



Australian
National
University



Innovation and Professional Practice

A new suite of multi-disciplinary programs and courses for people who want to change the world

ANU College of
Engineering &
Computer Science



INTRODUCTION

From first semester 2017, students in all disciplines will be able to complement their Bachelor's degree with a Minor, Major or Masters in Innovation and Professional Practice.

We all live and work in a world of rapid technological, economic, environmental and social change. The Minor, Major and Masters in Innovation and Professional Practice (MIPP) build upon the Australian National University (ANU) Vice Chancellor's courses to prepare students from all disciplines with the knowledge, skills and confidence required to build successful careers and achieve great things in this uncertain and exciting world.

The courses involved are multi-disciplinary in enrolment, content and teaching, and provide students with extensive opportunities to 'learn by doing' in multi-disciplinary teams working on complex real-world challenges and opportunities with business, the innovation ecosystem, government, non-government organisations (NGOs) and the broader community.

Students will complement their disciplinary specific undergraduate studies by working across fields to develop knowledge and competencies required of future workers including design thinking, systems thinking, dealing with complexity and uncertainty, creativity, entrepreneurship, innovation, leadership and teamwork.

Along with deep disciplinary knowledge, these generic competencies will set ANU graduates apart, enabling them to make a real difference in a rapidly changing and exciting world.

“The Innovation and Professional Practice courses are for people from any discipline who want to change the world.

Students will learn in multidisciplinary teams by tackling complex, real world challenges with world-leading researchers and experts from business, government, and the broader community.”

Dr Shayne Flint, MIPP Convenor

PATHWAYS

Masters Degree

The Master of Innovation and Professional Practice (MIPP) is a two year full-time program available to students from any discipline who have obtained a Bachelor degree or international equivalent with a GPA of at least five and-a-half on a seven point scale.

All applicants must meet the University's English Language Admission Requirements for Students.

Masters	Group Research and Innovation Project	Ignorance!	Mobilising Research	Entrepreneurship & New Venture Planning	Year 2
		Wicked Problems	Breadth Elective	Breadth Elective	
	Research Methods	Innovation & Entrepreneurship	University Elective	University Elective	Year 1
	Creating Impact	Unraveling Complexity	University Elective	University Elective	

Flexible Vertical Double Degree

The MIPP can be combined with a broad range of undergraduate degrees to form a Flexible Vertical Double Degree. Using this arrangement, student can complete the MIPP by adding a single year to a bachelor degree such as:

- > Bachelor of Arts
- > Bachelor of Commerce
- > Bachelor of Economics
- > Bachelor of Environmental Studies
- > Bachelor of International Relations
- > Bachelor of Music
- > Bachelor of Political Science
- > Bachelor of Science
- > Bachelor of Visual Arts
- > ...and many others.

Masters	Group Research and Innovation Project	Ignorance!	Mobilising Research	Entrepreneurship & New Venture Planning	Year 4
		Wicked Problems	Breadth Elective	Breadth Elective	
	Research Methods	Innovation & Entrepreneurship			Year 3
	Creating Impact	Unraveling Complexity			
Bachelor Degree					Year 2
					Year 1

Minor and Major

The Minor and Major in Innovation and Professional Practice provide undergraduate students with opportunities to develop innovation and professional practice competencies alongside their undergraduate degree.

The Minor and Major also provide pathways to the MIPP. Students who have met specific requirements will be permitted to take postgraduate versions of courses in the Minor and Major that correspond to courses in the MIPP. Students who complete these postgraduate courses will be given 24 units credit for the corresponding courses in the MIPP. In addition, students who complete the Major will be given 24 units credit for the four university electives in the MIPP.

Masters	Group Research and Innovation Project	Ignorance!	Mobilising Research	Entrepreneurship & New Venture Planning	Year 4
		Wicked Problems	Breadth Elective	Breadth Elective	
	Group Research and Innovation Project or Internship	Innovation & Entrepreneurship			Year 3
		Unraveling Complexity			
Bachelor Degree	Creating Knowledge	Research Methods			Year 2
	Leadership	Creating Impact			
				Year 1	

COURSES

Minor

Academic plan: INPP-MIN

Minimum: 24 units

The Minor in Innovation and Professional Practice requires completion of the following courses:

VCUG2004 Creating Impact

Students will learn to use key methods and tools that underpin innovation across disciplines. By applying these methods and tools to simple, real-world problems, students will work in small teams to develop the confidence and skills they need to begin tackling more complex problems and to have a real impact on the world around them.

VCUG3001 Unravelling Complexity

In this course students explore complexity and the connections between economic, historical, social, legal, scientific, engineering, environmental and moral dimensions of complex problems.

MGMT3027 Entrepreneurship and Innovation

This course introduces students to the conceptual foundations of innovation and entrepreneurship and enables students to develop skills in creating novel solutions to real-world challenges.

Research Methods Elective

Students will complete a research methods course offered by Colleges across the university.

Major

Academic plan: INPP-MAJ

Minimum: 48 units

The Major in Innovation and Professional Practice requires completion of the following courses in addition to the courses comprising the Minor in Innovation and Professional Practice:

VCUG2001 Creating Knowledge

A university is one of the places where people gather to make sense of the world. This course brings students from across the ANU together to do just that. It affords students the time and the space to consider the nature of academic inquiry and its relationship to other ways of knowing and creating knowledge.

Leadership elective

Students will complete either *VCUG2002 Leadership and Influence*, or *MGMT2006 Personal Leadership* to develop both their understanding of leadership and their ability to lead.

Project Elective (12 units)

Students will complete a group project and/or an Innovation Internship.

VCUG3100 Group Research and Innovation Project (six or 12 units) provides students with realworld, multi-disciplinary team project experience. Students work in small multi-disciplinary teams to address a complex, real-world opportunity or challenge. Most students will work on projects for an industry, government or university client. Highly motivated students will be given an opportunity to engage with the ACT start-up community to create their own start-up enterprises.

VCUG3200 Innovation Internship (six or 12 units) will enable students to develop competencies expected of professionals working in business, government or the broader community.

COURSES

Masters Degree

Academic plan: MINPP

Duration: two years full-time

Minimum: 96 units

The Master of Innovation and Professional Practice requires completion of the following courses in addition to postgraduate versions of the courses comprising the Minor in Innovation and Professional Practice:

VCPG8001 Wicked Problems

Wicked Problems are problems that have many interacting causes and are difficult to clearly define. They often involve stakeholders with differing and conflicting views, objectives and value systems that can vary over time. Wicked problems are difficult, and often impossible, to solve. Examples of wicked problems include climate change, drug trafficking, terrorism, population health and poverty.

In this course, students will develop an understanding of wicked problems and will learn to use a range of strategies to address them.

VCPG8002 Ignorance!

Ignorance is a neglected topic, and yet it is central to the human condition. This course presents a comprehensive framework for understanding, coping with, and making decisions in the face of ignorance.

Students will learn that ignorance is not always negative, but has uses and benefits in domains from everyday life to the farthest reaches of science, where ignorance is simultaneously destroyed and new ignorance created. They discover the roles ignorance plays in human relationships, culture, and how it underpins important kinds of social capital.

MGMT7161 Entrepreneurship and New Venture Planning

Students will be introduced to the process of identifying new business opportunities, researching and developing a business concept and analysing the resources and strategies necessary to implement them.

VCPG6004 Mobilising Research

This course challenges and supports students to explore the organisation of research for the good of society. How can we identify and integrate what is known from disciplinary research to contribute to the resolution of experienced problems? How can we prioritise a research agenda for the good of society? How are research findings implemented or used in practice?

Students will examine the linked themes of 'integration' and 'implementation' of research to address problems and issues in societal contexts. These include research consultancies and expert witness services, the research and intellectual property base for new businesses, approaches to introducing change to professional practice, and the contribution of research to the development of public policy.

VCPG6100 Group Research and Innovation Project (12 units)

Over the course of their final year, students will undertake a significant group project. They will work with business, government, NGOs and other organisations on wicked problems and opportunities of local, national and global significance. Highly motivated students will be given an opportunity to engage with the ACT start-up community to create their own start-up enterprises.

Breadth Elective (12 units)

Students will complete an Innovation Internship and/or advanced courses from across the university.

VCPG6200 Innovation Internship (six or 12 units) will enable students to develop competencies expected of professionals working in business, government or the broader community.

The opportunity to take six or 12 units of advanced courses allows students to develop deep knowledge and competencies in a specific discipline.

University Electives (24 units)

Elective courses offered by the university.

NOTES

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