



Curtin University

Engineering

2023

UNDERGRADUATE
COURSE GUIDE



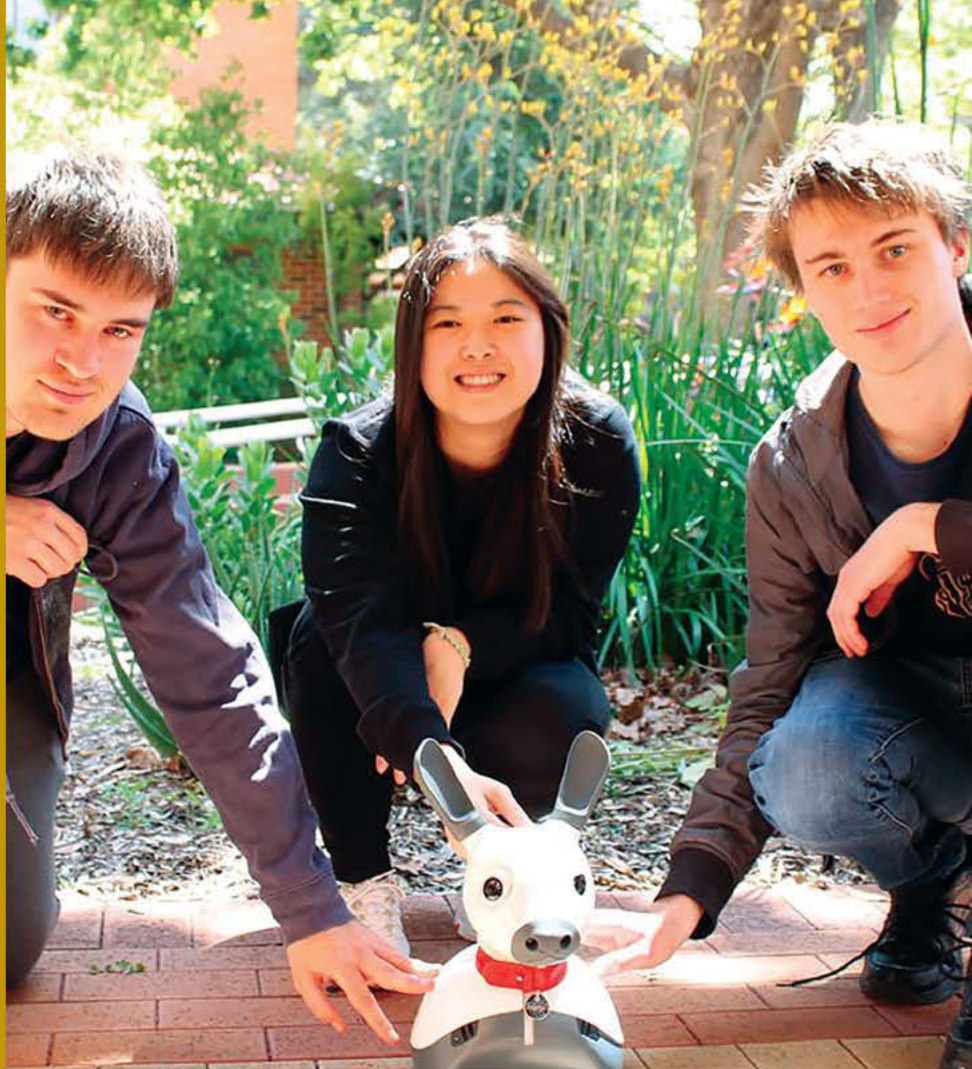
Make tomorrow better.

Change is here ▶

Curtin Engineering students and researchers have designed and implemented software for a robotic pet puppy named MiRO.

MiRo is an autonomous 'petoid' that is now being programmed as a companion robot for Perth aged-care residents.

Our units in robotics and autonomous systems offer exciting projects that encompass robot manipulator and mechanism design, mapping and navigation algorithms, signal processing, pattern recognition and control systems. Importantly, social robots like MiRo also allow us to look beyond technology and focus on how human and technology interact, to drive responsible development of future technologies.



We've created a **better electrocatalyst to produce green hydrogen from water** – which could lead to a new method of clean energy production to help in the transition from fossil fuels.



A team of Curtin students and researchers helped create a **'DIY' oxygen conversion unit**, to address the oxygen shortage in rural areas in India during the COVID-19 pandemic.



In the area of health and safety, our mining engineering researchers are **improving mine ventilation and dust control**, and have developed an effective dust suppressor for aluminium production.



We're investigating ways to **make our cities feel cooler** with enhanced material selection, shading and pavement design.



We're developing **new technologies in telecommunications** and IoT connectivity, satellite systems and Earth observation.

First Nations acknowledgement

Curtin University acknowledges the traditional owners of the land on which Curtin Perth is located, the Whadjuk people of the Nyungar Nation, and on Curtin Kalgoorlie, the Wongutha people of the North-Eastern Goldfields; and the First Nations peoples on all Curtin locations.

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CURTIN PERTH ACADEMIC CALENDAR

	SEMESTER 2, 2022	SEMESTER 1, 2023	SEMESTER 2, 2023
Orientation Week	18 – 22 July	20 – 24 February	17 – 21 July
Semester starts	25 July	27 February	24 July
Semester ends	11 November	16 June	10 November

Applications close two weeks before orientation*.
 Visit curtin.edu/calendar for all study periods for 2023.
 Visit curtin.edu/deadlines for application deadlines.

* Application closing dates and orientation dates are subject to change and may vary depending on the course. Dates are for Curtin Perth only. Contact other campuses directly for details.

Start your future career

Curtin is a vibrant, future-focused university where ideas and cultures combine to create a place of enthusiasm, endeavour and achievement.

We design our courses collaboratively with industry experts to ensure you graduate with the knowledge and skills that employers look for.



TOP 1% IN THE WORLD

Curtin is ranked in the top 1% of universities worldwide in the highly regarded Academic Ranking of World Universities 2021.



#2 IN THE WORLD FOR MINERAL AND MINING ENGINEERING

Curtin continues to be the second-ranked university and first in Australia for Mineral and Mining Engineering, in the latest QS World University Rankings by Subject 2021.



WESTERN AUSTRALIA'S #1

Curtin University has outranked all other public universities in Western Australia for undergraduate outcomes of full-time employment and starting salary, as well as staff qualifications, in the Good Universities Guide 2022.

Curtin engineering gives you many options

When you enrol in our Bachelor of Engineering (Honours) course, you'll learn about a range of engineering areas before selecting a major to focus on.

This Engineering Foundation Year offers a distinctive peer-learning experience and develops your identity as an engineer that sets you on the path to your future career. It helps you to be certain you're choosing an area that will lead to work you'll enjoy.

Your choice of majors are:

- Chemical Engineering
- Civil and Construction Engineering
- Electrical and Electronic Engineering
- Industrial and Systems Engineering
- Mechanical Engineering
- Mechatronic Engineering
- Metallurgical Engineering
- Mining Engineering
- Petroleum Engineering.

Your degree is accredited by Engineers Australia

Curtin's Engineering courses are accredited by Engineers Australia (EA). This means that when you graduate, you'll have fulfilled the EA's stage one competencies and are eligible to join the EA member community. The accreditation also shows that our courses meet international standards (such as the Washington Accord) so that you can take your career to the global level.

You benefit from immersive industry experiences

We incorporate applied industry problems into your classroom learning, so that you're continually building professional knowledge throughout your studies. You'll also complete 480 hours of professional engineering practice – which not only helps to consolidate the knowledge you've learned, but also gives you the confidence that comes with understanding industry practices.





Experience Perth

Located on the beautiful west coast of Australia, Perth is multicultural, prosperous and safe – an ideal destination for students and tourists alike.

01 Shopping and culture

Perth is home to Elizabeth Quay, Forrest Place, Murray Street Mall and numerous galleries. The historic port city of Fremantle is only 15 kilometres from Perth, where the Swan River meets the Indian Ocean.

02 Getting around

The metropolitan area is serviced with an extensive road network and public transport.

03 Western Australia's best food

Try some of the city's best food at farmers markets, and find gourmet food producers in the Swan Valley.

04 A natural beauty

There are many magnificent parks and gardens in and around Perth. Kings Park, which is larger than New York's Central Park, showcases more than 3,000 species of WA's unique flora. Caversham Wildlife Park has many Australian animals, including kangaroos you can handfeed.

05 Affordable living

Perth has lower living costs than Sydney, Melbourne and Canberra.*

06 Close to campus

To the north, the suburb of Victoria Park is buzzing with a vibrant array of restaurants, pubs, beautiful parks and recreation areas.

To the south, the Canning River is home to dolphins, pelicans, swans and many other bird species. It's ideal for walking, picnicking and kayaking.

07 Be by the beach

Perth's coast features breath-taking beaches and scenery. Don't forget to visit Rottnest Island – a famous holiday destination near Perth that is home to the friendly quokka.

Perth weather

Perth has a Mediterranean climate.



	High / Low (°C)	
Summer (December to February)	30	17.5
Autumn (March to May)	26	13.7
Winter (June to August)	19	8
Spring (September to November)	23	11.7

Source: australia.com

Perth timezone



05



* Expatistan (sourced 1 March 2022)



Photo: StudyPerth

Learn in Western Australia

From regional Western Australia to the heart of the city, our locations are thriving places of community and innovation. You'll be connected with a diverse student community and benefit from a global perspective.

PERTH

Our largest campus is just six kilometres from Perth city. It's a place of inspiration, technology-rich learning spaces, high impact research and exciting activities. All courses are available at Curtin Perth.

PERTH CITY

Curtin Law School in central Perth strengthens our links with the legal profession and the commercial heart of Western Australia.

MIDLAND

Our distinctive Midland campus provides health students with immersive learning facilities and connects them with nearby health services to apply their studies.

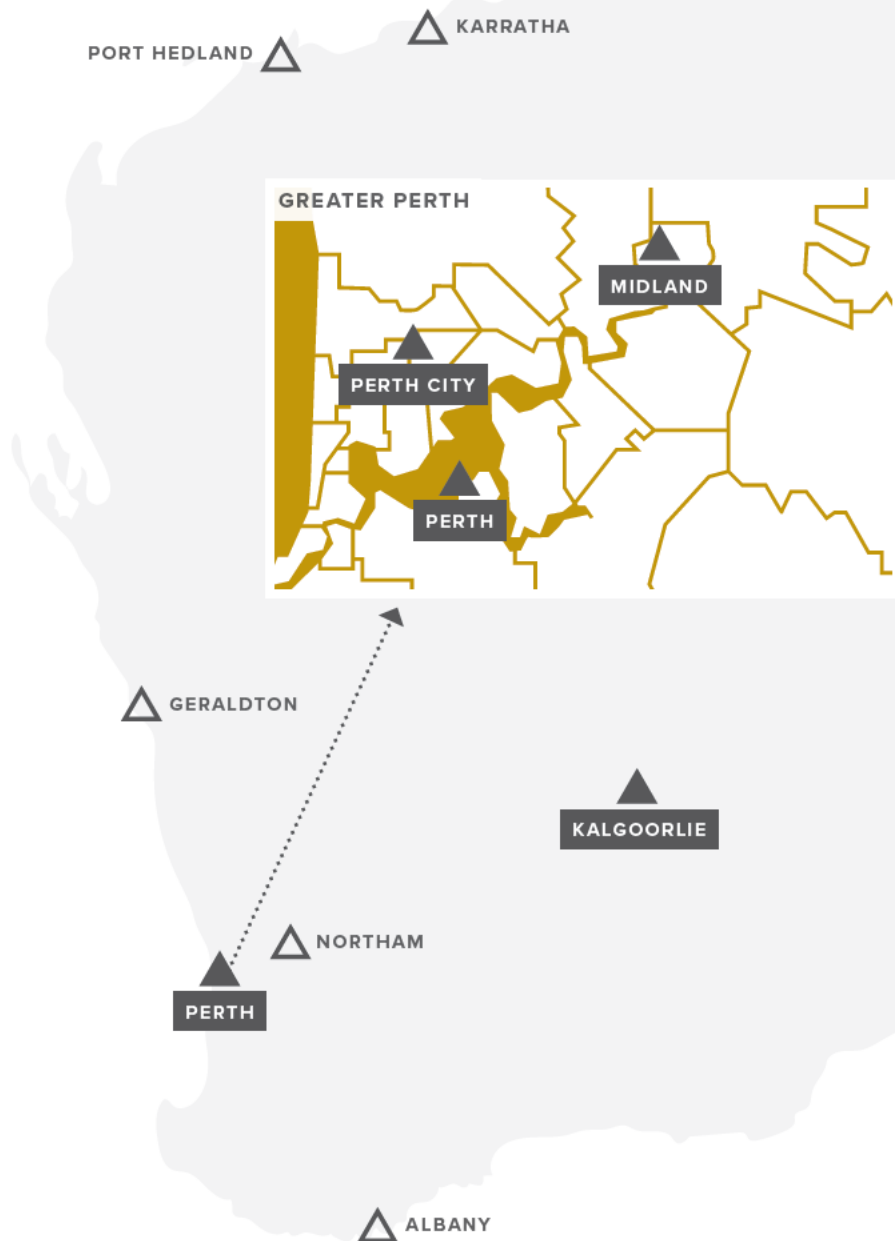
KALGOORLIE

Our Kalgoorlie campus is located in Western Australia's historic gold mining region. You can study our renowned engineering degrees here, as well as online courses in business, education and health. Curtin Kalgoorlie also houses our Rural Health Campus, which offers regional training opportunities for medical and health science students.

REGIONAL WESTERN AUSTRALIA

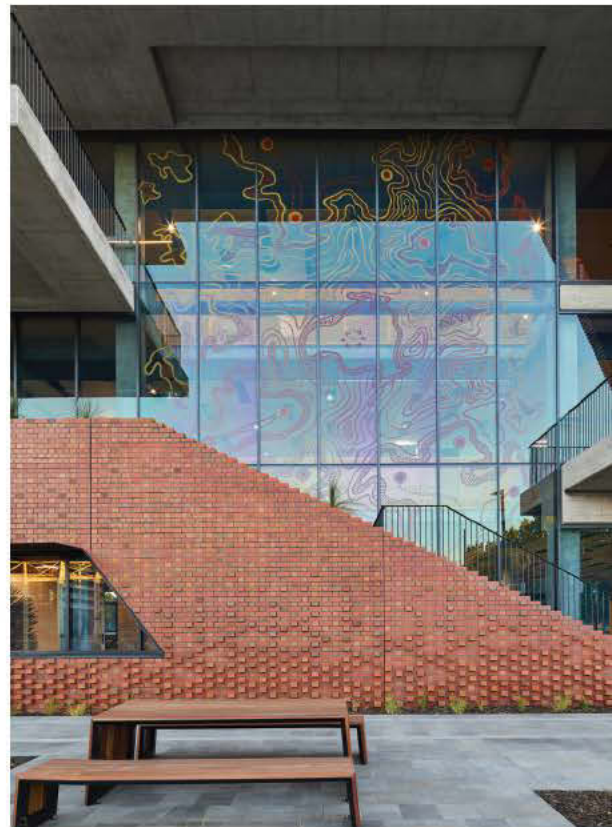
Want to study closer to home? We offer a variety of courses in partnership with higher education institutions in Albany, Northam, Geraldton, Karratha and Port Hedland.

Visit study.curtin.edu.au/curtin-life/regional-study.



Nowanup Bush Campus

An innovative learning space set on 750 hectares of Nyungar bushland, hosting On-Country education programs delivered by Aboriginal Elders and educators. The bush setting offers a unique opportunity to learn the importance of Aboriginal culture.



Explore your global opportunities



As a Curtin student, you'll have the opportunity to study at another Curtin campus or at one of our many partner universities in Africa, Asia, Europe, North America or South America.

You'll get to experience other cultures and build an international network that will prove invaluable both personally and professionally.

01 SINGAPORE

Curtin Singapore is located in one of Asia's major economic hubs, connecting it to the world of international business, and making it the ideal campus to study your commerce degree. You can also study a communications degree and health degrees, including nursing.

Visit curtin.edu.sg.

02 DUBAI

Our Dubai campus gives you the opportunity to study in the heart of Middle Eastern banking, tourism and trade. Its rich culture and economic growth can complement your study in arts, commerce, engineering, or IT and computing.

Visit curtindubai.ac.ae.

03 MAURITIUS

Curtin Mauritius offers courses in design, communications, commerce and science. It delivers a world-class education in a tropical island nation that blends cultures from Europe, Africa and Asia.

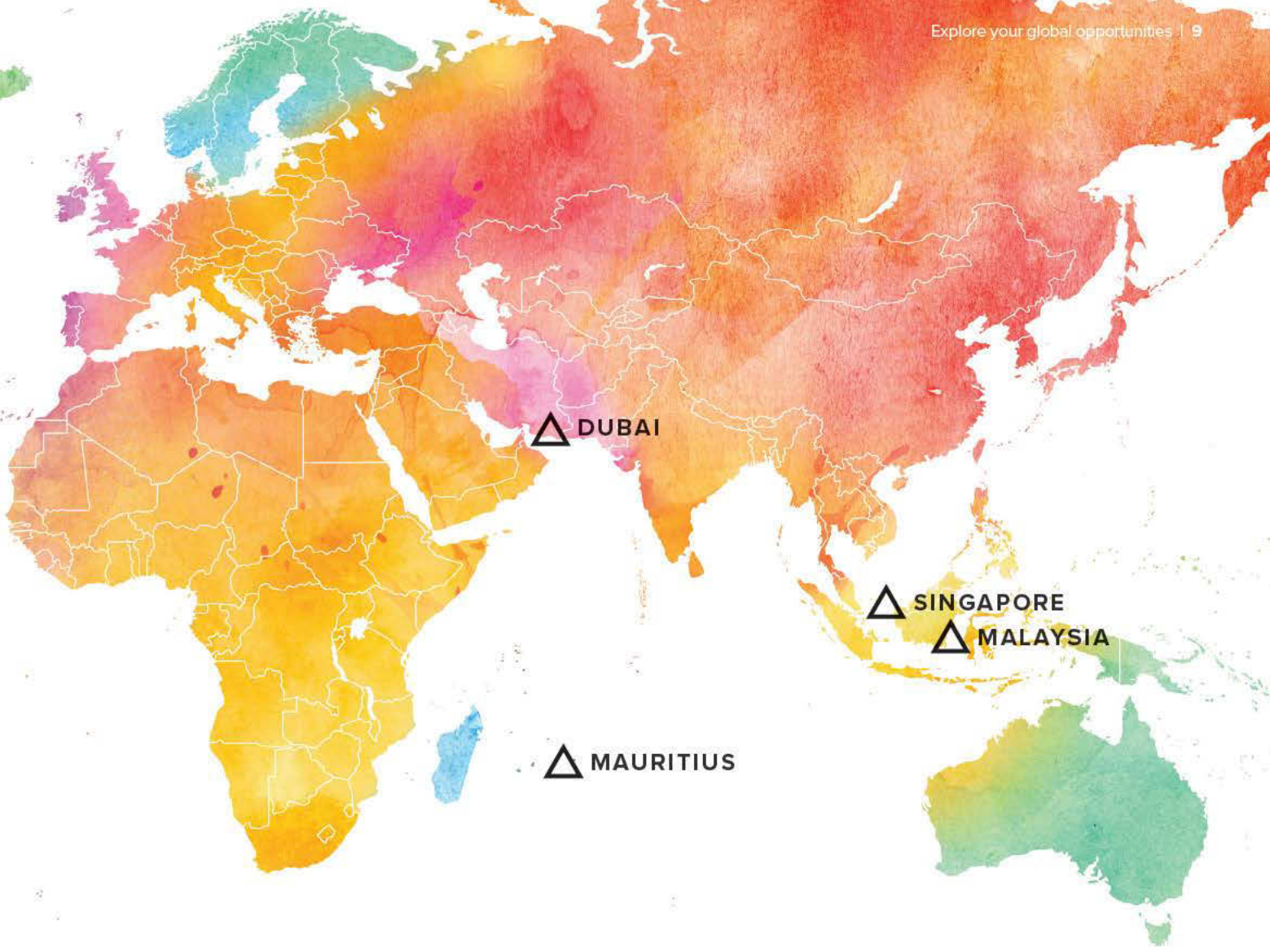
Visit curtinmauritius.ac.mu.

04 MALAYSIA

Located on the island of Borneo, our Malaysian campus is modern and vibrant, featuring lush greenery and lakes. You can study a range of Curtin degrees here, including commerce, engineering, science and arts.

Visit curtin.edu.my.





Benefit from immersive learning

At Curtin, you'll hone your skills in learning environments that simulate real workplaces, so you can step into your chosen career with confidence.

01



02



03





06

01 Curtin Engineering Pavilion

The advanced design and technologies of the Curtin Engineering Pavilion Complex provide an applied learning environment for our engineering students.

02 First-year engineering studio

Our first-year students have a purpose-designed engineering studio with electrical, mechanical and computing laboratories, which enable you to become familiar with the layout of a professional work environment.

03 GEEP: the Green Electric Energy Park

Our dedicated Green Electric Energy Park, or GEEP, is an innovative laboratory for projects in renewable-energy power conversion systems. Here you can conduct advanced experiments and research on solar, wind and hydro energy sources; distributed generation using hydrogen fuel cells; battery energy storage-based micro-grids; hybrid power systems; power converters; and energy storages.

04 ETAP® Laboratory

At the ETAP Power Systems Simulation Laboratory, Curtin engineering students can discover ETAP's simulation power in designing and solving a range of power system steady-state and dynamic problems.

05 Binar Space Program

Through Curtin's Binar Space Program, you can gain hands-on experience engineering the communications, computer, steering and power systems inside a cubesat.

06 Curtin Motorsport Team

Each year, up to 50 engineering students help run the Curtin Motorsport Team, designing and manufacturing a completely new Formula Student race car for competition. Each student has a technical role in aerodynamics, electrical systems, mechanical systems or vehicle dynamics, as well as a business role.



05



04



Live and learn on campus





There is a sense of community both in and out of the classroom, with collaborative learning spaces and outdoor leisure areas to enjoy between classes.

Buy your essentials on campus

Shops on campus stock a variety of textbooks, stationery, magazines, novels, cards, art and computer equipment. There's a dry-cleaning outlet and self-serve printing and binding.

Events

Market days, multicultural week, live music and the Guild Ball are just a few of the amazing events held on campus.

Technological convenience

Wi-fi can be accessed across the campus and there's a number of places on campus where you can recharge your devices. We also have several computer labs equipped with printing stations, scanners, graphic workstations, smart boards and current software.

Study hard, play hard

Curtin Stadium is the home of sport and fitness on campus, offering you access to:

- a 900sqm fully equipped gymnasium
- a group fitness studio
- a specialised studio
- a health and rehabilitation clinic
- vast outdoor recreation spaces
- indoor and outdoor multi-use courts.

With a strong focus on enhancing wellbeing and healthy lifestyles, you're encouraged to participate at any level, from spectator and supporter to representative and competitor.

The facilities, services and programs will inspire and engage you, and contribute to your vibrant student experience. Take the opportunity to try new things, move each day and find out there is more to university life than study.

Visit curtin.edu.au/sport.

Food, glorious food

Whether you need coffee or kombucha, a quick sandwich or a hearty hot meal, you can get it on campus. We have great cafés and a variety of food trucks!

Supporting your health and wellbeing

Studying can be challenging at times, so we offer a range of health and wellbeing services based conveniently on campus. These include a physiotherapy clinic, and a medical centre where you can make an appointment to see a doctor, occupational therapist, psychologist, counsellor or social worker.

If you have a disability or you're caring for someone with a disability, you can access support services and assistance to help you succeed at Curtin. Our Student Wellbeing Advisory service also offers free and confidential support for any issue that may be affecting you, no matter how big or small.

Study support

We acknowledge that uni is different to school study, so we offer support to help you transition to university, such as for peer-to-peer tutoring and library help.

Settling in

You'll start your course with Orientation Week, where you will receive lots of support from Curtin Connect and student advisors.

Get the course advice you need

Head to Building 102 Curtin Connect for advice on courses, applications, enrolment, getting your ID card and organising your timetable.

Security and personal safety

At Curtin Perth, we provide a 24/7 security patrol, after-hour security escort, campus courtesy bus, emergency telephone stations, the SafeZone safety app, secure-card building access and well-lit pathways.



Accommodation

If you're looking for independence when you finish school, consider living on campus. You'll enjoy an immersive university experience where you can live, study and socialise.

Curtin has six on-campus housing options that are surrounded by recreational spaces. Our newest accommodation buildings, Twin Dolphin Hall and St Catherine's College, form part of our industry-connected Exchange precinct. We also have student accommodation options at Curtin Kalgoorlie.

All our Perth accommodation options are a five-to-ten-minute walk from your classes and close to Curtin Stadium, Curtin Central Bus Interchange, and cafés and restaurants – offering all the convenience of an urban lifestyle and plenty of opportunities to make new friends.

And when you're ready for a study break, you're a short drive from the Perth CBD, Optus Stadium, the South Perth foreshore, local café strips and major shopping precincts.

St Catherine's College

St Catherine's College offers a personalised and supportive residential experience that helps you achieve success in your university studies and beyond.

Rent includes meals and academic support that is tailored to suit the different stages of your university journey, such as free tutoring and formal academic dinners. It also incorporates the wider college community for collaborating, networking and events and features an impressive dining hall, dedicated study spaces, common areas and music rooms. There are various room types that give you options to have a little extra space, and décor is modern and neutral so you can make it your own.

UniLodge

UniLodge offers a range of independent living options including self-contained studios with ensuites and furnished private rooms in shared apartments. Living on campus with UniLodge you can enjoy weekly events and activities, 24/7 security, plus you don't have to pay a bond or security deposit.

Twin Dolphin Hall

Twin Dolphin Hall offers self-contained studio options as well as private rooms in two-, four- or six-bedroom apartments, plus accessible units. The new ten-storey building has excellent facilities including commercial laundries, games room, music room, art room and common rooms on each level for you to relax or study with friends. On the top level you will also find a theatre room for movie marathons or catching up on your favourite shows.

Benefits of living on campus

- You'll live in a supportive environment where you can meet new people, make friends and feel part of the community.
- All accommodation is furnished and you'll benefit from free Curtin wi-fi, an off-peak gym membership at Curtin Stadium, plus all your utilities are included in your weekly rent.
- You can make the most of the university services, including the library, peer study groups, sport facilities and medical services.
- There's minimal travel time to classes.
- You can have greater involvement in the campus community in clubs, volunteering and events.
- You'll gain independent living skills in a safe environment.

Erica Underwood House

This homely environment sits across the road from Curtin, close to shops and restaurants and accommodates 324 students. There are 54 furnished, six-bedroom apartments, each with two bathrooms, bedrooms with desks and chairs, a lounge and dining area and an open-plan kitchen.

Vickery House

Sitting amongst beautiful gardens on the southeast boundary of Curtin Perth, Vickery House offers 42 furnished six- and eight-bedroom units. The common space also features a music room with a drum kit, keyboard and microphone!

Guild House

These furnished apartments are located across the road from Curtin Stadium, on the corner of Kent Street and Jackson Road – perfect for anyone wants to keep fit and enjoy the outdoors. There are 31 private rooms available across four- and six-bedroom apartments.

Kurrajong Village

This housing is located on the west side of Curtin Perth, opposite Waterford Plaza shopping centre. There are four properties available within the tranquil gardens: Don Watts House, George James House, Japan House and Rotary International House. Options range from private rooms in eight-bedroom apartments to studio apartments.

Studying in Kalgoorlie?

If you are studying at Curtin Kalgoorlie as part of your degree, you can live at the Agricola student accommodation. Agricola is located across from the campus and is just a short walk to the town centre.





▶ ▶ ▶ Visit [curtin.edu/accommodation](https://www.curtin.edu/accommodation).

Find the course for your dream job



Here are some of the careers a Curtin degree may lead to, but there are many more.

Technological advancement means the jobs of tomorrow might differ to the jobs of today, but don't worry. Curtin degrees are designed to prepare you for a range of industries and careers – even those that don't exist yet.

The most important thing is to study subjects you're interested in and capable of doing. Let your interests and passions guide you.

I WANT A JOB WHERE I'M...

Designing and developing new processes and innovative products and materials for the manufacturing, construction, energy, biomedicine and electronics industries.

YOU MIGHT LIKE

Chemical Engineering (page 24)

Designing, planning, organising and overseeing the construction of dams, bridges, pipelines, gas and water supply schemes, roads and airports.

YOU MIGHT LIKE

Civil and Construction Engineering (page 25)

Developing and testing digital and electronic systems in industries including health, mining and robotics; working on telecommunication and satellite systems, or designing microelectronics in computers and mobile devices.

YOU MIGHT LIKE

Electrical and Electronic Engineering (page 26)

Studying engineering and geological data to find reservoirs of natural gas and crude oil, and determining the best and most cost-effective way to extract oil and petroleum.

YOU MIGHT LIKE

Petroleum Engineering (page 32)



Designing and optimising whole systems and networks, ensuring systems work safely and efficiently, making predictions about a systems behaviour.

YOU MIGHT LIKE

Industrial and Systems Engineering
(page 27)

Designing, developing, building and testing mechanical devices, tools, engines and machines in a wide range of areas, like aircraft engines, transmissions, wind turbines, fuel cells and robotics.

YOU MIGHT LIKE

Mechanical Engineering (page 28)

Transforming metals into useful products like surgical implants, computer chips and cars; planning and supervising the extraction of minerals from mines.

YOU MIGHT LIKE

Metallurgical Engineering (page 30)
Mining Engineering (page 31)

Working across electrical and mechanical engineering disciplines to create smart, innovative machines like CNC machine tools, industrial robotics and medical scanners.

YOU MIGHT LIKE

Mechatronic Engineering (page 29)

Single degree or double degree?

Our degrees provide opportunities to choose from a range of subjects, giving you the freedom to study towards your dream career and pursue personal study interests at the same time.

Single degrees

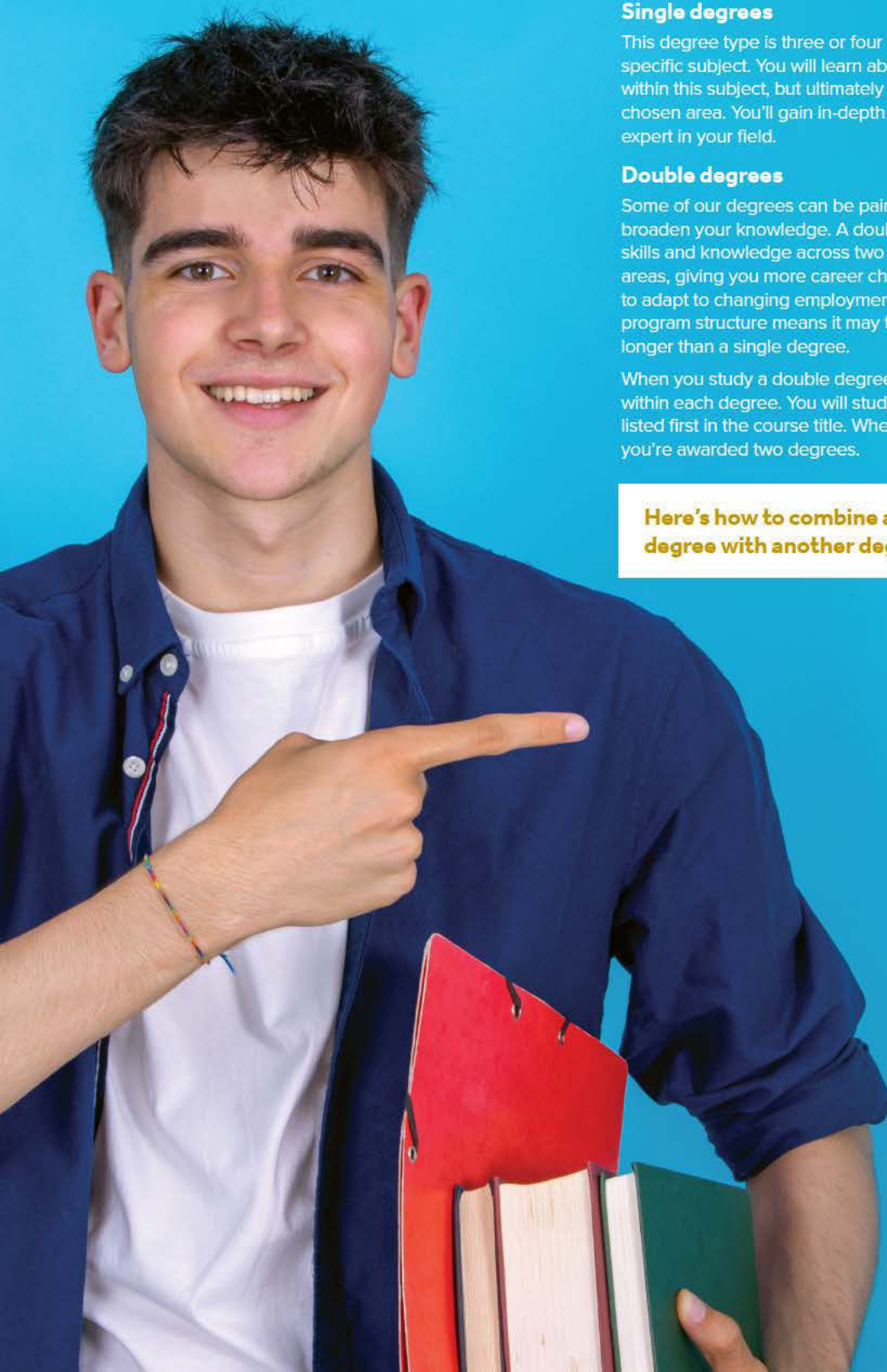
This degree type is three or four years of full-time study in one specific subject. You will learn about a wide range of topics within this subject, but ultimately your studies focus on your chosen area. You'll gain in-depth knowledge and graduate an expert in your field.

Double degrees

Some of our degrees can be paired with another degree to broaden your knowledge. A double degree increases your skills and knowledge across two complementary learning areas, giving you more career choices and the flexibility to adapt to changing employment trends. The condensed program structure means it may take only 12 to 18 months longer than a single degree.

When you study a double degree, you specialise in a major within each degree. You will study more units from the degree listed first in the course title. When you complete your course, you're awarded two degrees.

Here's how to combine an Engineering degree with another degree.



Engineering and Commerce

DEGREE

Bachelor of Engineering (Hons) and Bachelor of Commerce

GUARANTEED ATAR

80

PREREQUISITES

Mathematics Methods ATAR and at least one of Physics ATAR, Chemistry ATAR or Engineering Studies ATAR, or equivalent

DESIRABLE

Mathematics Specialist ATAR, or equivalent

STAT

May be used to demonstrate English proficiency only

PORTFOLIO ENTRY

Not accepted

INTAKE

Semester 1, semester 2

STUDY MODE

Full-time, part-time

DURATION

5.5 years full-time

LOCATION

Perth

CRICOS CODE

066675M

This double degree will expand your career opportunities as an engineer and in the corporate environment.

You will gain the understanding of economics and finance needed to lead large engineering projects in your engineering speciality.

Engineering majors available

- Chemical Engineering
- Civil and Construction Engineering
- Mechanical Engineering
- Metallurgical Engineering
- Mining Engineering.

Commerce majors available

- Accounting
- Economics
- Finance
- Management.

Engineering and Science

DEGREE

Bachelor of Engineering (Hons) and Bachelor of Science

GUARANTEED ATAR

80

PREREQUISITES

Mathematics Methods ATAR and at least one of Physics ATAR, Chemistry ATAR, Engineering Studies ATAR, or equivalent

DESIRABLE

Mathematics Specialist ATAR, or equivalent

STAT

May be used to demonstrate English proficiency only

PORTFOLIO ENTRY

Not accepted

INTAKE

Semester 1, semester 2

STUDY MODE

Full-time, part-time

DURATION

5 years full-time

LOCATION

Perth

CRICOS CODE

095950A

This double degree will give you a competitive edge to your career through an advanced understanding of the science that underpins practical engineering.

Major combinations available

- Mechatronic Engineering and Computer Science
- Electrical and Electronic Engineering and Computer Science
- Electrical and Electronic Engineering and Data Science
- Electrical and Electronic Engineering and Physics.

Chemical Engineering and Chemistry

DEGREE

Bachelor of Engineering (Hons) (Chemical Engineering) and Bachelor of Science (Chemistry)

GUARANTEED ATAR

80

PREREQUISITES

Mathematics Methods ATAR and Chemistry ATAR, and at least one of Physics ATAR or Engineering Studies ATAR, or equivalent

DESIRABLE

Mathematics Specialist ATAR, or equivalent

STAT

May be used to demonstrate English proficiency only

PORTFOLIO ENTRY

Not accepted

INTAKE

Semester 1, semester 2

STUDY MODE

Full-time, part-time

DURATION

5 years full-time

LOCATION

Perth

CRICOS CODE

050336F

An in-depth knowledge of chemistry unlocks more opportunities for chemical engineers.

In this double degree you will specialise in biosystems engineering, chemical engineering or oil and gas.

You'll explore the development, design and operation of processes for the extraction, conversion and recovery of materials. You'll also develop the skills for a career in a modern analytical or industrial laboratory.

Chemical Engineering and Extractive Metallurgy

DEGREE

Bachelor of Engineering (Hons) (Chemical Engineering) and Bachelor of Science (Extractive Metallurgy)

GUARANTEED ATAR

80

PREREQUISITES

Mathematics Methods ATAR and at least one of Physics ATAR, Chemistry ATAR or Engineering Studies ATAR, or equivalent

DESIRABLE

Mathematics Specialist ATAR, or equivalent

STAT

May be used to demonstrate English proficiency only

PORTFOLIO ENTRY

Not accepted

INTAKE

Semester 1

STUDY MODE

Full-time, part-time

DURATION

5 years full-time

LOCATION

Perth then Kalgoorlie

CRICOS CODE

043753C

Grounded in geology, chemistry and environmental science, this double degree will give you comprehensive skills in improving industrial procedures in the mining sector.

You'll also learn environmental considerations, and graduate ready to take a leading role in developing processes that extract, convert and recover materials and metals.

Civil and Construction Engineering and Mining

DEGREE

Bachelor of Engineering (Hons) (Civil and Construction Engineering) and Bachelor of Science (Mining)

GUARANTEED ATAR

80

PREREQUISITES

Mathematics Methods ATAR and at least one of Physics ATAR, Chemistry ATAR or Engineering Studies ATAR, or equivalent

DESIRABLE

Mathematics Specialist ATAR or equivalent

STAT

May be used to demonstrate English proficiency only

PORTFOLIO ENTRY

Not accepted

INTAKE

Semester 1, semester 2

STUDY MODE

Full-time, part-time

DURATION

5 years full-time

LOCATION

Perth then Kalgoorlie

CRICOS CODE

050568A

Adding a mining specialisation to a major in Civil and Construction Engineering will give you an in-depth understanding of mining industry operations.

You'll also learn aspects of environmental conservation, health and safety, and management of people and resources – an ideal skill set for careers in mine-site design, construction and maintenance.





Engineering

Access outstanding, purpose-built facilities and start work as a professional engineering graduate in just four years.

DEGREE

Bachelor of Engineering (Honours)

GUARANTEED ATAR

80

PREREQUISITES

Mathematics Methods ATAR and at least one of the following: Physics ATAR, Chemistry ATAR, Engineering Studies ATAR, or equivalent

DESIRABLES

Mathematics Specialist ATAR, or equivalent

STAT

May be used to demonstrate English proficiency only

PORTFOLIO

Not accepted

INTAKE¹

Semester 1, semester 2

STUDY MODES

Full-time, part-time

DURATION

4 years full-time

LOCATION²

Perth, Dubai, Malaysia, Sri Lanka

CRICOS CODE

072467B

LEARN MORE

curtin.edu/bach-engr

1. Perth intake shown.

2. Majors offered may vary between locations.

.Curtin's Bachelor of Engineering (Honours) offers you an industry-connected education experience in which you will learn how to provide solutions to complex societal challenges and improve the quality of life for people all around the world.

Your study will begin with the Engineering Foundation Year (EFY). You'll learn the fundamental concepts and develop the required skills common to all areas of engineering – giving you the opportunity to explore our range of engineering majors before choosing the major you will study from your second year.

Engineering majors available

- Chemical Engineering
- Civil and Construction Engineering
- Electrical and Electronic Engineering
- Industrial and Systems Engineering
- Mechanical Engineering
- Mechatronic Engineering
- Metallurgical Engineering
- Mining Engineering
- Petroleum Engineering.

Engineering Foundation Year

Developed in partnership with industry, our EFY program and its purpose-built first-year studios encourage learning by doing.

The EFY's cross-disciplinary curriculum was developed as a base for all Curtin engineering disciplines, to ensure you graduate with a solid theoretical grounding, strong practical experience and cultural awareness.

The program and its support services will help you progress smoothly into your area of specialisation and graduate as a sought-after and career-ready engineer.

The EFY includes:

- full-class lectures
- small group tutorials
- hands-on laboratory work
- team-based design and simulation projects
- web-based learning resources, bulletin boards, online tutorials and quizzes
- portfolio development, with an emphasis on reflection and self-evaluation
- participation by industry representatives, exposing students to professional practice.

First-year studio

The first-year engineering studio and project rooms reflect the modern working environment, enabling you to familiarise yourself with the layout of a professional career setting.

The studio is also a hub to develop social and academic networks. It comprises:

- an open-plan office
- computing, electrical and mechanics laboratories
- one-on-one learning assistance with Engineering Tutor Access Points
- project meeting rooms.

Years 2–4

In years 2 and 3 of your engineering degree you will study units relevant to your chosen major.

In year 4 you will undertake an honours-level, independent research project. Structured across two units of study, the project will give you an in-depth understanding on your thesis topic. It will demonstrate to potential employers your skills in planning and undertaking a complex body of work within deadlines.

Professional practice

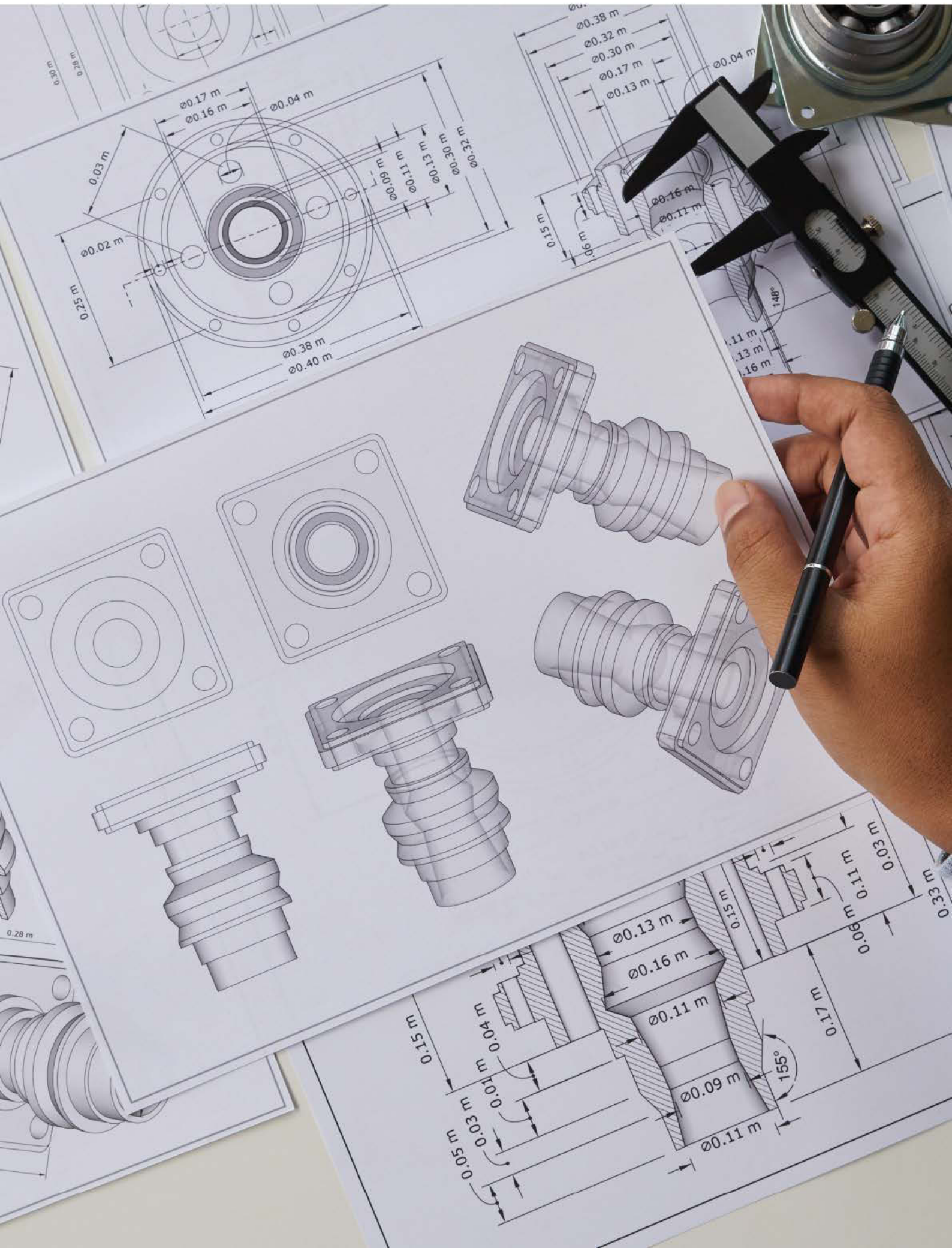
To graduate from this course you must have completed 480 hours of exposure to professional engineering practice and completed senior first-aid training.

Professional practice can comprise a combination of real-world experiences. Examples include paid and voluntary work placements, university-based experience in industrial projects, attending extra-curricular technical lectures and workshops, and industry site visits in Australia and/or overseas.

Professional recognition

Graduates fulfil the stage one competencies required by Engineers Australia for a professional engineer.





BACHELOR OF ENGINEERING (HONOURS)

Chemical Engineering

Expand your range of career options in process engineering industries.

DEGREE

Bachelor of Engineering (Hons) (Chemical Engineering)

LEARN MORE

curtin.edu/bach-cheng

Chemical or 'process' engineering involves finding the best sequence of chemical and physical processing operations, plus the right operating conditions, to convert raw materials into higher-value products.

Chemical engineering covers the development, design and management of processes and equipment for the extraction, conversion and upgrading of materials, using physical, chemical and biological operations.

There are numerous process industries serving a range of societal needs.

You will select either the Chemical Engineering or Oil and Gas streams to study.

Chemical Engineering

In this stream, you will examine processes for a range of materials.

You'll explore the theory and applications of fluid flow, energy transfer, and separation and chemical reaction for the synthesis, design, control and optimisation of general chemical processes.

Oil and Gas

In addition to learning chemical engineering fundamentals, you will gain detailed knowledge of the exploration and development of oil and gas resources.

You'll explore the behaviour of hydrocarbon reservoirs, offshore drilling and production, the refining of crude oil and processing of natural gas.

Double degree

You can study a Bachelor of Engineering (Hons) (Chemical Engineering) as part of a double degree. See pages 19–20 for double degree combinations.

Professional recognition

Graduates fulfil the stage one competencies required by Engineers Australia for a professional engineer.

Career information

Careers

- Chemical engineer
- Process engineer
- Production / operations engineer
- Risk and safety manager.

Industries

- Oil and gas
- Bioengineering and biotechnology
- Aerospace and automotive
- Agrochemical
- Food processing
- Mineral and material processing
- Pharmaceutical
- Semiconductor
- Biomass and sugar refining
- Cement and lime production
- Industrial and fine chemical production
- Petrochemical and polymer production
- Paper and board manufacture
- Water and wastewater treatment.





“I’ve always had a clear passion for engineering. From childhood, I’ve been fascinated by construction documentaries and the incredible solutions created by engineers.

I’ve loved the complexity and the range of topics covered in my course, and I’m lucky to have secured a role as a graduate structural engineer at Arup — the number one company on my list!”

Victor Brauner

Bachelor of Engineering (Hons) (Civil and Construction Engineering)

Civil and Construction Engineering

Design and construct the infrastructure of tomorrow.

DEGREE

Bachelor of Engineering (Hons) (Civil and Construction Engineering)

LEARN MORE

curtin.edu/bach-ccoeng

Civil engineers design and construct our infrastructure. They are key members of teams involved in the design and construction of buildings, bridges, roads and highways, harbours, dams, irrigation and water supplies, municipal infrastructure and other large structures and projects.

As our built environment becomes increasingly complicated, ambitious construction projects can only be completed by teams of people with different skills, working together. The civil engineer is central to this process.

In this course, you will develop basic scientific, mathematical and practical skills. You’ll learn how to use these skills to solve engineering problems and then to develop your civil engineering capabilities.

You’ll learn to apply these skills in structural analysis and design, geotechnical engineering, transportation engineering, hydraulics, construction and professional practice.

In your final year, you’ll integrate your design, construction and management skills in large civil engineering projects; undertake a major civil engineering research project; and select units from specialty options in the areas of structural, geotechnical, transportation, water resources and environmental engineering.

To satisfy professional requirements, you’ll complete at least 12 weeks (or equivalent) of exposure to professional engineering practice. This requirement can be met through appropriate work experience or a combination of technical and non-technical activities.

Double degree

You can study a Bachelor of Engineering (Hons) (Civil and Construction Engineering) as part of a double degree. See pages 19–20 for double degree combinations.

Professional recognition

Graduates fulfil the stage one competencies required by Engineers Australia for a professional engineer.

Career information

Careers

- Civil engineer
- Construction engineer
- Geotechnical engineer
- Mining engineer
- Site engineer
- Structural engineer.

Industries

- Construction
- Consulting
- Contracting
- Government
- Mining
- Transportation
- Water supply.



BACHELOR OF ENGINEERING (HONOURS)

Electrical and Electronic Engineering

Gain a thorough understanding of the fundamentals of electrical and electronic engineering before focusing on the stream that interests you.

DEGREE

Bachelor of Engineering (Hons) (Electrical and Electronic Engineering)

LEARN MORE

curtin.edu/bach-eleeng

Rapid advances in electronic communication, the 'internet of things', and renewable and sustainable energy offer abundant career opportunities in electrical and electronic engineering.

You'll gain a thorough understanding of the concepts that underpin electrical and electronic engineering, before choosing one of the specialisations below.

In your final year you'll undertake a major research or design project and complete 12 weeks of professional practice.

Power Systems

With fossil fuels being a finite resource, it is vital that we harness alternative sources of electrical energy, such as solar and wind.

This stream will help you address the challenges in the generation, transmission and distribution of electricity. It covers topics such as smart grids, distribution systems and the integration of renewable energy.

Electronics and Communications

Society has an increasing demand for intelligent transportation systems, mobile broadband access, remote operations and tactile internet – the next evolution of the internet of things.

This stream will help you address challenges facing telecommunication systems, to enable fast and reliable communication anywhere and anytime.

Embedded Systems

Our world is increasingly characterised by intelligent devices that contain embedded systems. These systems enable a computer to control another computer, monitor it or provide it with sophisticated functionality.

In this stream, you will learn the theoretical and practical aspects of embedded systems, sensors and electronic design.

Double degree

You can study a Bachelor of Engineering (Hons) (Electrical and Electronic Engineering) as part of a double degree. See pages 19–20 for double degree combinations.

Professional recognition

Graduates fulfil the stage one competencies required by Engineers Australia for a professional engineer. This course is also endorsed by the Naval Shipbuilding College.

Career information

Careers

- Electrical engineer
- Electrical power engineer
- Electronics engineer
- Communications engineer
- Embedded systems engineer
- Medical systems engineer
- Network controller
- Power systems engineer
- Systems engineer.

Industries

- Application engineering
- Computer hardware design
- Electronic systems
- Fibre optics and mobile communications
- Manufacturing
- Robotics
- Software development
- Solar and renewable energy.





Industrial and Systems Engineering

Use your analytical and problem solving skills to optimise complex systems and processes.

DEGREE

Bachelor of Engineering (Hons) (Industrial and Systems Engineering)

LEARN MORE

curtin.edu/bach-indsyseng

Industrial and systems engineering focuses on the design and optimisation of a whole system rather than individual components. Industrial and system engineers explore problems in their entirety to create holistic solutions and processes for complex projects.

In this engineering major you will learn how to use your analytical and problem-solving skills to make systems more efficient, safe and cost-effective.

You'll learn knowledge and skills in related engineering fields including mechanical and mechatronics, as well as industrial, applied and financial mathematics.

You'll also develop specialised theoretical knowledge and practical skills in key areas of mechanical design, manufacturing, system control, operations research, modelling, simulation and optimisation of industrial processes.

As a graduate, you'll be equipped to play an integral role in business and industry where the continual improvement of complex systems and processes is key to success.

Professional recognition

This course has provisional accreditation from Engineers Australia and is endorsed by the Naval Shipbuilding College.

Career information

Careers

- Manufacturing engineer
- Production engineer
- Data modeller
- Logistics specialist
- Material handling, maintenance or scheduling specialist
- Plant manager
- Process control analyst
- Process improvement specialist
- Quality controller.

Industries

- Banking
- Communications
- Defence
- Healthcare
- Hospitality
- Minerals and energy
- Retail
- Space exploration.



BACHELOR OF ENGINEERING (HONOURS)

Mechanical Engineering

Analyse and develop machines and moving systems.

DEGREE

Bachelor of Engineering (Hons) (Mechanical Engineering)

LEARN MORE

curtin.edu/bach-mceng

Mechanical engineers analyse and develop technological systems that involve motion. They help society harness the energy and forces that exist in nature.

Mechanical engineering is a discipline that is recognised worldwide. As one of the broadest engineering disciplines, it will provide you with versatile skills for numerous career options.

System conception, design, manufacturing, maintenance and management are all within the scope of mechanical engineering. These systems include micromechanical devices, power-generating turbines, thermal power generation, and air and transport systems.

In particular, you'll appreciate applying your multidisciplinary problem-solving skills across a spectrum of science and engineering endeavours that extend through to biomedical engineering.

In your final year you'll undertake an individual research project.

Double degree

You can study a Bachelor of Engineering (Hons) (Mechanical Engineering) as part of a double degree. See pages 19–20 for double degree combinations.

Professional recognition

Graduates fulfil the stage one competencies required by Engineers Australia for a professional engineer. This course is endorsed by the Naval Shipbuilding College.

Career information

Careers

- Mechanical engineer
- Aeronautical engineer
- Mechatronic engineer.

Industries

- Aerospace
- Automotive
- Manufacturing
- Marine engineering
- Mining
- Mineral and material processing
- Plant operation and maintenance
- Power generation
- Robotics
- System design
- Transportation
- Water supply.



“I studied a double degree in mechanical engineering and finance because I wanted a degree that would open doorways to many career paths.

During my study, I completed two years of work experience at a sustainable engineering consultancy, which helped me further my technical knowledge and gave me insight into a business environment. Work experience also helps you gain valuable skills and knowledge and discover those areas you're passionate about.”

Lucy Nyholt

Bachelor of Engineering (Hons) (Mechanical Engineering) and Bachelor of Commerce (Finance)





“I chose to study mechatronic engineering as I believe automation is the future of many industries, and I want to be at the forefront of innovation.

Throughout my degree I’ve had the opportunity to apply my theoretical knowledge to real-world situations. In my project units, I designed, modelled and tested solar-powered and semi-autonomous vehicles.

I completed a vacation program as a student rail engineer at the Public Transport Authority, and then accepted a permanent position there as a graduate mechatronic engineer.”

Theo Vander Heyden

Bachelor of Engineering (Hons) (Mechatronic Engineering)

Mechatronic Engineering

As the world becomes increasingly automated, the opportunities for mechatronic engineers are booming.

DEGREE

Bachelor of Engineering (Hons)
(Mechatronic Engineering)

LEARN MORE

curtin.edu/bach-mxeng

Mechatronic engineers work at the interface of mechanical devices and electronic control systems.

With the ever-increasing reach of robotics and autonomous systems, mechatronic engineers are found in diverse industries including aerospace, agriculture, biotechnology mining and energy resources.

As the number of industries that are innovating through digital technologies grows, so do the opportunities for mechatronic engineers. Rapid advances in automation applications – such as self-driving vehicles and mine-site automation – are driving an increased need for mechatronic engineers with expertise in mechanical, electronic and computer systems engineering.

Numerous industries, including mining, transportation, agriculture and biomedical engineering, also require mechatronic engineers to work towards solutions for some of society’s most pressing problems.

As a mechatronic engineering student, you will develop sound theoretical knowledge in the key disciplines of mechanics, electronics, computer systems and control. You’ll apply this knowledge and develop practical skills through a series of projects on topics including mobile robot communications and automation, pneumatic automation systems and machine control.

In your final year of study, you’ll undertake a major research or design project.

Double degree

You can study a Bachelor of Engineering (Hons) (Mechatronic Engineering) as part of a double degree. See pages 19–20 for double degree combinations.

Professional recognition

Graduates fulfil the stage one competencies required by Engineers Australia for a professional engineer. This course is endorsed by the Naval Shipbuilding College.

Career information

Careers

- Mechatronic engineer
- Mechanical engineer
- Automation engineer
- Computer systems engineer
- Data scientist.

Industries

- Aerospace
- Agritechology
- Autonomous vehicle
- Biosensors and security
- Biotechnology and biomechanics
- Manufacturing
- Mining and resources
- Oil and gas
- Renewable energy
- Robotics
- Subsea engineering.



BACHELOR OF ENGINEERING (HONOURS)



“I chose to study metallurgical engineering because I’ve always had a passion for chemistry and understanding chemical processes from a practical perspective. The most enjoyable part of my degree has been relocating to the WA School of Mines (WASM) in Kalgoorlie for my third and fourth years. I was able to immerse myself in the WASM culture and take on extracurricular roles, professional development and social events — all while being in the heart of the mining industry.”

Sarah Montague

Bachelor of Engineering (Hons) (Metallurgical Engineering)

Metallurgical Engineering

Learn to design and manage plant processing operations to create mineral and metal products.

DEGREE

Bachelor of Engineering (Hons)
(Metallurgical Engineering)

LEARN MORE

curtin.edu/bach-mteng

Metallurgical engineers mostly work in converting raw metals and minerals into more useable formats, such as converting iron ore and coal into steel. They extract, refine and recycle metals and minerals that are used in many areas of everyday life, including energy production, food production, housing and transportation.

In this major you will learn to design, develop, optimise and manage the operation of metallurgical processing plants that transform low-value raw materials into useful, high-value mineral and metal products – and in an economical and environmentally responsible way.

You’ll gain a thorough grounding in chemical and physical engineering, economic, environmental and sustainable principles, and the extraction of metals from ores. This course also includes a strong management component.

Following your Engineering Foundation Year (EFY) at Curtin Perth, you can go directly to Curtin Kalgoorlie, or study your second year in Perth before completing your third and fourth years in Kalgoorlie. Studying in Kalgoorlie will provide you with meaningful exposure to the resources sector.

Double degree

You can study a Bachelor of Engineering (Hons) (Metallurgical Engineering) as part of a double degree. See pages 19–20 for double degree combinations.

Professional recognition

Graduates fulfil the stage one competencies required by Engineers Australia for a professional engineer. The course is also recognised by the Australian Institute of Mining and Metallurgy.

Career information

Careers

- Metallurgist
- Hydrometallurgist
- Metallurgical engineer
- Minerals engineer
- Process control specialist
- Process engineer
- Process mineralogy specialist
- Pyrometallurgy specialist.



Industries

- Banking and finance
- Engineering
- Equipment design and sales
- Food production
- Housing
- Mining and minerals processing
- Research and development
- Transportation.

Mining Engineering

Develop the skills you need to extract minerals from underground or open-pit mines.

DEGREE

Bachelor of Engineering (Hons) (Mining Engineering)

LEARN MORE

curtin.edu/bach-mineng

Mining engineering is where the latest technology is used to extract minerals from the earth safely and efficiently.

It's a profession defined by rapid scientific advancement, and, as a Curtin student, you'll be at the cutting edge.

In this major you will learn about emerging mining technology such as robotics, data analytics and additive manufacturing. You'll delve into mining economics, gain understanding and consideration of working with Indigenous cultures, and discover how to make a positive contribution to sustainable development.

You can broaden your learning and enhance your employability by studying elective units.

The degree is tailored to guide your transition from the classroom to a job in the global resources sector, fully equipped to handle the technological developments that are transforming the industry.

In your first year, you'll study the Engineering Foundation Year (EFY), learning the fundamental concepts and develop the skills common to all areas of engineering.

Following this, you can go directly to Curtin Kalgoorlie, or study for a second year in Perth before completing your third and final years in Kalgoorlie. Studying in Kalgoorlie will provide you with meaningful exposure to the mining industry.

As you progress, emphasis will be placed on mining science and technology, which involves the study of soil and rock mechanics, explosives and rock breakage, materials transport, mining methods, mine planning, project evaluation and the environment. In your final year, you'll undertake a major research project and a team design project.

Double degree

You can study a Bachelor of Engineering (Hons) (Mining Engineering) as part of a double degree. See pages 19–20 for double degree combinations.

Professional recognition

Graduates fulfil the stage one competencies required by Engineers Australia for a professional engineer.

After a set period of practical experience in the industry, you can apply to the WA Department of Mines, Industry Regulation and Safety to sit for examinations that will qualify you for statutory Certificates of Competency (First Class Mine Manager, Underground Supervisor, and Quarry Manager).

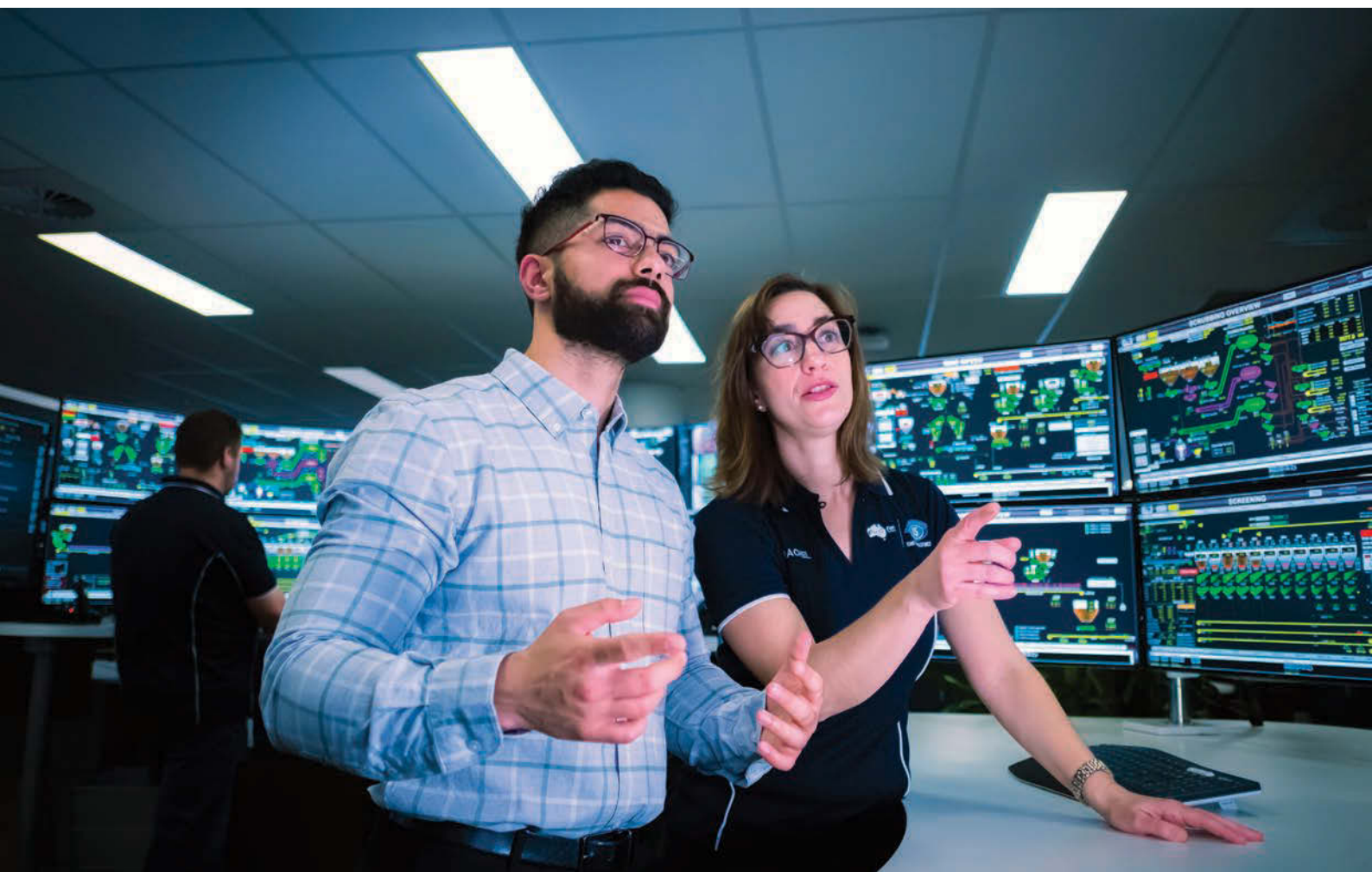
Career information

Careers

- Mining engineer
- Management consultant
- Mine manager
- Mine planner and designer
- Mining company director
- Operations manager.

Industries

- Government
- Mining and resources
- Research and development
- Risk analysis and investment.



BACHELOR OF ENGINEERING (HONOURS)

Petroleum Engineering

Learn how to evaluate, drill, develop and mine oil and gas reserves.

DEGREE

Bachelor of Engineering (Hons) (Petroleum Engineering)

LEARN MORE

curtin.edu/bach-pteng

Petroleum engineers extract oil and gas from deposits below the Earth's surface. They collaborate with other professionals to understand the geological and geophysical characteristics of particular reservoirs, before designing, testing and implementing the most effective and profitable extraction method.

Because reservoirs yield up to 30% of their oil, petroleum engineers are needed to develop methods that optimise oil and gas production. These engineers are also needed to help develop offshore gas fields.

In this major you will learn how to evaluate, drill, develop and mine oil and gas reserves. You'll study chemical engineering, drilling, fluid flow through reservoirs, formation evaluation, geology, hydrocarbon phase behaviour, oil and gas field development, petroleum production technology, thermodynamics and well completions engineering.

You will undertake practical study in fluid and reservoir rock and drilling laboratories, and gain industry exposure through field trips to service company offices, government offices, and drilling, exploration and production operation sites.

You'll also gain an understanding of global economic trends and corporate profit margins through the study of economics, risk and project management.

In your final year, you'll undertake a major research project, as well as a field development planning and design project.

Professional recognition

Graduates fulfil the stage one competencies required by Engineers Australia for a professional engineer.

Career information

Careers

- Petroleum engineer
- Drilling engineer
- Field operation engineer
- Production engineer
- Reservoir engineer
- Subsurface engineer
- Well completions engineer.

Industries

- Environmental management
- Government
- Health and safety
- Oil and gas
- Research and development
- Water treatment.





“Engineering is all about solving problems, and petroleum engineering in particular is an area where projects require innovation. Curtin’s petroleum engineering degree provides lots of practical experiences, covers a wide range of subjects and teaches you to use technology relevant to your field.”

Emily James
Bachelor of Engineering (Hons)
(Petroleum Engineering)

How to apply



1. Find a course

Find your course in the guide or at study.curtin.edu.au.

2. Check the admission criteria

Admission is usually based on graduating from high school and achieving the following:

ATAR OR CUT-OFF SCORE

Domestic students: You need to achieve the minimum or guaranteed ATAR for your chosen course.

International students: Cut-off scores for most countries are shown against each course at study.curtin.edu.au.

ENGLISH

Domestic students: You need a scaled score of at least 50 in English ATAR, Literature ATAR or English as an Additional Language/Dialect ATAR.

International students: See curtin.edu/english-criteria for your country's equivalent English competency criteria.

PREREQUISITES

Some courses require completion of certain high school subjects. These are called prerequisites.

Domestic students: You need a scaled score of at least 50 in these subjects.

International students: You need your country's equivalent pass mark in these subjects.

OTHER CRITERIA

Some courses have additional requirements, such as the submission of a portfolio.

3. Apply

DOMESTIC STUDENTS

To apply, visit curtin.edu/apply.

INTERNATIONAL STUDENTS

First, get electronic copies of your qualifications and English language proficiency documents.

Applying through an agent: You may prefer to submit an application through a registered Curtin agent. To find an agent in your country, see curtin.edu/agents.

Applying online: If you'd rather not apply through an agent, find your course at study.curtin.edu.au and click APPLY NOW. From here, you can begin the online application process. Make sure your documents are ready to upload.

Successful applicants will receive an offer package, which explains how to accept Curtin's offer and how to enrol. When your enrolment has been completed, you'll receive your Confirmation of Enrolment.

Curtin Early Offers for 2023

Are you in year 12 and keen to lock in your place at Curtin early?

Our Early Offers Program is available for most Curtin courses, and will help you secure a place in your chosen course before you even receive your ATAR.

We're also rewarding your hard work in year 12 with the new ATAR Achievement Scholarship. Simply apply for an early offer, and if your final ATAR is three or more points above your predicted ATAR score, you'll receive a \$3,000 scholarship to help you start your study journey at Curtin*.

You can apply for an early offer through TISC until 2 December, 2022.



Visit study.curtin.edu.au/early-offers.

**Conditions apply.*



GETTING READY TO GO!

We want to make your transition to study in Australia as smooth as possible. Use our pre-departure resources to help you prepare for your move to Perth.

Visit curtin.edu/pre-departure.

YOUR STUDENT VISA

Apply for your student visa after you receive your Confirmation of Enrolment.

If you will be under the age of 18 when you start your Curtin course, you must nominate a guardian.

You can find more information about applying for a student visa by searching for 'student visa' on the Department of Home Affairs website.

Visit immi.homeaffairs.gov.au.

WE'RE HERE TO HELP

If you have any questions about admission, our team can help you.

Domestic students

Tel: 1300 222 888

FAQ: future.connect.curtin.edu.au

Web: study.curtin.edu.au

International students

Tel: +61 8 9266 5888

Email: study@curtin.edu.au

FAQ: future.connect.curtin.edu.au

Web: international.curtin.edu.au

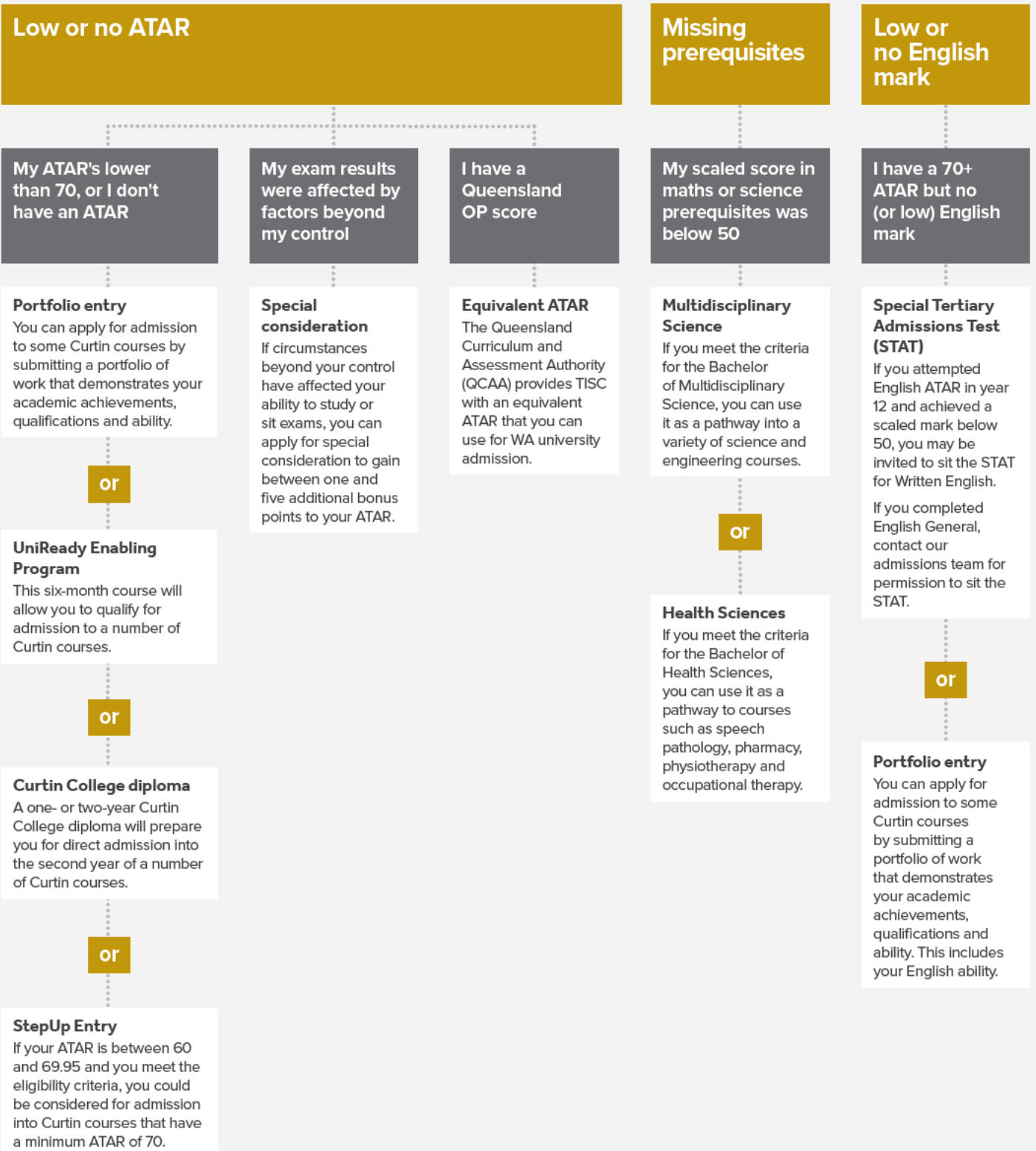
Find your pathway

There's more than one way to get into a Curtin course.



If you don't think you'll meet one or more criteria, there are many other pathways to Curtin. This diagram shows some common pathways that you can take, but there are more.

Visit [curtin.edu/pathways](https://www.curtin.edu/pathways) for all the ways you can gain entry to Curtin.



Common uni words

Course types

Bachelor degree

The standard university award recognised worldwide for successfully completing an undergraduate course.

- **Double degree:** Studying two complementary bachelor degrees concurrently. For example, Bachelor of Laws and Bachelor of Arts.
- **Honours:** Additional research and coursework at an advanced level.

Postgraduate degree

A higher degree qualification and subject specialisation that can be studied once you have completed a bachelor degree.

Undergraduate study

Education that leads to your first university qualification, usually a bachelor degree.

Course structure

Major

A series of more than eight units in the same area within a bachelor degree. A major includes at least two units at final-year level.

- **Double major:** Studying two majors within a degree course. For example, Bachelor of Commerce (Economics and Finance).

Minor or specialisation

A minor or specialisation is a set of four units in the same discipline. It may complement your bachelor degree or major, and can be from the same discipline as your bachelor degree or a different discipline. For example, you may study a Bachelor of Arts (Journalism) and complement this with a commerce specialisation such as Public Relations.

Professional placement/internship

Working in a professional environment during your studies to extend your knowledge and practical skills.

Stream

A series of six units in the same discipline.

Unit

A component of a course that covers one subject area in detail. A unit may comprise lectures, tutorials, class presentations, group work, computer lab sessions, case studies, workplace assignments and exams.

- **Core unit:** A compulsory unit, which is specified in the course outline.
- **Elective unit:** A unit that can be chosen from any discipline as long as you meet the prerequisites.
- **Optional unit:** A unit that you choose from a specified list provided in the course outline.

Course essentials

ATAR

The Australian Tertiary Admission Rank, used for allocating places in university courses.

- **Guaranteed ATAR:** A rank that guarantees you a place on the course provided you meet the course prerequisites and English proficiency requirements.
- **Minimum ATAR:** The lowest rank you need to be considered for entry to a course.

Desirable

A non-essential but recommended subject completed before starting a course.

Duration

The time it will take to complete the course if you study full-time.

Intake

The semester or trimester when you can begin studying the course.

Location

Curtin campuses that offer the course.

Prerequisite

A subject or unit you must complete before starting a course or taking a higher-level unit.

STAT

The Special Tertiary Admissions Test (STAT) is a national test for those who don't meet university admission criteria. STAT can be used to meet entry criteria for some courses, or as a way to satisfy Curtin's English proficiency requirements if you haven't done so through year 12.

Visit tisc.edu.au/static/guide/stat.tisc.

Study mode

How much study you undertake in a semester or a trimester.

- **Domestic students:** Full-time study is three or four units per semester. Part-time study is one or two units per semester. Studying part-time reduces your weekly workload but extends the duration of your course.
- **International students:** International students studying in Australia on a student visa must study four units per semester for most courses. A small number of courses allow a study load of three units.

Other university terms

Advanced standing / credit for recognised learning

Recognition of any previous study or work experience you have that may exempt you from having to study some units of your degree.

Faculty

A teaching area comprising university schools and disciplines.

OUA

Open Universities Australia.

Semester

A 16-week study period. There are two semesters per calendar year.

TISC

The Tertiary Institutions Service Centre processes university applications on behalf of the four public Western Australian universities. It also administers STAT.

Trimester

A 14-week study period. There are three trimesters per calendar year.

WACE

Western Australian Certificate of Education.

Manage your finances

Before you start your course, consider the financial implications, find out how much it will cost and look at ways to manage your budget.

Tuition fees

You will need to pay tuition fees for each unit you undertake at Curtin. The amount you pay will depend on the course you are studying, the units you enrol in and whether you are a domestic or international student.

Curtin offers Commonwealth-supported undergraduate places to students who are Australian citizens, New Zealand citizens, Australian permanent residents, and Australian permanent humanitarian visa holders.

A Commonwealth-supported place is a subsidised higher education enrolment. The Australian Government subsidises these student places by paying part of your tuition fees directly to Curtin. The subsidy amount is not a loan and you do not have to pay it back. You only pay the remainder of the fee, known as the student contribution amount for each unit in which you are enrolled.

Our fees and charges web page shows the required student contribution for every unit.

To apply for a Commonwealth-supported place, you must submit an electronic Commonwealth Assistance Form (eCAF) with a valid tax file number to Curtin before the due date.

You will also need to provide Curtin with your Unique Student Identifier (USI). Applying for a USI is fast and free, and you keep the same USI for life. Apply at usi.gov.au.

As a Commonwealth-supported student, you have the option of paying your student contribution fee by the study period due date or deferring your payment via the HELP loan scheme.

Visit curtin.edu/course-fees.

HECS-HELP

HECS-HELP is a government loan scheme, which allows you to defer payment of your student contribution amount until you start earning an annual salary above the compulsory repayment threshold.

Once your salary exceeds the threshold, you will begin repaying your loan as a percentage of your wage to the Australian Tax Office.

HECS-HELP is available to all eligible students enrolled in a Commonwealth-supported place and it takes effect involuntarily if you have provided Curtin with your tax file number, and if you don't pay your student contribution up-front by the study period due date.

Visit studyassist.gov.au/help-loans.

International students are not eligible for Commonwealth-supported places and should contact Curtin Global for fee information.

Student Services and Amenities Fee

The Student Services and Amenities Fee (SSAF) is a fee that universities and other approved higher education providers may charge for non-academic services and amenities, such as sporting and recreational activities, employment and career advice, child care, financial advice and food services. If you are eligible, you may choose to defer all or part of your fee for the relevant year through a HELP loan scheme, SA-HELP.

Visit curtin.edu/ssaf.

SA-HELP

Similar to HECS-HELP, SA-HELP is a loan scheme, which helps you pay for all or part of your Student Services Amenities Fee, provided you are an Australian citizen, permanent humanitarian visa holder, or eligible New Zealand special category visa holder.

If you use SA-HELP, the amount will be added to your HELP debt. You may opt to access the SA-HELP loan even if you don't wish to access any of the other HELP loan schemes.

Visit studyassist.gov.au/help-loans/sa-help.

Other expenses

Tuition fees do not cover the cost of some items required for studying a particular unit or course. Examples of these items include but are not limited to:

- art supplies
- field trips
- first aid courses
- lab coats
- textbooks
- Working With Children Check.

You may also incur day-to-day expenses, which include but are not limited to parking, transport, food and recreation costs.

Centrelink

Centrelink may provide financial assistance to students who are Australian residents and studying full time, however each applicant is assessed on an individual basis and must meet other specific criteria. Services to students include:

- Abstudy
- Health Care Card
- rent assistance
- student financial supplement
- Youth Allowance.

Visit servicesaustralia.gov.au/centrelink.

Curtin Student Guild

The Guild provides comprehensive education, welfare and social services to its members. If you become a full Guild member, you can take advantage of discounts both on and off campus. In conjunction with the Curtin Bookshop, the Guild offers bookshop grants to students in need of financial assistance. The Guild also offers tax and budgeting advice.

Elite athletes

Elite athletes may be eligible for funding support via:

- Elite Athlete Grant – awarded annually to student athletes in the Elite Athlete Program who display sound academic results while competing in their respective sports.
- Subsidies to assist student athletes in representing Curtin at the Australian University 'Nationals', World University Games/ Championships and other events.
- Free Curtin Stadium gym memberships.

Visit stadium.curtin.edu.au/sport/academy.

Scholarships

Scholarships offer financial, academic and career support, giving you more opportunities to gain new skills, expand your horizons and add to your portfolio of achievements.

Scholarships are not loans – the money is given to you provided you fulfil key requirements such as academic performance, work experience or volunteer commitments.

There are many scholarships available. Some are offered for academic achievement, such as the Curtin Excellence Scholarship, while others are designed to make university possible for students who face financial hardship.

Eligibility criteria

Scholarships are offered through a competitive process for students who are:

- from low-income backgrounds
- from Indigenous and Torres Strait Islander backgrounds
- high-achievers
- from regional areas
- studying specific courses.

Each scholarship has different eligibility criteria, application procedures and closing dates, so check these early.

Further information

Visit our scholarships website for further information about each scholarship.

The scholarships website contains:

- up-to-date information and eligibility criteria for available scholarships
- tips for writing a good scholarship application
- a sign-up email alert service that lets you know when a scholarship matching your selection criteria is open for applications. You will also receive a reminder email one week before applications close.

Visit scholarships.curtin.edu.au.

Engineering Scholarships

Sir William Tyree Scholarship in Engineering

This scholarship supports Bachelor of Engineering (Honours) students from disadvantaged backgrounds throughout their four-year course of study. The scholarship is paid as a cash stipend of \$7,500 per semester, up to \$60,000.

Women in Engineering Top Excellence Scholarship

This Curtin scholarship rewards and assists academically talented female student/s with the highest ATAR who have applied to study Bachelor of Engineering (Honours) at Curtin. The scholarship is paid as a cash stipend of \$3,000 per study period, up to \$33,000.

Science and Engineering Rob Riley Memorial Scholarship

This scholarship is for Aboriginal and Torres Strait Islander students who are applying for entry to a Curtin undergraduate course in engineering or science. The scholarship is paid as a cash stipend of \$2,500 per semester for the course duration, up to \$20,000.

Michael Jones Scholarship

This scholarship is awarded annually to a student from a secondary school student at one of the Kalgoorlie-Boulder local high schools who enrolls to study a course at the Curtin WA School of Mines. The \$12,000 scholarship is paid as a cash stipend of \$1,500 per semester.



Getting to Curtin Perth

Curtin is located just six kilometres from the city centre. There are several easy, safe, affordable and environmentally friendly ways to get to and around campus.

Parking

Our pay-as-you-go parking system means you only pay for the time you park on campus. Download CelloPark from the App Store or Google Play and you'll be ready to park.

Transperth buses

More than 500 buses stop at Curtin each weekday during semester. Curtin has two main bus terminals: Curtin Bus Station, which is located on the east side of campus, and the new Curtin Central Bus station, located on the campus' north-west side.

Two high-frequency bus routes – 100 and 101 – connect Curtin with the Canning Bridge train station. Routes 998 and 999 connect Curtin with Oats Street train station.

The CircleRoute buses, which run between Perth's universities, train stations and shopping centres, leave every 15 minutes between 6:30am and 8pm.

Transperth travel concessions are available on request to all full-time students.

Curtin shuttle buses

We provide a free hail-and-ride bus service for students living in Waterford, Bentley, Victoria Park and South Perth. Known as Curtin Access Bus Service (CABS), it runs during semester on weekdays.

There's even a CABS smartphone app that provides live GPS tracking, route mapping and access to timetables.

Trains

Mandurah Line

Many Perth – Mandurah trains stop at the Canning Bridge train station, where you can catch a connecting Transperth bus to Curtin. Buses run every seven to eight minutes during peak times.

Armadale Line

Many Perth – Armadale trains stop at Oats Street train station, where you can catch a connecting Transperth bus to Curtin.

Cycling

In addition to the many bicycle racks, secure bicycle pods are an increasingly common feature on campus. Showers are available at some bicycle enclosures. Entry to the facilities is by swipe card access, available from Curtin Security.

1 Curtin Connect

This is the first point of contact for all queries from current and future Curtin students and parents. Here you can speak to experts on courses, admissions, housing, enrolment and careers.

2 Curtin Stadium

The stadium includes a fitness centre and facilities for tennis, basketball, volleyball, table tennis, badminton, netball, futsal, floorball and group fitness classes.

3 Exchange

Exchange is our new innovation precinct, home to our two new student accommodation buildings and the School of Design and the Built Environment.

4 Guild Precinct

The Curtin Student Guild provides educational, commercial and social services to its members. It also operates many services on campus including cafés and cafeterias, The Tav, second-hand bookshop, Curtin Concept store, and the Copy & Design Centre.

5 Health Services Centre and Counselling Service

The centre includes a medical centre where you can visit either a doctor or nurse. You'll also have access to psychologists and social workers.

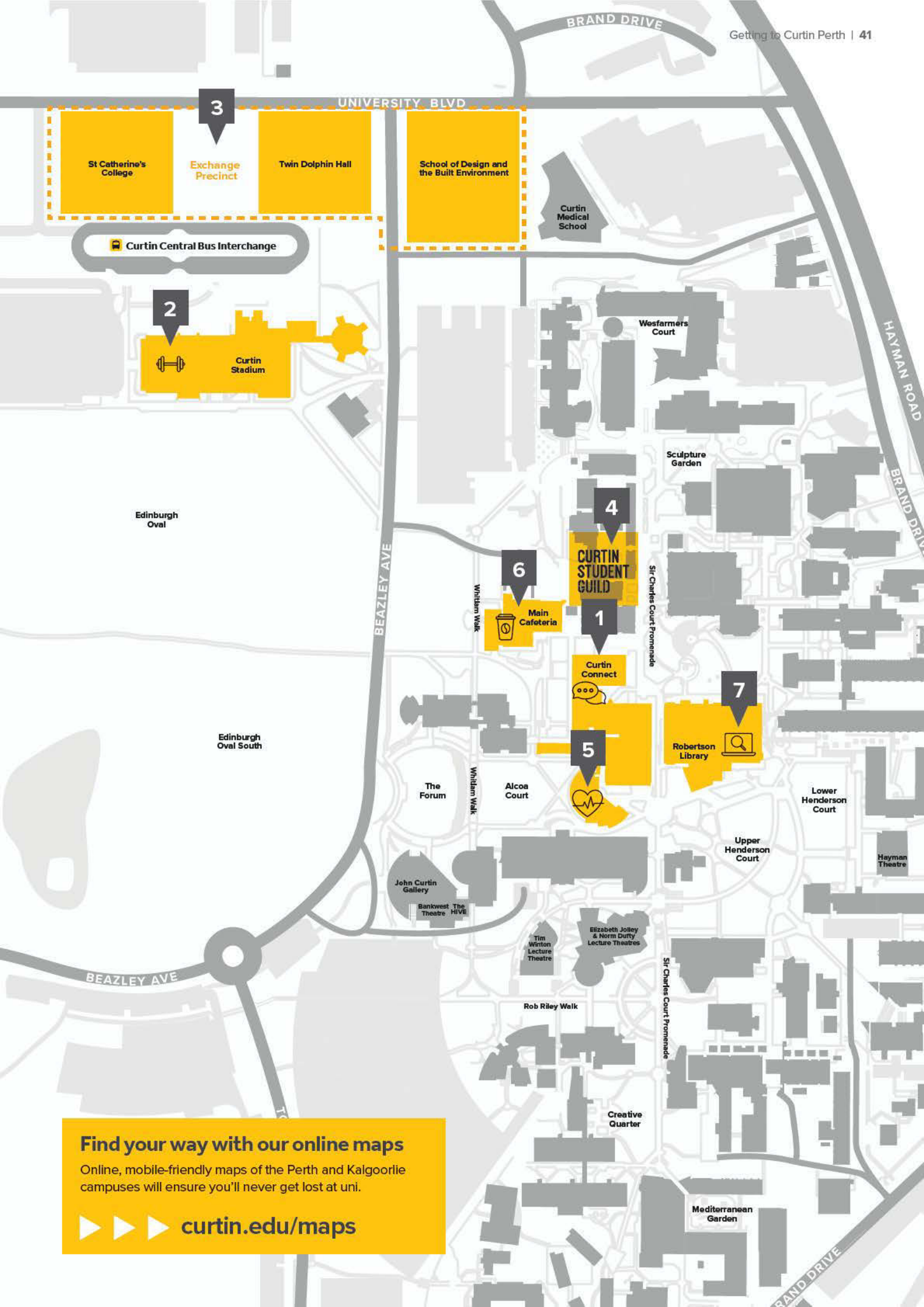
6 Main Café and Common Ground Café

There are 12 food outlets at the main campus and several food trucks that change locations daily throughout semester.

7 Robertson Library

The Robertson Library is spread over five levels and includes the Bookmark Café, Lounge, iZone and wireless internet. During semester, it's open 24/7.





3

St Catherine's College

Exchange Precinct

Twin Dolphin Hall

School of Design and the Built Environment

Curtin Medical School

Curtin Central Bus Interchange

2



Curtin Stadium

Edinburgh Oval

Edinburgh Oval South

BRAND DRIVE

UNIVERSITY BLVD

BEAZLEY AVE

HAYMAN ROAD

BRAND DRIVE

4

CURTIN STUDENT GUILD

6

Main Cafeteria

1

Curtin Connect

5

7

Robertson Library

The Forum

Alcoa Court

Lower Henderson Court

John Curtin Gallery

Bankwest The Theatre HIVE

Tim Winton Lecture Theatre

Elizabeth Jolley & Norm Duffy Lecture Theatres

Rob Riley Walk

Creative Quarter

Mediterranean Garden

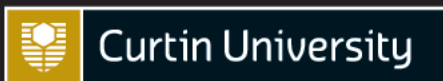
Find your way with our online maps

Online, mobile-friendly maps of the Perth and Kalgoorlie campuses will ensure you'll never get lost at uni.



curtin.edu/maps

BRAND DRIVE



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