
Occupational Hygiene Trainee, Anitech

MATERIALS ENGINEERING

Materials engineering is all about making new materials and improving existing ones. It's about making things stronger, lighter and more functional, sustainable and cost-effective. It underpins much of engineering – if we want to make things, we need to have materials with the right properties. Whether it's a next-generation jet engine, a biodegradable tissue scaffold to grow organs from stem cells, or new types of solar cells and batteries, the structure, properties and processing of materials are crucial to the final product.

Materials engineers work with everything from the thermal protection of space shuttles to high-tech artificial hip and cochlear implants, and nanoparticles that seek and destroy cancer. Materials engineering is truly interdisciplinary. It involves physics, mathematics, biology and chemistry, culminating in a groundbreaking research field and a thriving job market. As a materials engineer, your expertise will be sought after in the emerging fields of additive manufacturing, nanotechnology, biomedical materials, electronic materials, recycling and energy generation, the development of lightweight metal alloys and in traditional industries such as metallurgy, mining and infrastructure engineering.

CAREER OPTIONS

Demand for materials engineers continues to outstrip supply, with Monash graduates receiving an exceptional response in the employment market. Working across a range of exciting industries including aerospace, biomedical, mining, future manufacturing, 3D printing and recycling, materials engineers become:
- biomedical engineers
- consultants
- technology managers
- metallurgists
- materials designers
- energy scientists and future renewable energy engineers
- forensic engineers, aircraft forensics and defence scientists
- materials selection specialists (aero, auto, structural)
- failure analysts
- process engineers
- corrosion or durability engineers
- research engineers.

Clayton

4 years full-time
8 years part-time

February and July

ATAR: 85.1[1]
IB: 32.5[1]
MG: 75

Specialist

DEGREE AWARDED
Bachelor of Materials Engineering (Honours)

DOUBLE DEGREES
- Arts
- Biomedical Science
- Commerce
- Laws (Honours)
- Science

MINORS
- Artificial intelligence in engineering[2]
- Computational engineering
- Intelligent manufacturing[3]
- Medical technology
- Micro and nano technologies
- Mining engineering
- Networks for connectivity
- Power and energy systems engineering
- Renewable energy engineering
- Smart manufacturing
- Sustainable engineering
- Telecommunications infrastructure
- Transport

CRICOS: 001722B

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2 Available in Malaysia and Clayton campus
3 Only available at Malaysia campus

Discover more at
monash.edu/engineering/specialisations/materials

Scan me or visit
monash.edu/engineering/change-makers/brendan

"My time during the Summer Research Program, I worked on patterned polymer scaffolds to direct cell growth and creating brain organoids using hydrogel microparticles. These projects taught me so many new skills and allowed me to collaborate with a variety of students, postdocs and academics. I gained a broad base of knowledge and skillset, from polymer synthesis, through to cell culture, which assisted me in jump-starting my PhD."

BRENDAN HUNG
Bachelor of Materials Engineering (Honours) and Bachelor of Biomedical Science Graduate
PhD Candidate, Monash University

MECHANICAL ENGINEERING

Clayton, Malaysia

4 years full-time
8 years part-time

February and July

ATAR: 85.1[1]
IB: 32.5[1]
MG: 75

Specialist

DEGREE AWARDED
Bachelor of Mechanical Engineering (Honours)

DOUBLE DEGREES
- Arts
- Biomedical Science
- Commerce
- Design
- Laws (Honours)
- Science

MINORS
- Artificial intelligence in engineering[2]
- Computational engineering
- Intelligent Manufacturing[3]
- Medical technology
- Micro and nano technologies
- Mining engineering
- Networks for connectivity
- Power and energy systems engineering
- Renewable energy engineering
- Sensory systems in Industry 4.03
- Smart manufacturing
- Sustainable engineering
- Sustainable energy transition[3]
- Telecommunications infrastructure
- Transport

CRICOS: 001722B

1 The scores provided are to be used as a guide only, and are either the lowest selection rank to which an offer was made in 2025 or an estimate (E).
MG: Monash Guarantee
2 Available in Malaysia and Clayton campus.
3 Only available at Malaysia campus

Mechanical engineering is about the intelligent and efficient use of motion and energy to create, manufacture and assemble designs, from the simplest to the most complex. It builds on physics, chemistry, materials, mathematics and biology. Growth industries include advanced manufacturing, smart buildings, renewable energy and medical engineering.

Mechanical engineers are increasingly engaged in the design and operation of devices that require skills that cross traditional discipline boundaries. As a mechanical engineer, you can build a career in industries including power generation, water distribution, biomedical, mass transportation and air travel.

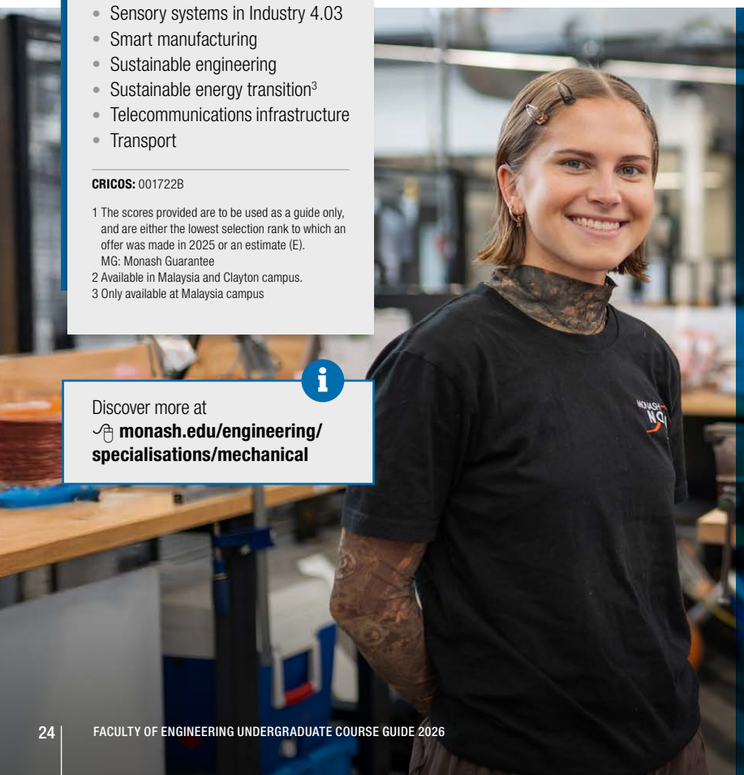
You can use your skills to improve life on earth and in space. From designing sustainable living spaces to cost-effective products for the developing world. You could even create a safe and reliable human habitat to support future space exploration.

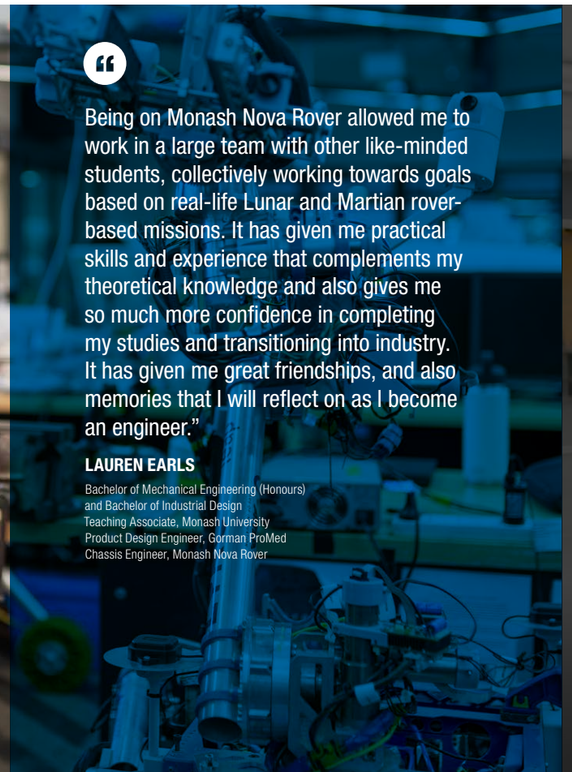
CAREER OPTIONS

As a mechanical engineer you will discover countless opportunities in a wide range of industries in Australia and overseas. You could pursue one or more of these specialist areas:

- building systems engineering
- advanced manufacturing
- robotics and automation
- advanced engineering analyses
- food production
- medical device technologies
- advanced composite structures
- micro and nano technologies
- wind engineering
- sustainable engineering systems
- renewable energy systems.

Discover more at
monash.edu/engineering/specialisations/mechanical





“Being on Monash Nova Rover allowed me to work in a large team with other like-minded students, collectively working towards goals based on real-life Lunar and Martian rover-based missions. It has given me practical skills and experience that complements my theoretical knowledge and also gives me so much more confidence in completing my studies and transitioning into industry. It has given me great friendships, and also memories that I will reflect on as I become an engineer.”

LAUREN EARLS
Bachelor of Mechanical Engineering (Honours) and Bachelor of Industrial Design
Teaching Associate, Monash University
Product Design Engineer, Gorman ProMed
Chassis Engineer, Monash Nova Rover

ROBOTICS AND MECHATRONICS ENGINEERING

Clayton, Malaysia

4 years full-time
8 years part-time

February and July

ATAR: 85.1[1]
IB: 32.5[1]
MG: 75

Specialist

DEGREE AWARDED
Bachelor of Robotics and Mechatronics Engineering (Honours)

DOUBLE DEGREES
- Arts
- Commerce
- Computer Science
- Information Technology
- Science

MINORS
- Artificial intelligence in engineering[2,3]
- Computational engineering
- Intelligent Manufacturing[4]
- Medical technology
- Micro and nano technologies
- Mining engineering
- Networks for connectivity
- Power and energy systems engineering
- Renewable energy engineering
- Sensory systems in Industry 4.04
- Smart manufacturing[2]
- Sustainable engineering
- Telecommunications infrastructure
- Transport

CRICOS: 001722B

1 The scores provided are to be used as a guide only, and are either the lowest selection rank to which an offer was made in 2025 or an estimate (E).
MG: Monash Guarantee
2 Artificial Intelligence minor not available in Artificial intelligence stream and Smart Manufacturing minor not available in Automation stream.
3 Available in Malaysia and Clayton campus.
4 Only available at Malaysia campus.

Robotics and mechatronics is where mechanical and electrical engineering meet, employing computer science and control systems to make devices smarter and more efficient.

As a robotics and mechatronics engineer you could create rovers for planetary exploration or robots for precision manufacturing or to assist the elderly. Alternatively, you might convert a household product into a truly clever device, and create the programs that control it.

You'll learn how to handle vast amounts of data and extract critical information from data in real time so that a fully automated manufacturing facility can operate safely and efficiently, or a car can drive completely autonomously.

Robotics and mechatronics engineers are in high demand. Their expertise is required in many industries including advanced manufacturing, aerospace, medicine, defence, transportation and data analysis.

There are two streams available to choose from:
- **Artificial intelligence** covers neural networks and deep learning, advanced engineering design, computer vision systems, and intelligent robotics.
- **Automation** includes design of mechatronic systems, dynamics and control, robotics and sensing, and advanced manufacturing.

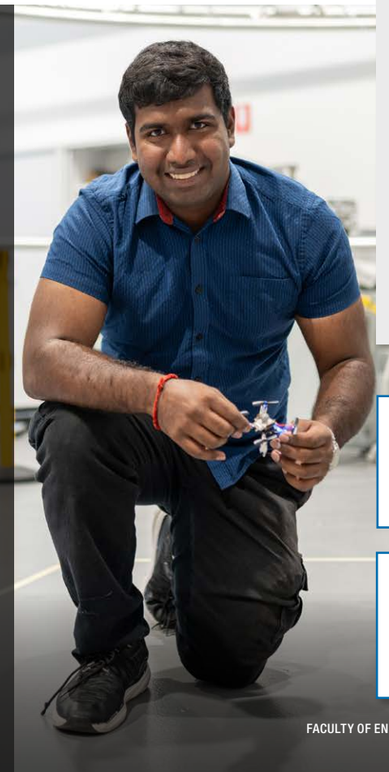
CAREER OPTIONS

You'll be equipped with the knowledge and skills to design, develop, manufacture and operate the intelligent products and complex systems of today and tomorrow. There are also opportunities in consulting, management and finance. You may also pursue a career in research and development, in academia, research institutions or advanced industry sectors. Opportunities exist in:

- robotics and automation
- aerospace systems and flight control
- artificial intelligence
- bioengineering
- defence
- intelligent systems for motor vehicles
- manufacturing systems and processes
- telecommunications
- medical systems
- software engineering
- mining systems and processes
- nanotechnology.

“I chose to study Engineering at Monash because it's one of the top-ranking universities in Malaysia, as well as the opportunity to transfer to the Clayton Campus in Australia. The Clayton campus provides students with high-tech engineering labs and facilities such as the Makerspace and Design and Build Studio. These spaces allow students access to tools such as 3D printers, laser cutters, and soldering stations to work on projects.”

AVVIENASH JAGANATHAN
Bachelor of Robotics and Mechatronics Engineering (Honours) Graduate Control Systems Engineer, SAFEgroup Automation



Discover more at
monash.edu/engineering/specialisations/robotics-mechatronics

Scan to watch
youtube.com/shorts/Ft2CRHe9ZXU

SOFTWARE ENGINEERING

Clayton, Malaysia

4 years full-time
8 years part-time

February and July

ATAR: 85.1[1]
IB: 32.5[1]
MG: 75

Specialist

DEGREE AWARDED
Bachelor of Software Engineering (Honours)

DOUBLE DEGREES
- Arts
- Commerce
- Computer Science
- Information Technology
- Science

CRICOS: 001722B

1 The scores provided are to be used as a guide only, and are either the lowest selection rank to which an offer was made in 2025 or an estimate (E). MG: Monash Guarantee

Discover more at
monash.edu/engineering/specialisations/software

Software engineering is a field that's constantly evolving as new technologies emerge. As an engineer in this area, your skills will be critical across many functions – from dispensing life-saving medicine to controlling flight paths.

As a software engineer you'll use your expertise in computer science, engineering principles and programming languages to build intelligent software products that may involve artificial intelligence and machine learning components, develop games and run network control systems. You could design systems and applications tailored to specific users and their needs, and build the underlying systems that run the technology and control networks. Solve business challenges by delivering technical solutions and assess organisation's current systems and needs to create strategies for improvement.

You'll learn about core areas such as software processes and life-cycles, requirements analysis, software design and architecture, software development, quality assurance and testing. Work with modern, industry-strength programming languages, technologies and systems. Through collaborative learning, you'll hone your teamwork, problem solving, resource management, project coordination and communication skills.

You can choose from a wide range of IT electives from cyber security to games development to business information systems. Gain valuable work experience through various industry programs including the IT Faculty's Industry-Based Learning (IBL) program. The Bachelor of Software Engineering (Honours) is accredited by the Australian Computer Society and Engineers Australia.

CAREER OPTIONS

In the age of digital transformation, new roles are constantly emerging and software engineering graduates are highly sought-after around the world. You could pursue a career as:

- software engineer or developer building products, games and network systems
- software architect or data engineer designing specific systems and databases
- block chain developer or engineer building software for digital identity, workforce management and data storage
- front end engineer writing the code for a website or app
- machine learning engineer writing personalised and predictive software
- network administrator or security engineer making systems secure and protect from threats.

"I chose to specialise in Software Engineering because I was interested in the idea that meaningful solutions could be created just by using a laptop. I was particularly interested as software has become an integral part of our daily lives, meaning that there's a growing demand for engineers to address the complex challenges in this field. What I enjoy most is the collaborative nature of the work and being part of a team that develops products from start to finish, whether it's websites, applications, or other solutions."

VICKY HUANG
Bachelor of Software Engineering (Honours) and Bachelor of Computer Science
Telstra Edge Undergraduate Network Commerical Engineer, Telstra Operations Subteam, Monash Human Power

ENGINEERING MINORS

Artificial intelligence in engineering[1] is used to develop driverless vehicles, human machine interaction and image recognition. Create new designs involving robotics, deep learning, computer vision and autonomous vehicles.

Civil engineering is the design and improvement of systems and processes that allow humans and nature to coexist with minimal impact. Including transportation systems, water supply, pollution control, roads, bridges and structures.

Computational engineering is a growing field that simulates the physical world to solve design problems. Develop new technology from biomedical devices, submarines and wind turbines with computer models are used to predict how new designs are used in reality.

Environmental engineering involves the implementation and management of solutions with the principles of sustainable development. By improving the knowledge on air, water and land quality, environmental engineers help restore the environment.

Intelligent Manufacturing[2] involves solving problems in manufacturing to create components for products and systems at any scale. Develop new products, technologies, and automation to meet the demands of a fast-paced world.

Medical technology explores life-changing devices like pacemakers, hip replacements and contact lenses. Study drug delivery systems, biosensors, tissue engineering, and regenerative medicine. Learn how these technologies interact with the body and bring innovations to clinical practice.

Micro and nano technologies form the basis of modern miniaturised systems from electronic devices, sensors and actuators in smartphones and vehicles and diagnostic systems, biomedical devices and devices for environmental monitoring.

Mining engineering involves environmentally-safe extraction and processing of natural minerals from the earth. The industry uses the latest automation and digital technologies to supply critical materials like copper, iron, lithium and gold, that are essential for modern society and the world's economy.

Networks for connectivity offers an opportunity to delve into the design and performance of smart networks and associated technologies. This includes exploration of communications protocols, multimedia, and optimisation techniques for enhancing network performance.

Power and energy systems engineering will enable you to explore power and energy systems, covering aspects from generation and transmission to distribution and low-voltage levels, including power customers.

Renewable energy engineering involves environmentally-safe extraction and processing of natural minerals. Using advanced automation and digital technologies to supply critical materials like copper, iron, lithium and gold, that are essential for modern society and the global economy.

Sensory systems in Industry 4.0[2] explore analogue systems and their role in modern industries. Learn about advanced sensors, programming, and autonomous technologies, integrating the Internet of Things, cloud computing, AI, machine learning, and more.

Smart manufacturing is the core of Industry 4.0 including cyber-physical systems, the Internet of Things, and augmented reality. Learn the modern systems of telecommunication, mechatronics, cyber-physics, and manufacturing for the new era of industry.

Sustainable energy transition[2] empowers you with the knowledge and skills to address the evolving challenges of energy systems in sustainability. Building a solid technical foundation and nurtures the innovative mindset essential for advancing your career in the rapidly growing energy sector.

Sustainable engineering is a growing multidisciplinary field where you'll explore life-cycle analysis, sustainability in built environments including passive and active technologies, and the political, social and environmental background to materials usage.

Telecommunications Infrastructure minor will enable you to delve into communication technologies, encompassing wireless (5G), optical and future-generation technologies, routing and switching principles, and telecommunications protocols.

Transport is essential to the sustainability, economic and social outcomes of cities. How can we design transport systems to reduce emissions, positively impact cities and embrace cutting-edge technologies? Providing you with the skills to tackle the complex challenges of modern, sustainable transport systems.

Discover more at
monash.edu/engineering/minors

1 Available in Clayton and Malaysia.
2 Only available at Malaysia campus.

DOMESTIC ADMISSIONS AND ENTRY REQUIREMENTS

ATARS AND PREREQUISITES FOR SINGLE AND DOUBLE DEGREES

ACADEMIC PREREQUISITE SUBJECTS

The table below outlines the requirements, and the course listing tells you which categories apply to each course. Make sure you check if this applies to your course of choice in this guide.

	English		Mathematics			Science
	■ Level 1	■ Level 2	■ Level 1	■ Level 2	■ Level 3	
VCE	Units 3 and 4: a study score of at least 25 in English (EAL) or 25 in English other than EAL.	Units 3 and 4: a study score of at least 35 in English (EAL) or 30 in English other than EAL.	Units 1 and 2: satisfactory completion in two units (any combination) of General Mathematics or Mathematical Methods or Specialist Mathematics.	Units 3 and 4: a study score of at least 22 in Mathematical Methods (any) or Specialist Mathematics, or a score of at least 25 in Further Mathematics.	Units 3 and 4: a study score of at least 25 in one of Mathematical Methods or Specialist mathematics.	Units 3 and 4: a study score of at least 25 in Chemistry or Physics.
IB	At least 4 in one of the following SL subjects: • English A: Literature, or • English A: Language and Literature, or • Literature and Performance, *OR* At least 3 in one of the following HL subjects: • English A: Literature, or • English A: Language and Literature, *OR* At least 5 in one of the following SL subjects: • English AB, or • English B, *OR* At least 4 in the following HL subject: • English B.	At least 5 in one of the following SL subjects: • English A: Literature, or • English A: Language and Literature, or • Literature and Performance, *OR* At least 4 in one of the following HL subjects: • English A: Literature, or • English A: Language and Literature, *OR* At least 6 in one of the following SL subjects: • English AB, or • English B, *OR* At least 5 in the following HL subject: • English B.	At least 3 in any mathematics subject at SL or HL level.	At least 4 in one of the following SL subjects: • Math Studies, or • Mathematics: Applications and Interpretations, or • Mathematics, or • Mathematics: Analysis and Approaches, *OR* At least 3 in one of the following HL subjects: • Mathematics: Applications and Interpretations, or • Mathematics, or • Further Mathematics, or • Mathematics: Analysis and Approaches	At least 4 in one of the following SL subjects: • Mathematics, or • Mathematics: Analysis and Approaches, *OR* At least 3 in one of the following HL subjects: • Mathematics: Applications and Interpretations, or • Mathematics, or • Further Mathematics, or • Mathematics: Analysis and Approaches.	At least 4 at Chemistry SL or Physics SL or 3 at HL in Chemistry or Physics.

SINGLE DEGREE COURSES AT A GLANCE

Course	Duration (years)[1]	Prerequisites (Refer to table above) English Level 1	English Level 2	Mathematics Level 3	Science Specified	Degree awarded	Location	Indicative[2] ATAR	Indicative[2] IB score	Monash Guarantee
Engineering M	4	■		■	Chemistry or Physics	Bachelor of Aerospace Engineering (Honours)	CL	85.10	32.50	75
						Bachelor of Biomedical Engineering (Honours)	CL	85.45	32.75	80
						Bachelor of Chemical Engineering (Honours)	CL	85.10	32.50	75
						Bachelor of Civil Engineering (Honours)				
						Bachelor of Electrical and Computer Systems Engineering (Honours)				
						Bachelor of Environmental Engineering (Honours)				
						Bachelor of Materials Engineering (Honours)				
						Bachelor of Mechanical Engineering (Honours)				
						Bachelor of Robotics and Mechatronics Engineering (Honours)				
						Bachelor of Software Engineering (Honours)				
	4.5	■		■	Chemistry or Physics	Bachelor's Honours / Master's Pathway[3]	CL	90.25	35.50	80

DOUBLE DEGREE COURSES AT A GLANCE

Course	Duration (years)[1]	Prerequisites (refer to table on page 28) English Level 1	English Level 2	Mathematics Level 3	Science Specified	Degree awarded	Location	Indicative[2] ATAR	Indicative[2] IB score	Monash Guarantee
ENGINEERING AND										
Architectural Design	5	■		■	Chemistry or Physics	Bachelor of Civil Engineering (Honours) and Bachelor of Architectural Design	CL CA	85.75	32.75	76
Arts[4]	5	■		■	Chemistry or Physics	Bachelor of Aerospace Engineering (Honours) and Bachelor of Arts	CL	85.45	32.75	75
						Bachelor of Chemical Engineering (Honours) and Bachelor of Arts				
						Bachelor of Civil Engineering (Honours) and Bachelor of Arts				
						Bachelor of Electrical and Computer Systems Engineering (Honours) and Bachelor of Arts				
						Bachelor of Environmental Engineering (Honours) and Bachelor of Arts				
						Bachelor of Materials Engineering (Honours) and Bachelor of Arts				
						Bachelor of Mechanical Engineering (Honours) and Bachelor of Arts				
						Bachelor of Robotics and Mechatronics Engineering (Honours) and Bachelor of Arts				
						Bachelor of Software Engineering (Honours) and Bachelor of Arts				
Biomedical Science	5	■		■	Chemistry	Bachelor of Chemical Engineering (Honours) and Bachelor of Biomedical Science	CL	91.10	36.25	85
						Bachelor of Civil Engineering (Honours) and Bachelor of Biomedical Science				
						Bachelor of Electrical and Computer Systems Engineering (Honours) and Bachelor of Biomedical Science				
						Bachelor of Materials Engineering (Honours) and Bachelor of Biomedical Science				
						Bachelor of Mechanical Engineering (Honours) and Bachelor of Biomedical Science				
Commerce	5	■		■	Chemistry or Physics	Bachelor of Aerospace Engineering (Honours) and Bachelor of Commerce	CL	86.75	33.50	77
						Bachelor of Chemical Engineering (Honours) and Bachelor of Commerce				
						Bachelor of Civil Engineering (Honours) and Bachelor of Commerce				
						Bachelor of Electrical and Computer Systems Engineering (Honours) and Bachelor of Commerce				
						Bachelor of Environmental Engineering (Honours) and Bachelor of Commerce				
						Bachelor of Materials Engineering (Honours) and Bachelor of Commerce				
						Bachelor of Mechanical Engineering (Honours) and Bachelor of Commerce				
						Bachelor of Robotics and Mechatronics Engineering (Honours) and Bachelor of Commerce				
						Bachelor of Software Engineering (Honours) and Bachelor of Commerce				
Computer Science	5	■		■	Chemistry or Physics	Bachelor of Electrical and Computer Systems Engineering (Honours) and Bachelor of Computer Science	CL	85.40	32.50	75
						Bachelor of Robotics and Mechatronics Engineering (Honours) and Bachelor of Computer Science				
						Bachelor of Software Engineering (Honours) and Bachelor of Computer Science				
Design	5	■		■	Chemistry or Physics	Bachelor of Mechanical Engineering (Honours) and Bachelor of Industrial Design	CL CA	86.30	33	76
Information Technology	5	■		■	Chemistry or Physics	Bachelor of Electrical and Computer Systems Engineering (Honours) and Bachelor of Information Technology	CL	85.15	32.50	75
						Bachelor of Robotics and Mechatronics Engineering (Honours) and Bachelor of Information Technology				
						Bachelor of Software Engineering (Honours) and Bachelor of Information Technology				
Laws (Honours)	6.25[5]		■	■	Chemistry or Physics	Bachelor of Laws (Honours) and Bachelor of Aerospace Engineering (Honours)	CL	95.10	39.25	85
						Bachelor of Laws (Honours) and Bachelor of Chemical Engineering (Honours)				
						Bachelor of Laws (Honours) and Bachelor of Civil Engineering (Honours)				
						Bachelor of Laws (Honours) and Bachelor of Electrical and Computer Systems Engineering (Honours)				
						Bachelor of Laws (Honours) and Bachelor of Materials Engineering (Honours)				
						Bachelor of Laws (Honours) and Bachelor of Mechanical Engineering (Honours)				
Pharmaceutical Science	5	■		■	Chemistry	Bachelor of Chemical Engineering (Honours) and Bachelor of Pharmaceutical Science	CL PA	85.05	32.50	80
Science	5	■		■	Chemistry or Physics	Bachelor of Aerospace Engineering (Honours) and Bachelor of Science	CL	85.35	32.50	75
						Bachelor of Chemical Engineering (Honours) and Bachelor of Science				
						Bachelor of Civil Engineering (Honours) and Bachelor of Science				
						Bachelor of Electrical and Computer Systems Engineering (Honours) and Bachelor of Science				
						Bachelor of Environmental Engineering (Honours) and Bachelor of Science				
						Bachelor of Materials Engineering (Honours) and Bachelor of Science				
						Bachelor of Mechanical Engineering (Honours) and Bachelor of Science				
						Bachelor of Robotics and Mechatronics Engineering (Honours) and Bachelor of Science				
						Bachelor of Software Engineering (Honours) and Bachelor of Science				

M Master's Accelerated Pathway | CL –Clayton | CA – Caulfield | PA – Parkville

1 Duration is based on a standard full-time load of 48 credit points per annum.
2 Indicative – The provided score is the 2025 lowest ATAR to which an offer was made or an estimate (E), and is to be used as a guide only.
3 Master's Accelerated Pathway is only available to school leavers and is not offered with biomedical, or software engineering specialisations.
4 Depending on your Arts major, you may take the Arts component at Clayton or Caulfield.
5 This course is an accelerated course where you'll be required to undertake more than the standard annual load of 48 credit points in year two and/or year three in order to complete the course in six years.

INTERNATIONAL ENTRY REQUIREMENTS

COURSE	DEGREE AWARDED	Duration (years)[1]	Monash code	Location	Intake[2] (semester)	English language level (see below)	2025 fee p.a.[3] (A$)	Prerequisites (see page 28)			
								English		Mathematics	Science
								Level 1	Level 2	Level 3	Specified
Engineering	Bachelor of Aerospace Engineering (Honours)	4	E3001	CL	Feb July	A	$56,300	■		■	Chemistry or Physics
	Bachelor of Chemical Engineering (Honours)										
	Bachelor of Civil Engineering (Honours)										
	Bachelor of Electrical and Computer Systems Engineering (Honours)										
	Bachelor of Environmental Engineering (Honours)										
	Bachelor of Materials Engineering (Honours)										
	Bachelor of Mechanical Engineering (Honours)										
	Bachelor of Robotics and Mechatronics Engineering (Honours)										
	Bachelor of Software Engineering (Honours)										
	Bachelor of Biomedical Engineering (Honours)				Feb						
	Bachelor of Engineering (Honours) / Master's Accelerated Pathway[4]	4.5						■		■	Chemistry or Physics

	AUSTRALIA-INTERSTATE			BRITAIN (GLOBAL)	CANADA	CHINA	FRANCE	HONG KONG	INDIA		INDONESIA	MALAYSIA		REPUBLIC OF KOREA		USA		VIETNAM	MONASH PATHWAY PROGRAMS		
	2025 ATAR for international students	UNSW Foundation Studies	University Of Melbourne, Trinity College Foundation Studies	GCE A Level	Ontario Secondary School Diploma – Grade 12	Gao Kao	International Baccalaureate (IB) Diploma	Hong Kong Diploma of Secondary Education	All India Senior School of Certificate	Indian School Certificate Examination	SMA3	STPM	UEC	College Scholastic Ability Test (CSAT)	High School Diploma	Advanced Placement	SAT (Total score out of 1600)	High School Diploma	Foundation Year (commencing MUFY in 2026)	Monash Pathways	
																				Diploma Part 1[5]	Diploma Part 2[5]
Engineering	85	8	81%	10	84.80%	75%	30	19	80%	75%	81%	9.1	3.4	340	81%	7	1240	8.42	76.25%	80%	60%
	90.25	N/A	N/A	12	87.90%	80%	33	21	83%	77%	89%	9.7	2.6	350	86%	8	1290	8.56	88.75%	N/A	

ACADEMIC ENTRY REQUIREMENTS

All Monash undergraduate courses require you to have successfully completed a minimum of an Australian Year 12 qualification (or equivalent) and achieve the required academic entry score. The table above outlines the academic entry scores for the listed qualifications that apply to each undergraduate course applicable to international students only. Entry scores for the listed qualification in this guide are calculated as follows:

COUNTRY	QUALIFICATION	AWARDING BODY	HOW TO CALCULATE YOUR ENTRY SCORE
AUSTRALIA	**Australian Year 12 qualifications listed below (refer to the '2025 ATAR for international students' column)**		
	Australian Year 12 qualifications		Final ATAR as awarded by the relevant Australian state Year 12 authority.
	Monash University Foundation Year (MUFY)	Monash College Pty Ltd	The undergraduate entry requirements published in this brochure are for students who commence the MUFY program in 2026. Refer to **monashcollege.edu.au/courses/fy/dd**
	Monash Pathways Programs Part 1 and Part 2		The Monash Pathways Programs Part 1 & Part 2 entry requirements published in this guide are for students commencing their undergraduate destination degree in 2026. Refer to **monashcollege.edu.au/courses/dips/dd**
	Trinity College Foundation Studies	Trinity College, The University of Melbourne	Overall average of the best four subjects (excluding English for Academic Purposes).
	UNSW Foundation Studies	University of New South Wales	Final grade point average.
CANADA	Ontario Secondary School Diploma – Grade 12	Ontario Ministry of Education	Overall average of the best six academic Grade 12 subjects[6] (excluding workplace preparation courses and open courses). Students must achieve a minimum total of 30 credits and complete Community Involvement. 6 The grade 12 subjects must be taken from the most recent completed Ontario Student Transcript issued by the Ontario Ministry of Education.
CHINA	Gaokao	Department of Education in China	The total score achieved in the Gaokao examination will be converted into a 100% scale by dividing the total score achieved with the 2025 Gaokao maximum score 7 published by the Department of Education in China for each Chinese province. 7 For example: If you achieved a total score of 555 in your Gaokao examination and the 2025 Gaokao maximum score for Guangdong is 750, then the percentage score on a 100% scale converted by Monash University will be 74%.
GLOBAL	GCE A Levels	• Cambridge International • Pearson Edexcel • Council for the Curriculum, Examinations and Assessment • Oxford, Cambridge and RSA Examinations • Welsh Joint Education Committee • Assessment and Qualifications Alliance	Total score by achieving either: • A maximum of the best three A Level subjects completed within two years.[8] In the event where only one A Level subject has been completed (and no other A Level subjects have been completed), two AS Level subjects can be counted in place of one A Level subject however the AS Level subject must not be in the same subject area as the A Level subjects included in the calculation. *OR* • A minimum of the best two A Level subjects completed within two years[8] plus the best two AS Level subjects. The AS Level subjects however must not be in the same subject area as the A Level subjects included in the calculation. Additional guidelines / Score grades as follows: • A Level subjects: A*(a*) = 5, A(a) = 5, B(b) = 4, C(c) = 3, D(d) = 2, E(e) = 1, U = 0. • AS Level subjects: a(a) =2.5, b(b) =2, c(c) =1.5, d(d) =1, e(e) =0.5, U = 0. • N (Narrow failure) and U (Unclassified) results are not to be included in the calculation. • A maximum of one bonus point is offered when achieving A* in an A Level Subject. 8 Subject examinations taken within two years may include more than one sitting. For example, subject examinations in June 2023 until June 2025 are acceptable.
	International Baccalaureate (IB) Diploma Programme	International Baccalaureate Organization	Total points as awarded on the IB Diploma Programme results.
GLOBAL (continued)	**American Admission Tests[9]**		
	• Advanced Placement (AP)	The College Board	Total of the best two AP examinations as awarded on the Student Score Report[10] issued by the College Board. Minimum accepted score in each AP examination is 3. 9 If you have completed multiple American Admission Tests (i.e. SAT, AP or ACT), the test with the highest achieved scores will be used to determine if the academic entry requirement has been satisfied 10 All AP examinations submitted to Monash University will be considered when calculating the entry score.
	• Scholastic Aptitude Test (SAT) – total score out of 1600		Total score by adding the best section scores achieved in 'Evidence Based Reading and Writing' and 'Math' as awarded on the SAT Score Report[11] issued by the College Board. 9 If you have completed multiple American Admission Tests (i.e. SAT, AP or ACT), the test with the highest achieved scores will be used to determine if the academic entry requirement has been satisfied. 11 All SAT examinations submitted to Monash University will be considered when calculating the entry score, provided the SAT is marked out of 1600.
HONG KONG (continued)	Hong Kong Diploma of Secondary Education (HKDSE)	Hong Kong Examinations and Assessment Authority	• Total score of the best five subjects[12] (Category A and C only). • Scores graded as follows: Level 1=1, Level 2=2, Level 3=3, Level 4=4, Level 5=5 or A=5, B=4, C=3, D=2, E=1. • A maximum of 1 bonus point is offered when achieving Level 5** or Level 5* in a HKDSE Category A subject. 12 The highest grade will be used in the calculation in the event where individual subject examinations have been sat in multiple sittings.
INDIA	All India Senior School Certificate	Central Board of Secondary Education	Overall average of the best four academic subjects (excluding Monash University approved non-academic subjects) and results indicated as 'pass'.
	Indian School Certificate Examination	Council for the Indian School Certificate Examinations	Overall average of the best four academic subjects (excluding Monash University approved non-academic subjects) and results indicated as 'pass certificate awarded'.
INDONESIA	SMA3	Ministry of Education, Culture, Research and Technology	Overall average of all Semester 1 and Semester 2 Grade 12 results. **Note:** Monash University undergraduate entry scores vary for SMA3 qualifications that are marked on differing grading scales.
MALAYSIA	STPM	Malaysian Examinations Council (Majlis Peperiksaan Malaysia)	Total of the best three subjects, excluding Pengajian Am (General Studies).
	UEC	United Chinese School Committees Associate of Malaysia (Dong Zong)	• Overall average of the best five subjects. • Only grades A1, A2, B3, B4, B5 and B6 to be included in calculation. C7, C8 and F9 cannot be included in the calculation. • Five subjects must be included in the calculation with a score of B6 grade or higher in each subject. • Score grades as follows: A1=1, A2=2, B3=3, B4=4, B5=5, B6=6. • It should be noted that a score of A1 is the highest score.
REPUBLIC OF KOREA	College Scholastic Ability Test	Korea Institute for Curriculum and Evaluation	Total score of the best four subjects (including Language Arts and Mathematics)[13,14] 13 Korean History, English and vocational education stream subjects can not be included in the calculation. 14 If you have completed both the College Scholastic Ability Test and South Korean High School Diploma, the qualification with the highest achieved score will be used to determine if the academic entry requirement has been satisfied.
	High School Diploma, Republic of Korea	Ministry of Education, Science & Technology	Overall average of academic subjects including fails (excluding non-academic subjects such as Moral Education, Home Science, Physical and Health Education, Civil Ethics, Ethics and Thought, Home Living, and Chinese Characters)[15]. 15 If you have completed both the College Scholastic Ability Test and South Korean High School Diploma, the qualification with the highest achieved score will be used to determine if the academic entry requirement has been satisfied.
VIETNAM	High School Diploma (Bằng Tốt Nghiệp Trung Học Phổ Thông)	Ministry of Education and Training, Socialist Republic of Vietnam	Overall average of all Grade 12 subjects.

If your qualification cannot be located in the above table refer to **monash.edu/prior-study**

PREREQUISITE SUBJECTS AND ADDITIONAL REQUIREMENTS

In addition to meeting English entry requirements, some Monash University undergraduate courses may require you to satisfy other prerequisite subjects and additional selection and/or extra requirements.

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

MINIMUM AGE REQUIREMENTS

You must be at least 17 years of age to enrol in a Monash University undergraduate course. Some exemptions may apply. Refer to **monash.edu/admissions/age-requirements**

ENGLISH ENTRY REQUIREMENTS

When you apply for a Monash University undergraduate course you must satisfy English entry requirements.

Level	Academic IELTS					Internet Based TOEFL					Pearson Test of English (Academic)				
	Overall band score	Listening	Reading	Speaking	Writing	Total score	Listening	Reading	Speaking	Writing	Overall score	Listening	Reading	Speaking	Writing
A	6.5	6.0	6.0	6.0	6.0	79	12	13	18	21	58	50	50	50	50

1 Duration is based on a standard full-time load of 48 credit points per annum.
2 Please refer to **monash.edu/study** for further details on semester intake availability for individual specialisations.
3 Fees are quoted in Australian dollars; each is the annual average fee per 48 credit points of study in this course for 2025. Fees are adjusted annually. **monash.edu/students/admin/fees/course/international-full-fee**
4 Master's Accelerated Pathway is only available to school leavers and is not offered with biomedical, or software engineering specialisations.
5 The Monash Pathways Part 1 and 2 entry requirements are for students commencing their undergraduate degree in 2026.

COURSE STRUCTURE

Here's an indicative course map showing what your studies could look like if you selected Mechanical Engineering.

View all engineering specialisation course maps
monash.edu/engineering/course-maps

YEAR 1[1]

Semester 1	Elective	Engineering mathematics	Engineering numerical analysis	Level 1 Engineering Breadth study elective	
Semester 2	Engineering design	Engineering smart systems	Engineering methods	Elective	

YEAR 2

Semester 1	Mechanics of materials	Dynamics 1	Design methods	Level 1, 2 or 3 elective or engineering technical elective	
Semester 2	Advanced engineering mathematics	Mechanics of fluids	Thermodynamics	Level 1, 2 or 3 elective or engineering technical elective	

YEAR 3

Semester 1	Solid mechanics	Fluid mechanics 2	Engineering computational mechanics	Level 3 or 4 technical or engineering minor elective unit	
Semester 2	Dynamics 2	Machine design	Systems and control	Level 3 or 4 technical or engineering minor elective unit	Industrial Training[3]

YEAR 4

Semester 1	Final year project A	Professional practice	Thermodynamics and heat transfer	Level 3, 4 or 5 technical or engineering minor elective unit	Continuous Professional Development[2]
Semester 2	Final year project B	Design project	Computer-aided design	Level 3, 4 or 5 technical or engineering minor elective unit	

Engineering fundamentals · Level 1 Engineering Breadth study elective · Discipline core units · Engineering Design
Engineers Australia professional accreditation requirement · Free elective · Discipline technical elective or minor unit

1 If no foundation units are required.
2 Clayton campus students.
3 Malaysia campus students.

HOW TO APPLY

DOMESTIC STUDENTS

APPLY THROUGH VTAC

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

PREREQUISITES

Please check that you meet the prerequisites for your chosen course before submitting your application. Prerequisite details for each course can be found in the admissions table beginning on page 28.

FEES

To estimate your course fees, visit: **monash.edu/fees**

COMMONWEALTH SUPPORTED PLACES (CSP)

You may be eligible for CSP if you are an Australian citizen, Australian permanent residents and permanent humanitarian visa holders or a New Zealand citizen living in Australia. A CSP is a subsidised enrolment where the government pays for part of your course and you only have to pay the Student Contribution Amount (SCA). Eligible CSP students may use a HECS-HELP loan to pay for all or part of the SCA.

monash.edu/enrolments/government-loans/commonwealth-supported-place

INTERNATIONAL STUDENTS

All international students must apply for a Monash University course online or through an accredited Monash agent.
Visit: **monash.edu/study/how-to-apply** for details.

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

FEES

A$56,300 annual average fee per 48 credit points of study in this course for 2025. Further information on fees, visit: **monash.edu/fees**

MONASH COLLEGE

The preferred pathway for students who aspire to study engineering at Monash University but who narrowly miss the academic requirements for direct entry.

For more information on Monash College academic pathways, visit:
monashcollege.edu.au/courses

SCHOLARSHIPS

Monash celebrates academic excellence and supports students who are disadvantaged. We offer a range of scholarships and awards to help ensure money and circumstances aren't barriers to you accessing a world leading engineering education.

For details and a full list of scholarships, bursaries and awards available, visit: **monash.edu/scholarships**

LIVING IN MELBOURNE

Melbourne 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. 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.

COST OF LIVING

Before you begin your studies at Monash, it's a good idea to plan and prepare a budget. Your tuition and study fees do not include personal costs such as accommodation, food and miscellaneous items. For information on budgeting for your lifestyle, visit:
monash.edu/cost-of-living

STUDENT ACCOMMODATION

Living on-campus is a great way to experience university life and make connections while you study. On-campus accommodation is available at the Clayton campus and our Residential Services support team is available to help you through the application and transition process. If you prefer a little more independence, there is plenty of off-campus accommodation available.
For more information on accommodation, visit:
monash.edu/accommodation

STUDENT LIFE AT MONASH

CLAYTON CAMPUS

Twenty kilometres from the centre of Melbourne, Monash's Clayton campus combines a vibrant research, technology, and manufacturing precinct with first-rate sporting facilities, shops, a student centre, libraries, a post office, banks, medical services, and religious centres.

monash.edu/study/student-life

SUPPORT SERVICES

University study takes commitment and drive, especially if you're moving to a new city or country. We can help you settle into university life by providing an extensive range of support programs and services including:

- Academic support
- Safety and security
- Careers counselling
- Disability services
- International student support
- Spirituality
- Monash Connect
- Skills Essentials seminars
- Health and counselling

monash.edu/students/support

ORIENTATION

Our orientation service incorporates a series of programs to help students adjust to a new country and the Monash University environment.

monash.edu/orientation

1 Economist Intelligence Unit.


Southbank


Australian native wildlife (Penguins)


Chadstone Shopping Centre


Great Ocean Road


The Shrine of Remembrance

MONASH University

DISCOVER MORE

Join us at one of our events to experience Monash Engineering first-hand.

- Monash Information Evenings
- Discover Monash Engineering
- Engineering Campus tours
- Monash Engineering Girls (MEG) program
- Open Day

monash.edu/engineering/events

MONASH ENGINEERING

monash.edu/engineering

FACEBOOK
MonashEngineers

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@monashengineering

LINKEDIN
linkedin.com/school/monash-engineering

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YOUTUBE
youtube.com/monashengineering

MONASH UNIVERSITY
monash.edu

FIND A COURSE
monash.edu/study

FUTURE STUDENT ENQUIRIES
Australian citizens, permanent residents and New Zealand citizens
monash.edu/study/contact-us

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

Monash is proud to have the following industry partners who support our students through scholarships, prizes, the Engineering Career Ready Series and Co-operative Education Internship Program:

4DMedical, AECOM, AMOG, aurecon, BOSCH Invented for life, Bulla, CanadianSolar, CitiPower, Powercor Australia, Coleman Rail, Deloitte., Downer Relationships creating success, drac, Australian Government Defence, enstruct, EDIOM, FERA Nature is our power, geckon, gm, GHD, Hanson HeidelbergCement Group, hrl:, Hume City Council, ineight engineering, lendlease, Level Crossing Removal Project, Lewis Australia, Metro, Mitsubishi Heavy Industries, prime air, RWC, Sentient, SMEDTECH Technical & Strategic, Tekt Industries, Telstra, Transurban, ultraspin, united energy, ventia, Vestas, wood., woodside, Yarra Valley Water, ZECO Energy

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