



Australian National University School of Cybernetics

Master of Applied Cybernetics

2025 application pack

Introduction

The School of Cybernetics is a non-traditional School based in the College of Engineering, Computing and Cybernetics at the Australian National University; we are making space for different futures.

Established in 2021, the School of Cybernetics is the Australian National University's first new School in nearly half a century.

We are establishing cybernetics as an important tool for navigating major societal transformations, through capability building, policy development and safe, sustainable and responsible approaches to new systems.

Our goal is to build a new generation of cybernetic practitioners who will shape a future that we want through and with technology.

The ANU Master of Applied Cybernetics is our flagship education program. It is the first of its kind and the only Master's program in applied cybernetics in the world. The program offers a transformational education experience by drawing upon high-impact research and creating meaningful engagements with industry and the broader community.

Our graduated Master's students have gone on to senior leadership roles in digital, data and AI in Federal and State governments, nonprofits and industry, as well as on to PhDs at the ANU and other leading global universities. Entry to the program is by competitive application only, and the number of students is strictly limited to under 20. Scholarships are available to remove barriers to entry and encourage diversity through recognition of individual background, education, and industry experience.

We welcome applications from candidates who come from diverse backgrounds and disciplines, including those who have pursued non-traditional academic pathways but have met the professional experience levels of assumed knowledge.

This application pack provides details on how to apply for one of the limited number of positions on this degree program in 2025.

At a glance

Admission

Competitive entry (see page 4), small cohort (approx. 12-20 students).

Length

1 year for Master of Applied Cybernetics or 1.5 years for Master of Applied Cybernetics (Advanced).

Full-time on ANU campus from Feb 2025-Nov2025.



Student profile

We are recruiting a small cohort of students. Successful applicants will undertake the program over one year commencing in February 2025 to November 2025. Courses are delivered full-time and in-person on the ANU campus in Canberra, Australia.

Students who would like to complete a larger research and/or industry project in 2026 may enrol in the Master of Applied Cybernetics (Advanced), which extends the period of study to 18 months full-time equivalent.

Criteria for selection

- Criteria for entry into the Master of Applied Cybernetics is based on a competitive two-stage selection process. Candidates will be assessed based on the following criteria:
- A track record of outputs illustrating intellectual leadership in your field, such as, but not limited to:
- Awards, grants and projects, publications, media, policy briefings, outreach activities, guidelines and training delivered, IP, products and product concepts created.
- A demonstrated ability to communicate complex ideas to a range of audiences across disciplines, media and sectors.
- A demonstrated ability to operate with a high degree of flexibility and openness to calculated risk-taking.
- Demonstrated determination and resilience, and aptitude for working in uncertain and fast-changing environments.
- Demonstrated aptitude for transdisciplinary, mission-driven collaboration and ability to operate across disciplinary silos.
- Ability to think laterally and critically.
- Individual and/or group-based professional / entrepreneurial / community service contributions.
- (Highly regarded) Experience in one or multiple of these fields: education, policy, technology, business, the arts, science, engineering, computing, social sciences, and entrepreneurship.

Assumed level of knowledge

Although not a formal entry requirement, the following level of cognate study in any discipline, or relevant professional experience is assumed:

A Bachelor degree with honours or international equivalent, or higher qualification, and GPA of 5/7; or

A Bachelor degree or international equivalent with a minimum GPA of 5/7 and a minimum of 3 years full-time, relevant work experience at ANZSCO Skill Level 1: or

GMAT (Graduate Management Admission Test), completed no more than 5 years before the time of application, with a minimum score of 600 (minimum 5.0 in Analytical Writing) and a minimum of 8 years full-time, relevant work experience; or

GRE General test, completed no more than 5 years before the time of application, with a minimum score of 155 for Verbal Reasoning, 155 for Quantitative Reasoning and 4.0 in Analytical Writing and a minimum of 8 years full-time, relevant work experience; or

A minimum of 15 years of full-time, relevant work experience at ANZSCO Skill Level 1.

In addition, candidates must:

- Be ready to start in February 2025 and commit to full-time, in-person studies on the ANU campus until November 2025.
- Meet the University's English Language Admission Requirements for students.

Application process

Applications will open on 03 June 2024 and close on 12:00pm on 23 August 2024. The competitive selection process will include a review of documentary submissions and interviews with applicants.

We will contact short-listed applicants by early September to arrange interviews. Domestic applicants must be available to participate in an in-person interview. Overseas applicants are given a virtual interview option.



- Most recent CV/ resume including
 - 1. Statement of formal Qualifications and dates awarded.
 - 2. Statement of Employment history.
 - 3. Information on other skills, achievements, capabilities, and interests outside of work.
 - 4. A minimum of 2 referees.
- A cover letter (max 2 A4 pages) addressing criteria for selection.
- A Portfolio Piece that succinctly demonstrates your interest in the program.
- Statement of English proficiency (International students only) ERN
- Your portfolio piece must be your own work and can be in any format e.g., a short piece of writing, an artwork, a video recording, a piece of software, a poem, a blueprint, etc. we encourage you to be creative!



Click here to submit

We recommend you contact us early if your portfolio piece is a large file or if you require any form of assistance.

03 June, 2024

Applications open

25 June, 5 pm 2024 06 August, 5 pm 2024

Online information session

23 August, 12pm, 2024

Applications close

Early-September, 2024

Applicants contacted

9-13 September 2024

Applicant interviews

Early October, 2024

Offers made

Late-October, 2024

Acceptance of offers by applicants



Scholarships

All applicants will be automatically considered for a School of Cybernetics scholarship to help with the cost of their studies. Scholarship recipients will be notified upon successful admission by the ANU into the Master of Applied Cybernetics.

Full details about scholarships and eligibility criteria are listed on the ANU Scholarships page.

Please note, scholarship recipients may only receive one of the scholarships attached to the Master of Applied Cybernetics.

Florence Violet McKenzie Master of Applied Cybernetics scholarships

This scholarship honours the legacy of Florence Violet McKenzie. The objective of the Award is to support students who are undertaking the School of Cybernetics' Master of Applied Cybernetics.

The Award aims to remove barriers to entry and to encourage diversity through recognition of individual background, education, industry experience and aspiration.

The award will be given to a successful applicant who has never received an undergraduate degree but can demonstrate appropriate experience that is relevant to the field of cybernetics.

The Bill Hickson & Engineers Australia Scholarship for **Masters in Applied Cybernetics**

The Bill Hickson & Engineers Australia Scholarship for Master in Applied Cybernetics will be awarded to successful applicants to the 2025 program who have an undergraduate degree in engineering and are eligible for membership to the Institution

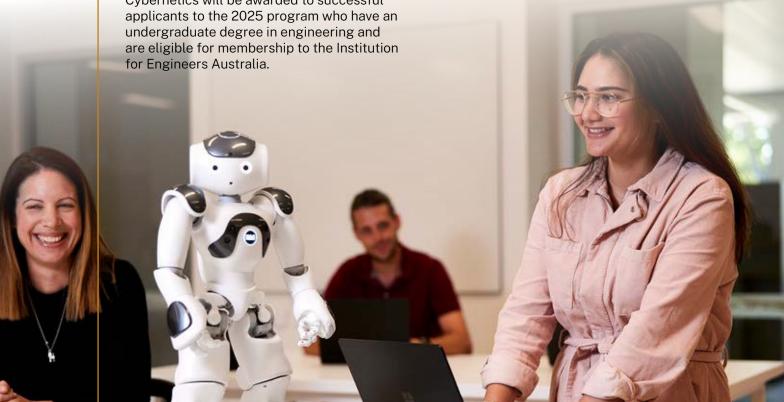
School of Cybernetics Scholarship for Indigenous **Students**

To accelerate Indigenous participation in our School, we are also offering a targeted School of Cybernetics Indigenous scholarship. The objective of the Award is to support indigenous students who are undertaking the School of Cybernetics Master of Applied Cybernetics.

The Award aims to help build the recipient's leadership skills in technology, business and community areas, and to develop a mentoring relationship with prominent professionals in the private and public sectors.

School of Cybernetics Scholarship

The objective of the Award is to support students who are undertaking the School of Cybernetics Masters of Applied Cybernetics. The Award aims to help build the recipient's leadership skills in technology, business and community areas, and to develop a mentoring relationship with prominent professionals in the private and public sectors.



Program outline

Students are expected to dedicate approximately 40 hours per week to the program and commit to full-time, in-person studies for one-year (subject to the usual university holiday breaks). Around 20 hours per week will be in-class contact hours; the remaining hours per week will be reading, listening, reflecting, viewing, discussing and writing, as well as individual and group projects.

Program structure

The Master of Applied Cybernetics is comprised of four main courses that interact and reinforce each other.

Framing Questions about Cybernetic Systems

Semester 1 2025 | 12 units 20 hours per week

This course will start to create cybernetic practitioners who can critically examine new and emerging technological constellations and the questions they raise for human society.

It challenges participants to (a) engage with technological detail and understand the building blocks of the technologies around us, (b) integrate multiple disciplinary perspectives to move from a focus on solving problems to a focus on framing critical questions about cybernetic systems.

Cybernetics Practice

Semester 1 2025 | 12 units 20 hours per week

This course uses a case-study approach focusing on emerging cybernetic systems. It is designed to (a) provide participants with an appreciation of the complexity and dynamics of the settings in which cybernetic systems are planned, designed, built, operated and maintained, and (b) give participants a practical grounding in new and existing approaches they could use to analyse and intervene throughout the cybernetic system life cycle.

Building on the critical framework established in 'Framing Questions about Cybernetic Systems', this course challenges participants to explore the key questions of autonomy, agency and assurance, plus how we decide metrics for success and what the interface looks like when planning, designing, building, operating and maintaining cybernetic systems.

Building Cyber-Physical Systems

Semester 1 & 2 2025 | 24 units 20 hours per week

This course will give participants a hands-on understanding of new and emerging technological constellations and their separate components. Participants will complete a range of lab-based projects to develop an understanding of systems as designed objects which embody values.

They will also gain confidence in designing, building and understanding learnt in 'Questions' and 'Practice'. Through learning-by-doing, participants will complement their existing skillsets and gain the mastery required to build and guide teams developing and understanding new and emerging technologies.

Applied Cybernetics Experience

Winter 2025 or Summer 2025 | 0 units 140 hours total as negotiated with placement organisation

This course will enable students to develop competencies expected of professionals working in business, government, academia or the broader community. There may be internship opportunities available, for which students can apply. A holistic selection process will be used to match the best applicant for each opportunity.

Master of Applied Cybernetics (Advanced)

Courses as above plus the following course.

Capstone Project

Semester 1 2026 (negotiable) | 24 units 40 hours per week

Capstone research and/or industry projects will be established following negotiations between the student, ANU and the potential host organisations or project sponsors, before being offered to students along with other opportunities.

Frequently asked questions

Where and when a can I apply for the 2025 ANU Master of Applied Cybernetics?

You can apply on our website: cybernetics.anu.edu.au.

Applications will open on 03 June 2024 and close on 12pm on 23 August 2024. The selection and interview process will happen from September.

I don't meet the assumed level of knowledge for the Master of Applied Cybernetics. Should I apply?

Yes. The selection panel will review all applications received and make informed decisions on the basis of the information provided by candidates and their suitability against the selection criteria.

If I want to pursue extended research after my Master's program, what options do I have?

The Master of Applied Cybernetics is a one-year, 48-unit degree. For students seeking an additional research experience, including an extended industry placement, they may pursue a Master of Applied Cybernetics (Advanced) and take an additional 24-unit research project course. This can be taken individually over a period negotiated with project supervisors.

Students keen to pursue a PhD but who have not previously undertaken large research projects are encouraged to pursue the Advanced track. The Master's program is mandatory for those wanting to do their PhD at the School of Cybernetics.

What are the fees for the Master of Applied Cybernetics?

Estimated fees for students commencing in 2025: For Master of Applied Cybernetics (1 year; 48 units) **Domestic**: \$37,710 and **International**: \$53,370.

The schedule of fees is regularly updated. Check the Master of Applied Cybernetics' most recent schedule of fees on the Program and Courses page of the Australian National University website.

How will you select the 2025 cohort for the ANU Master of Applied Cybernetics?

Applications will be reviewed against the assumed level of knowledge and criteria for selection (listed under Student Profile). Applications will then be ranked. If you have access and equity considerations that require tailored support, we would be happy to assist. Equity and access scholarships are available, please review the scholarship section.

Contact us at cybernetics@anu.edu.au or +61 2 6125 8121.

Will students receive a scholarship for living expenses?

All applicants will be considered for a scholarship if they are accepted into the program. More information on scholarships is available in the Application Pack under the Scholarships section.

How many students will you accept for 2025?

We will admit up to 20 students in our next cohort.

Will I need to commit 40 hours a week every week?

You will need to commit approximately 40 hours per week to the program during the ANU Semesters 1 & 2 2025, as follows:

Academic Period	Activity - On campus delivery
10 February –14 February	Introduction and orientation week
17 February – 28 March	Term 1, Semester 1
14 April – 43 June	Term 2, Semester 1, including exam period
21 July – 29 August	Term 1, Semester 2
15 September – 14 November	Term 2, Semester 2, including exam period
Academic Period	Activity - Off campus delivery
Winter 2025 or Summer 2026	Student time for professional experience (4 weeks full time equivalent)

What if I can't relocate to Canberra for reasons beyond my control?

The nature of teaching and learning in this program requires in-person delivery. Unfortunately, we cannot hold your place in the program if you are unable to move to Canberra, Australia.

Is it possible to maintain full-time or part-time work during this program provided it doesn't clash with class contact hours?

Due to the nature of the intensive program, group-work requirements and additional non-coursework activities, it will be highly challenging to keep up with external work commitments.

What happens if I get sick or am no longer able to commit to the ANU Master of Applied Cybernetics due to an unforeseen change in circumstances?

We realise that life sometimes gets in the way of best-laid plans. If your circumstances change and you are no longer able to commit to the ANU Master of Applied Cybernetics, the School of Cybernetics team will work with you to find the best way forward based on your situation.

I cannot meet all the time commitments outlined in the application pack, is it OK to miss out on some of the courses or activities?

No. Students are required to study full-time and in-person on the ANU campus in Canberra, Australian Capital Territory.

Will you be running an online information session?

Yes. Our teaching team will be hosting two online information sessions, one each on 25 June and 13 August, 2024. These sessions will run through what to expect from the course, answer any questions you may have, and provide practical advice on the application process. Please make sure that you are subscribed to our mailing list to ensure you receive the event details for this session or check our website for the latest updates.

Does Genevieve Bell teach this course?

ANU Vice-Chancellor and our School's inaugural Director offers students special lectures throughout the course, 2-3 classes per year. We are a dedicated team of diverse teaching staff led by Program Convenor Dr Ash Lenton. We teach the field of applied cybernetics developed by Professor Genevieve Bell and the School of Cybernetics team.

What job prospects and career opportunities do graduates have?

Our alumni have gone on to senior leadership roles including digital, data and AI in federal and state governments, digital non-profits, and industry, as well as on to PhDs with global universities.

Cybernetic practitioners operate across many different fields. The skill sets acquired in the program are transferable. They are applicable to every area of industry that is experiencing rapid change and transformation.

Some of our students return to their current employer and use this course to advance or pivot their careers. Others pursue a change of career, applying new skills to emerging organisational needs. We also see students with an interest in further academic study.

You mention considering "diversity" when accepting students into the program. What do you mean by that?

Diversity is a key element to the success of our Master of Applied Cybernetics Program. We consider diversity to include age, gender, life experience, cultural background, area(s) of interest (both professional and personal). Cybernetics is a transdisciplinary field, and as such we want to have diverse perspectives in the classroom to help shape a holistic approach to addressing issues and managing change.

The course sounds very techy, how true is this?

The courses incorporate elements of history, technology, anthropology, arts and sciences to enable students to have a broad understanding of systems across different disciplines. We are integrating traditional STEM (Science, Technology, Engineering, Maths) fields with HASS (Humanity, Arts and Social Sciences) to create a truly transdisciplinary practice and broad systems thinking approach to create a better, fairer more equitable future for all.

Do I need skills in coding to be able to do the course?

Coding is not a pre-requisite for this course. We select a diverse cohort ensuring all levels of skills and experience are considered. Basic coding with Python computer programming language is part of the program. However, some familiarity and awareness would be advantageous. Guidance in this area is given to students selected for this course.

Are there Commonwealth Supported Places (CSPs) available for this course?

Postgraduate Commonwealth Supported Places are limited in number and highly competitive. There is no application process for a CSP as domestic students who have received an offer of admission to a CSP-eligible postgraduate program are automatically considered prior to commencement each semester.

You can find more information about CSPs on the Postgraduate commonwealth supported places - ANU page.

In previous cohorts we have been able to allocate CSPs to most (if not all) domestic students.

What are the requirements for the portfolio piece? Can you provide examples of how others have approached this in the past?

We are flexible and open to your own creativity and imagination that best represents your personal capability. In the past we have received essays, project descriptions, songs, poems, drawings, animations, websites, game coding, published work, blog posts, and podcasts. We welcome whatever form highlights your unique skillset.

What kind of degree is it, is it a degree in Science or Engineering?

It is a degree in the field of cybernetics. The Master of Applied Cybernetics is a nationally recognised degree by the Federal Department of Education in Australia.

How is the professional experiences course component assessed?

This is a zero-unit course that must be completed as part of the Program. Students select professional placements with partner organisations. Students are required to produce a journal of their placement to reach completion. The journal is assessed on a pass/fail basis.

Is the Master's degree an accredited degree?

Currently we are not an accredited degree.

Is there a research element to this program?

Yes, the Program contains numerous opportunities to pursue individual and collective research, both traditional and non-traditional. The Master's is also registered as a research project at the University. We will need your consent and you will be listed as coinvestigators. You will actively contribute to the research program which is guided by an ethics protocol.

I would like to talk or email the school about further questions I have

Of course, our school office email is cybernetics@anu.edu.au or you can phone us on +61 2 6125 8121



Connect

E: cybernetics@anu.edu.au

T: +61 2 6125 8121

Sign up to our newsletter









TEQSA Provider ID: PRV12002 (Australian University CRICOS Provider: #00120C | ABN - 52 234 063 906