

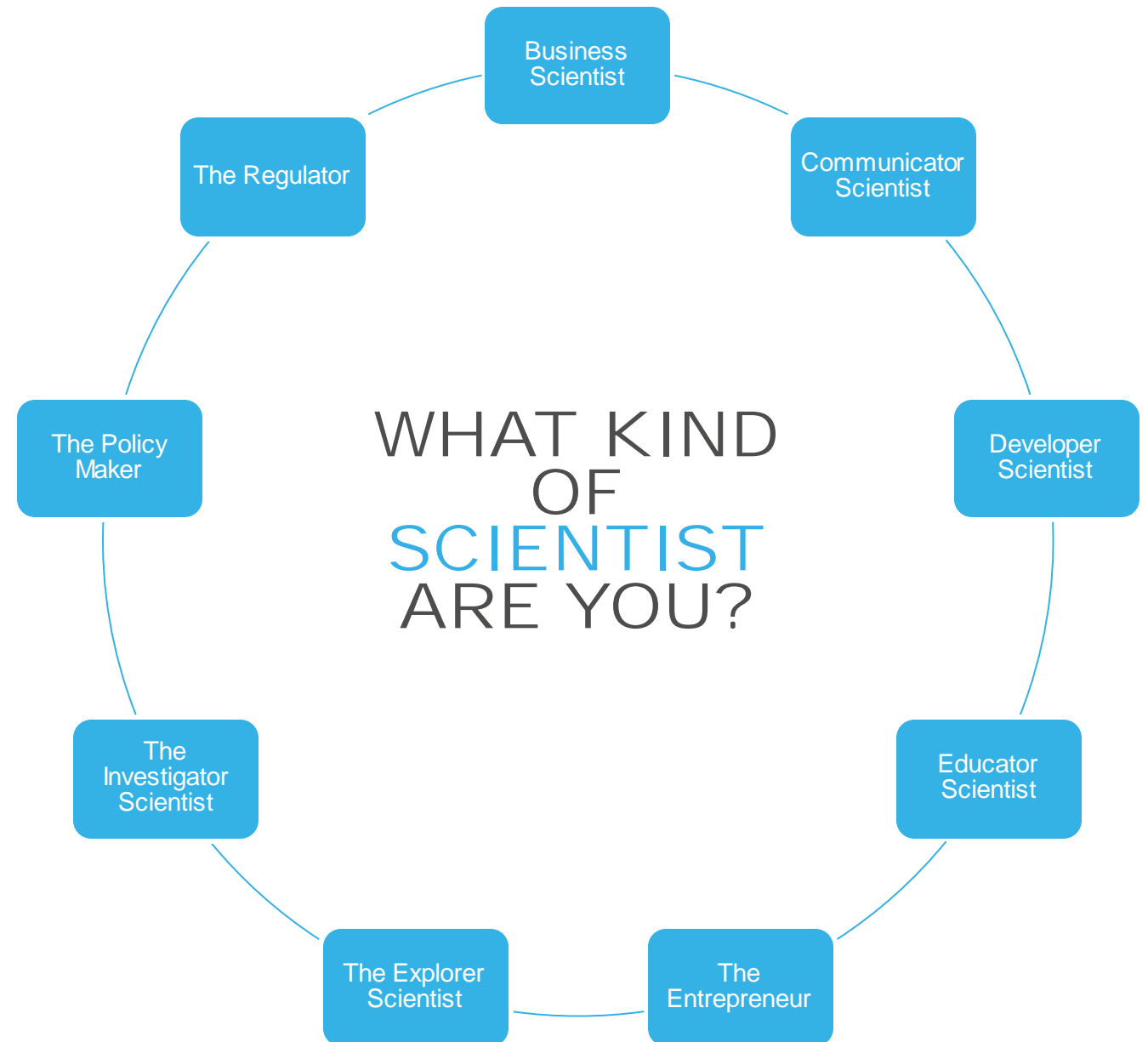
BACHELOR OF SCIENCE  
PROFESSIONAL SKILLS  
ELECTIVE PATHWAYS -  
CALLAGHAN



These pathways have been created to provide guidance for Bachelor of Science students wishing to build their professional skillset with their elective courses.

Each pathway has been selected to complement the content of the Bachelor of Science program with consideration of pre-requisites. Please note that these pathways are suggestions only and will not be noted formally on the final degree certificate.

Students are welcome to enrol in any elective provided that they satisfy the pre-requisites, and they adhere to the rules regarding maximum number of 1000 level courses in their program. For a full list of UON courses, visit the [course handbook](#).



# THE BUSINESS SCIENTIST

Business Scientists combine their understanding of science, technology and business to excel across all industries. They're not only in demand in obvious fields like pharmaceuticals or IT, but also finance, insurance, marketing, product development and many more.

Choose 40 units from below (with a recommended maximum of 20 units at 1000 level):

<b>ECON1001</b>	Microeconomics for Business Decisions
<b>ECON1002</b>	Macroeconomics in the Global Economy
<b>LEGL1001</b>	Foundations of Law
<b>IBUS1001</b>	Managing International Business Risk
<b>MNGT1001</b>	Introduction to Management
<b>MNGT1002</b>	Introduction to Entrepreneurship and Innovation
<b>MKTG1001</b>	Foundations of Marketing
<b>LEGL2002</b>	Law of Business Organisations
<b>MNGT2002</b>	Business Venturing
<b>MNGT3009</b>	Business Development and Growth
<b>STAR4000</b>	Innovation, Start-ups and Entrepreneurship
<b>BIOL6001</b>	Science Policy & Commercialisation
<b>LAWS6113</b>	Law for Start-ups

# THE COMMUNICATOR SCIENTIST

Communicators share science with the world. They find creative, targeted ways to communicate information to a wide range of audiences, and work across diverse industries like TV, advertising, public affairs, museums and cultural institutions.

Complete the following:

**SCIE2100** Science & Professional Communication

Choose 30 units from below (with a recommended maximum of 20 units at 1000 level):

<b>CMNS1000</b>	Introduction to Digital Communication
<b>CMNS1005</b>	Media Production: Cinematography
<b>CMNS1090</b>	Introduction to Professional Writing
<b>CMNS1230</b>	Foundations of Media Production
<b>CMNS1280</b>	Introduction to Journalism
<b>EDUC1751</b>	Knowledge & Communication Technologies
<b>CMNS2500</b>	Developing Multimedia Publications
<b>HUBS2410</b>	Biomedical Science Communication
<b>INFT3950</b>	Games Design
<b>STAT3100</b>	Systems Thinking for an Integrated Workforce
<b>BIOL6001</b>	Science Policy & Commercialisation
<b>STEC6104</b>	Evidence-based STEM investigations

# THE DEVELOPER SCIENTIST

Developers take other people's discoveries and transform them into something practical – like a new product, service or technology. They are practical problem-solvers who embrace challenges with fresh eyes and new ideas.

Complete the following:

<b>MECH1110</b>	Mechanical Drawing/CAD and Workshop Practice
<b>MECH2110</b>	Mechanical Engineering Design 1
<b>MECH2430</b>	Mechanics of Solids 1
<b>MECH3110</b>	Mechanical Engineering Design 2

# THE EDUCATOR SCIENTIST

Educators share their passion and knowledge of science with the world. They help students in colleges, universities, and other institutions like museums, to understand scientific concepts, and inspire them to use their new knowledge to make the world better. They also develop tools and methods to improve the way science is taught, and information is received.

Choose 40 units from below (with a recommended maximum of 20 units at 1000 level):

<b>EDUC1090</b>	Specialist Studies in Mathematics 1
<b>EDUC1101</b>	Curriculum, Assessment & Pedagogy
<b>EDUC2052</b>	Specialist Studies in Science 1
<b>EDUC2101</b>	Introduction to Specialist Studies
<b>EDUC2200</b>	The Future of Learning & Teaching
<b>EDUC3810</b>	Teaching Science with the Creative Arts
<b>EDUC4110</b>	STEM – An exercise in Integration
<b>EDUC4807</b>	Educating for Ecologically Sustainable Communities
<b>SCIE2100</b>	Science & Professional Communication
<b>MATH2910</b>	Thinking and Working Mathematically
<b>MATH3910</b>	Mathematics With a View to Teaching

# THE ENTREPRENEUR

Entrepreneurs make big ideas a reality. They combine their knowledge of science and business with an entrepreneurial flair, embracing every opportunity to bring new innovations to the world.

Complete the following:

<b>MNGT1001</b>	Introduction Management
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<b>MNGT1002</b>	Introduction to Entrepreneurship and Innovation
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<b>MNGT2004</b>	Managing Innovation
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Choose 10 units from below:

<b>MNGT3008</b>	Advanced Innovation Management
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<b>MNGT3009</b>	Business Development and Growth
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# THE EXPLORER SCIENTIST

Explorers take risks. They embrace a bold approach to research in pursuit of new scientific discovery. They aspire to break new ground across a diverse range scientific fields, and it's hard to know what they might find. Whatever it is, it'll be something new.

Complete the following:

<b>SENG1110</b>	Object Oriented Programming
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<b>COMP1140</b>	Database and Information Management
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<b>COMP3350</b>	Advanced Databases
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Choose 10 units from below:

<b>STAT2000</b>	Applied Statistics and Research Methods
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<b>STAT2020</b>	Predictive Analytics
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<b>STEC6104</b>	Evidence-based STEM investigations
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# THE INVESTIGATOR SCIENTIST

Investigators are experts at finding connections between ideas and information, and using this to map the scientific landscape. By working in a team to plot the bigger picture, they allow others to find their way more easily.

Choose 40 units from below (with a recommended maximum of 20 units at 1000 level):

<b>NHIL1001</b>	Natural History Field Studies 1
<b>NHIL1003</b>	Natural History Field Studies 2
<b>NHIL1005</b>	Botanical Scientific Illustration
<b>NHIL2001</b>	Advanced Field Studies
<b>NHIL2002</b>	Natural History Theoretical Studies
<b>NHIL2004</b>	Anatomical and Medical Illustration

# THE POLICY MAKER

Policy Makers use their scientific knowledge and understanding to help shape government policy. Through excellent communication and negotiating skills, they ensure decisions are grounded in sound, scientific evidence.

Choose 40 units from below (with a recommended maximum of 20 units at 1000 level):

<b>LEGL1001</b>	Foundations of Law
<b>POLI1010</b>	Australian Politics and Government
<b>SOCS1100</b>	Professional Practice and Key Debates in Social Sciences
<b>POLI2180</b>	Politics, Policy and Government
<b>SOCS2100</b>	Organisational Management and Social Behaviour
<b>SOCS2300</b>	Ethical Debates in the Social Sciences
<b>SOCS2400</b>	Applied Social Research
<b>POLI3001</b>	Organisations, Politics and Society
<b>POLI3130</b>	Principles of Public Policy
<b>POLI3150</b>	Foundations of International Relations
<b>SOCS3100</b>	Policy Development, Program Management and Evaluation
<b>BIOL6001</b>	Science Policy and Commercialisation

# THE REGULATOR SCIENTIST

Regulators are all about safety. They ensure that new science and technology is safe and secure. They require excellent communication skills and must build trust and confidence among other scientists and the public. For example, Regulators check that our food is safe to eat.

Complete the following:

<b>LEGL1001</b>	Foundations of Law
<b>ENVS2002</b>	Environmental Legislation and Planning
<b>LEGL2002</b>	Law of Business Organisations

Choose 20 units from the following:

<b>ERAR6001</b>	Site Assessment and Planning
<b>ERAR6006</b>	Ecological Risk Assessment
<b>LAWS6037</b>	International Environment Law and Policy
<b>LAWS6038</b>	Law and Economics of Climate Change
<b>LAWS6112</b>	Food and Wine Law
<b>LEGL6004</b>	Law for Workplace Health and Safety
<b>LEGL6005</b>	Co-operative Law and Governance