



2015 Commercialisation and Entrepreneurship

Masters and Postgraduate Certificate

Core knowledge and skills needed to commercialise and take to market new products, services and processes based on research discoveries, inventions and new ideas.



**CENTRE for
INNOVATION and
ENTREPRENEURSHIP**



Turning innovation and discovery into dollars

The University of Auckland Business School offers the Postgraduate Certificate and the Master of Commercialisation and Entrepreneurship which will provide you with the core knowledge and skills needed to commercialise and take to market new products, services and processes based on research discoveries, inventions, innovations and new ideas.

You will develop an understanding of business concepts and how business decisions are made. This will include learning how to test and validate customer need and market demand, protect intellectual property, obtain funding, sell research-related innovations into national and global markets, and develop successful entrepreneurial ventures.

Industry integration and support

The programme has strong industry support and uses case studies, guest speakers and other interactive and innovative teaching methods. Beginning with an orientation programme and continuing with lectures, backbone sessions, engagement with Spark and the Entrepreneurs' Club, students can hear and learn from iconic New Zealand entrepreneurs, local and international experts, Government and investors. A list of some of the speakers can be found on our website.

Students who continue on to the masters programme bring together all of their learning in a project that investigates the commercialisation of research or innovation from a university, Crown research institute, or a private sector organisation. Previous students have worked on innovations ranging from inductive power transfer to animate computer technology to nano coating.

Who is the programme designed for?

The programme is designed and structured for working professionals, including business developers, marketers, sales people, researchers and PhD students in R&D intensive industries and those who wish to work in this area.

Students come from:

- Hi-tech companies
- Large corporates
- Small and medium enterprises
- Professional service firms
- Incubators
- Crown research institutes
- Technology transfer offices
- Universities
- Economic development agencies
- Government departments

The industries they work in include:

- Computer science
- Engineering
- Animation
- Design
- Optoelectronics
- Biotechnology
- Health science
- Clean energy
- Aviation
- Business
- Marketing
- Law

Their roles include:

- Business developers
- Project managers
- Entrepreneurs
- Owner managers
- Marketers
- Sales
- Technology transfer specialists
- Legal and patent executives
- Product managers
- Software developers
- Research and development managers
- Policy analysts
- Postgraduate students
- Research fellow/Post docs
- PhD students

Meet some of our students and alumni at www.cie.auckland.ac.nz

Meet our students

Tools to apply in hi-tech firms

"The in-depth discussions with like-minded people were really what set the programme apart. I've learnt that commercialisation is as much an art as a science, but one that is repeatable given the right frameworks. The programme challenges students to apply the frameworks sensibly, in a real-world context. The lean start-up techniques have helped me break out of a habitual mindset and consider new ventures."

Philip Cockrell – User Experience Lead, Serato

Benefits across my business

"The programme enabled me to develop a clear vision for my company's commercialisation of new products. I'm sharing my knowledge every day and all parts of the business have benefited. The IP and commercial law parts of the programme really enhanced my understanding in trademark and patent law and I can apply this knowledge to manage my company's growing IP portfolio."

Anna Milne – Co-founder and Creative Director, Junior Learning

Talented, experienced lecturers, industry speakers and cohort

"The lecturers and guest speakers all have good practical experience. Learning modules are designed with a multidisciplinary approach to technology commercialisation, with innovative assessment methods and opportunities to engage in project work. The combination of talented experienced lecturers, the industry based speakers and the interaction with the diverse highly experienced class has made this course an extremely interesting and exciting experience for me."

Jack Shan – Patent Executive, AJ Park

Adding commercialisation skills to scientists

"When I started working on projects that might lead to commercialisation, I realised that knowledge in IP, marketing and finance was necessary. I was so motivated to acquire this skillset that I enrolled in the programme while working and living in Wellington. I would recommend the programme to anyone with a technical or scientific background wanting to develop business skills."

Jérémie Langlet – Scientist, Institute of Environmental Science and Research

Skills and knowledge to develop my career

"The programme provides a toolkit of skills and knowledge to go forward with your career - in fact, I didn't realise my day job was a marketer until I took the programme. The course content was very good, particularly the legal portion, which was salient to my role. The mix of students was interesting, and I made great friends and contacts. I'd recommend the programme to anyone wanting to progress their career."

Brett Telfer – Programme Manager Special Projects, Callaghan Innovation

Expanding and developing a multidisciplinary skillset

"In this programme, I have enjoyed the opportunity to expand my multidisciplinary skillset and gain deeper and more balanced knowledge in commercialisation and entrepreneurship. I also really value the opportunity to stretch my comfort zone and push my boundaries. I have gained product and business development frameworks, as well as innovation methodology and best practices that I can apply to my day-to-day job."

Ginger Li – Head of UX, Spendvision

Learning new frameworks to address uncertainty

"The programme has provided me with a wide range of perspectives, tools and experiences that I readily draw from on a daily basis. The frameworks relating to entrepreneurship and innovation have been particularly useful in helping me understand and make sense of the ever-present uncertainty associated with early stage ventures and start-ups. Being part of such a diverse class has been fun, rewarding and insightful."

Huw Jones – Director, U-PARKIT Corporation

Enhancing my corporate career

"The programme has given me a greater understanding on how to introduce new ideas and solutions to the market place. On the surface it may seem that this programme is not applicable to people who work for large corporations. However, what you quickly learn is that companies that do not innovate are at risk of displacement, shrinking revenues and ultimately unhappy clients."

Maheen Mudannayake – Account Director, General Electric



Meet some of our teaching team and guest lecturers

Professor Kenneth Husted

Kenneth joined the Business School in 2005 from Copenhagen Business School. His primary research interests are in the fields of management of R&D, innovation and research management, corporate entrepreneurship and knowledge management. He is also an entrepreneur, having established businesses in Denmark and New Zealand, and has extensive consulting experience in the innovation and research management fields.



Dr Brian Karlson

Brian is the Co-Founder and CEO of TransferCar an online relocation service helping rental car companies in United States, Australia and New Zealand find relocation drivers. Prior to this Brian worked in the Centre for Innovation and Entrepreneurship as the Programme Director for the Master of Commercialisation and Entrepreneurship and has also been affiliated with the Department of Management and International Business at the University of Auckland Business School as a PhD graduate and teaching assistant. He has taught several courses within entrepreneurship, innovation, research commercialisation and strategy at both undergraduate and postgraduate level.



Professor Rod McNaughton

Rod is a Professor in the Department of Management and International Business at the University of Auckland. Rod's specialty is international marketing strategy, focusing on the rapid entry into overseas markets by knowledge-intensive new ventures. Prior to joining the University of Auckland, Rod was Eyton Chair in Entrepreneurship and Director of the Conrad Business, Entrepreneurship and Technology Centre at the University of Waterloo.



Dr Kjesten Wiig – National Manager Commercialisation for Ministry of Business, Innovation and Employment

Kjesten began her career by working for Sention Inc, a company formed on the basis of her post-doctoral work at Brown University. At Sention she directed the preclinical programme and was integrally involved in the intellectual property processes, obtaining angel and venture capital funding, new drug applications to the FDA and the advancement of compounds into clinical trials. Kjesten went on to work at Galenea, a spin-out company from MIT as the Director of the pre-clinical research team. She now brings her experience in creating value out of science to MBIE where she serves as the National Manager of Commercialisation.



Adjunct Professor Dr Peter Lee

Peter is the Chief Defence Technologist for the New Zealand Defence Force and a consultant in innovation and commercialisation. Peter was the CEO of UniServices, the commercialisation arm of the University of Auckland and previously the Vice President of Research and Development for International Paper Company based in New York. In 2013 he received The Thomson Medal from the Royal Society of New Zealand for his outstanding contribution to commercialisation of scientific research in New Zealand.



Professor Shaun Hendy

Shaun is a Professor of Physics at the University of Auckland and an Industry and Outreach Fellow at Callaghan Innovation. He is a sought-after public speaker and commentator on science and innovation matters. In 2012 he won the Callaghan Medal and the Prime Minister's Science Media Communication Prize and in 2013 he co-authored with the late Sir Paul Callaghan, 'Get off the Grass: Kickstarting New Zealand's Innovation Economy'.



Bridget Liddell, MNZM – Chief Executive, White Cloud Dairy Innovation

Bridget has global leadership and commercial experience, gained as chief executive, director and Chairperson of a number of global companies and enterprises. She is currently Chief Executive of White Cloud Dairy Innovation, Chair of ArcAngels, General Partner at 212 Equity Management based in New York, and a member of the University of Auckland Business School advisory board. She has been on the boards of the New Zealand Superannuation Fund, SkyCity, Fisher & Paykel Appliances Holdings, BioVittoria and KEA New Zealand. Previous roles include Chair of the NZTE US Beachhead programme, inaugural Chair of The Icehouse, Director of UniServices, member of the US/NZ Council in Washington DC and one of the leaders of the Knowledge Wave Trust in 2001.



How is the programme structured and delivered?

Postgraduate Certificate

- 60 points from: COMENT 708 A and B, 703 and 704.

Masters (120 points)

- 60 points from: COMENT 708 A and B, 703 and 704 *and*
- 60 points from: COMENT 705 (45 points) and approved courses at Level 700 at The University of Auckland (15 points).

Year 1

Business Analysis for Commercialisation and Entrepreneurship (COMENT 708 A&B, Yr1 - 30 pts)

Develops a cross-disciplinary set of competencies for research commercialisation, entrepreneurship and technology ventures by drawing upon core concepts, models and knowledge from the disciplines of Accounting/Finance, Marketing, IP and Commercial Law. Emphasis will also be placed on linkages between the disciplinary concepts and methods and how they are applied in specific situations.

Commercialisation of Science and Technology (COMENT 703, Yr1 - 15 pts)

Addresses the research-business interface, commercialisation pathways and processes and how IP based projects are evaluated and assessed as they advance through stages of development. Examines the product development process and different technology transfer models including licensing, partnering, spin-outs and start-ups. Introduces related issues of market and competitor research, IP valuation, risk management, and the financing of different stages in the commercialisation process.

Entrepreneurship for Science and Technology Ventures (COMENT 704, Yr1 - 15 pts)

Studies how entrepreneurs think and act in organising, motivating and leading high performance teams, and introducing and selling innovative science and technology based products and services into national and international markets. Examines how entrepreneurs create and capture revenues and profits by recognising, assessing, and marketing opportunities for new products or services based on science and technology; developing new strategies and business models; validating markets; and selling into industrial enterprises and markets.

Specifically designed and structured for working professionals and PhD students and taught on a part-time basis, this programme can be successfully completed while working, or undertaking a full-time role or programme of study.

Each course will generally be delivered fortnightly during each quarter and will be held on Fridays (3-7pm) and Saturdays (9am-12noon) and will involve in-class seminars, case discussions and reading as well as individual and team assignments.

Year 2

Project in Commercialisation (COMENT 705, Q1 & Q2, Yr2 - 45 pts)

A supervised project requiring the application of knowledge and skills for the commercialisation of a creative application of science and technology. The commercialisation project will involve the identification and analysis of complex, open-ended problems and issues associated with commercialisation. A written commercialisation report will present findings and a plan for commercialisation. Projects will be sourced from universities, CRIs and science and technology based enterprises.

Elective course

To complete the Masters students are required to take a 15pt elective course. They can either take the one listed below or another course approved by the Academic Director.

Special Topic – Contemporary Issues in Innovation, Commercialisation and Entrepreneurship (COMENT 706, Yr 1 or 2 - 15pts)

This course provides an introduction to a range of contemporary issues with relevance for the practice of innovation, research commercialisation and entrepreneurship in New Zealand and internationally. The course examines New Zealand's innovation landscape by building an understanding of the links between innovation, productivity and economic growth. This course will also address the funding landscape in New Zealand including resources available for the management and funding of R&D.



Innovation and entrepreneurial ecosystem

The Postgraduate Certificate/Master of Commercialisation and Entrepreneurship is supported and integrated with the innovation and entrepreneurial ecosystem at the University of Auckland, as well as the ecosystems regionally and nationally. The Centre for Innovation and Entrepreneurship (CIE) plays a key role in ensuring the ecosystem is integrated in the programme through guest speakers, projects, panellists and numerous other opportunities.

Some of the elements of the innovation and entrepreneurship ecosystem at the University of Auckland are described below.

CENTRE for INNOVATION and ENTREPRENEURSHIP

CIE nurtures business-savvy scientists, engineers, technologists and creative professionals by

developing an entrepreneurial and innovation curriculum that is built on experiential learning and draws on the expertise and insights of the faculty and the business community. CIE was established in 2010 to further foster and develop entrepreneurial activities and initiatives at the University of Auckland.

Key initiatives include:

- Educating students by creating curricula in entrepreneurship, innovation and commercialisation and a portfolio of project-linked internships and experiential programmes
- Inspiring and motivating students with presentations by outstanding business leaders
- Providing network opportunities for staff and students through workshops, seminars and open forums with industry
- Supporting the University of Auckland Entrepreneurship Challenge and the student-led Spark initiative
- Evolving the entrepreneurial ecosystem within and beyond the University of Auckland

www.cie.auckland.ac.nz

ICEHOUSE



The Icehouse is a development factory of owner managers and entrepreneurs that aims to shape the future of the New Zealand economy. Through nationwide events, workshops and

programmes they give startups and SMEs access to the expertise, networks and funding they need to achieve their growth aspirations. It was founded in 2001 by the University of Auckland Business School as a collaborative partnership with industry partners. The Icehouse was named one of the top ten technology incubators of the world by Forbes Magazine in 2010.

www.theicehouse.co.nz

Spark

THE UNIVERSITY OF AUCKLAND
ENTREPRENEURSHIP PROGRAMME

The Spark programme has fostered entrepreneurs who between them have created more than 110 startup ventures, which have collectively raised \$143 million in investment, employ more than 350 people and sell their products and services into more than 30 countries. Some notable alumni companies include PowerbyProxi and Telemetry Research, as well as Fishpond, ecoPortal, IMeasureU, Transfercar, and SavY. Launched in 2003 as a partnership between students, the Business School and other University faculties, Spark is a highly successful entrepreneurial development programme.

www.spark.auckland.ac.nz

uniservices

UniServices, a wholly owned company of the University of Auckland, manages the University's intellectual property.

UniServices is the innovation interface between organisations and the University of Auckland. It provides a single, business-oriented portal to the knowledge and capabilities of the University adding value to businesses through contract research and consulting, delivering customised education programmes and commercialisation and investment - by investing in emerging technologies and capabilities. UniServices operates in 42 countries and in the last decade has cumulative revenue of \$1 billion.

www.uniservices.co.nz

Entrepreneurs' Challenge

The Entrepreneurs' Challenge makes available \$1 million in funding for high potential New Zealand SMEs on an annual basis to help them successfully execute initiatives that will ultimately create opportunity and prosperity for all New Zealanders. Since launching in 2009, ten companies have been awarded funding including Rose & Thorne, EcoStock, Manuka Health, K9 Natural, Jucy Group and Biomatters.

www.entrepreneurschallenge.co.nz

Contact the Centre for Innovation and Entrepreneurship

For more information or to make an appointment, please contact Maria Aquino:

Email: cie@auckland.ac.nz **Phone:** +64 9 923 4985 or 0800 227 337 **Web:** www.cie.auckland.ac.nz

Disclaimer

Although every reasonable effort is made to ensure accuracy, the information in this document is provided as a general guide only for students and is subject to alteration. All students enrolling at the University of Auckland must consult its official document, the current Calendar of the University of Auckland, to ensure that they are aware of and comply with all regulations, requirements and policies.