Career Adviser Briefing

August 2022

Wominjeka!

Acknowledgement of Country

RMIT University acknowledges the people of the Woi wurrung and Boon wurrung language groups of the eastern Kulin Nation on whose unceded lands we conduct the business of the University.

RMIT University respectfully acknowledges their Ancestors and Elders, past and present.

RMIT also acknowledges the Traditional Custodians and their Ancestors of the lands and waters across Australia where we conduct our business.

Artwork 'Luwaytini' by Mark Cleaver, Palawa

Agenda

PRESENTATION	SPEAKERS
STEM change introduction	Professor Angela Carbone
Engineering	Professor Margaret Jollands
Health Science	Dr. Elizabeth Verghese
Biomedical Science	Dr. Elizabeth Verghese
Science	Professor Mark Osborn
Aviation and Flight Training	Associate Professor Chrystal Zhang / Paul Wyborn
Information Technology	Dr. Santha Sumanasekara
Student Recruitment Updates and Announcements	Kate Tangas

Professor Angela Carbone

Associate Deputy Vice-Chancellor, Learning, Teaching and Quality - STEM College

How RMIT Has Transformed STEM for 2023 and Beyond

Why RMIT Has Transformed STEM

- **At RMIT we have a STEM College**

- **STEM is instrumental to ensuring that we all enjoy a future that's healthy, sustainable and connected.**

- **We want our STEM students to discover their interests, pursue their passions, and graduate with the skills to navigate** a complex and fast changing world.

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Drivers for change

Ready for work in the 21ˢᵗ century

- Discipline and cross-discipline depth and breadth and industry exposure in all programs

Lifelong Learning

- Flexible entry and exit
- Multi-directional pathways that work for multiple audiences

Future Ready

- Ensure flexibility and responsiveness of our programs and learning products for disrupted futures.

STEM Program
Features

Flexibility

Common First Year

RMIT has a variety of STEM subjects you will experience in year 1, which will give you a grounding in the fundamentals for a variety of STEM disciplines.

This will give you an opportunity to experience a range of options before you choose your major.

Cross Disciplinary Minor

New cross-disciplinary minors give you the flexibility to explore disciplines outside of your main discipline to craft your own degree.

Combine chemistry and physics, information technology with business, or even switch to a new major if you find your first choice doesn't suit you. The opportunities are endless.

Double Major

Double Major lets you not only specialise in your preferred discipline but also a second field of your choice.

Practical Industry Experiences

Bootcamp

Boot Camp model breaks your learning experience into two parts: first a focused intensive to learn theory and gain a grounding in the subject, then a studio session in which you apply these skills.

Industry Partnered Experience

Industry Partnered Experience lets you count up to 6 months full time or 12 months part time of relevant work experience in STEM towards your program credit!

Expand your resume and grow your professional network—all while working towards completing your degree."

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STEM Program
Features

Preparing for a tech rich world*

25% of courses wholly online

- 1 course per semester delivered wholly online
- Balance university, work, and life

Future Technology Skills Platform Courses

We are embedding in our STEM degrees the future focused technology skills you will need to succeed in your career.

1. Foundations of AI for STEM
2. STEM for Sustainable Development
3. The Future of Work
4. Cyber-Physical-Biological Systems: Technology for a Digital World

Digital Labs

All courses with laboratory classes provide at least one digital lab experience

Examples include:

- Open STEM labs,
- Labster,
- AR/VR, CAE, simulations, etc.

By introducing new technology like virtual labs, AR and VR, you still get a high-quality experience, which fits with your life

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professionally accredited degrees may not include all of these features

Future Technology Skills Platform Courses

Foundations of AI for STEM

Develops AI literacies in STEM students through authentic practical assignments, industry case studies & dialogue.

STEM for Sustainable Development

Equips students with a sustainability focus through global strategies & the solving of industry challenges.

Innovation Ecosystem and the Future of Work

Positions students as STEM professionals living the future of work & creating value through design thinking.

Cyber-Physical-Biological Systems: Technology for a Digital World

Students as co-creators learning about & experimenting with computational, physical and biological systems.
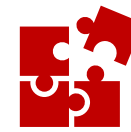
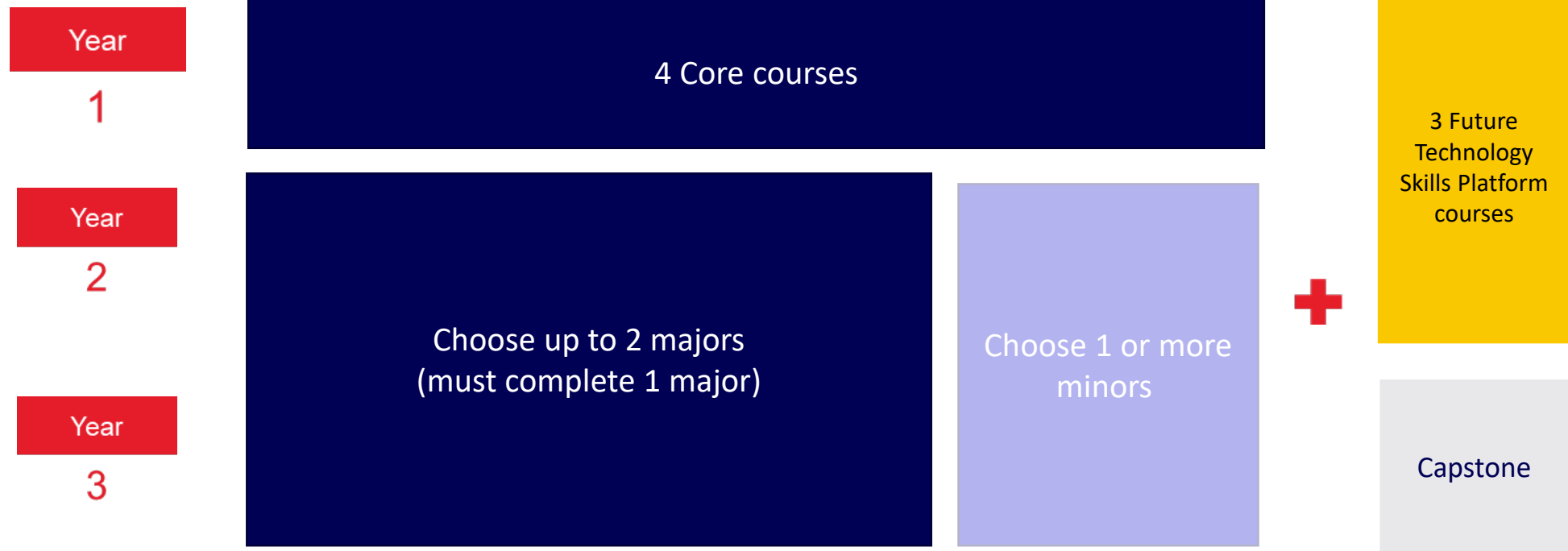Multidisciplinary   Industry relevant   Virtual labs   Large-scale   Custom built canvas shell   Modular   Authentic Assessments

General Program Structure

Year 1	4 Core courses		3 Future Technology Skills Platform courses
Year 2	Choose up to 2 majors (must complete 1 major)	Choose 1 or more minors	**+**
Year 3			Capstone

*Source: LTSC summary on SCA presented by ADVC LT&Q Angela Carbone

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Program Components

48CP

First Year block

- Shared across multiple majors and minors
- Should address foundational knowledge and skills
- Opportunity for students to experience a range of options before choosing a major
- Contains one Partnered Learning Experience

48CP

Minor block

- Program should incorporate a cross-disciplinary minor where possible
- Contains one Industry Partnered Learning Experience

96CP

Major block

- Majors are built on the First Year Block
- A major lets you not only specialise in your preferred discipline, but also a second field of your choice
- Double majors are an alternative to double degrees
- Contains two Partnered Learning Experiences

12CP

Capstone block

- Capstone experience allows students to synthesise all their learnings and work on real industry projects in their final year
- Current RMIT policy stipulates that a capstone is required for Bachelor Honours degrees
- Can be incorporated into a major or as a standalone

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Hear more about

Engineering

Health Science

Biomedical Science

Science

Aviation and Flight Training

Information Technology

Thank you!

Any questions?

Professor Margaret Jollands
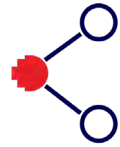
Dean, Learning & Teaching, Engineering & Technology
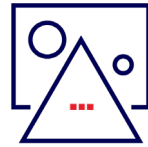
Engineering

At RMIT

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Major program updates

New common structure across all programs

With majors and minors

Flexible first year still available

Math prerequisite changes

All programs now only require Further Maths
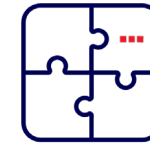
Business double degrees now allow for any business major

New common *Future Technologies Skills Platform* courses

Bachelor of Engineering program overview

Old program name	New program name	Amendments
• Bachelor of Engineering (Honours) (1 year)	No change to title	• No changes
• Bachelor of Engineering (Advanced Manufacturing and Mechatronics Engineering) (Honours) • Bachelor of Engineering (Aerospace Engineering) (Honours) • Bachelor of Engineering (Biomedical Engineering) (Honours) • Bachelor of Engineering (Civil Engineering) (Honours) • Bachelor of Engineering (Chemical Engineering) (Honours) • Bachelor of Engineering (Electronic and Computer Systems Engineering) (Honours) • Bachelor of Engineering (Electrical Engineering) (Honours) • Bachelor of Engineering (Environmental Engineering) (Honours) • Bachelor of Engineering (Mechanical Engineering) (Honours) • Bachelor of Engineering (Sustainable Systems Engineering) (Honours)	No changes to titles	• Common First Year Block • Minors now available • Prerequisites changed to any Maths
• Bachelor of Engineering (Automotive Engineering) (Honours) • Bachelor of Engineering (Computer and Network Engineering) (Honours)		• Not open for 2023 intake

# Bachelor of Engineering /Double Degree program overview

Old program name	New program name	Amendments
• Bachelor of Engineering (Adv Manufacturing & Mechatronics)(Hons)/Bachelor of Business (Intern Bus) • Bachelor of Engineering (Aerospace Engineering) (Honours)/Bachelor of Business (Management) • Bachelor of Engineering (Chemical Engineering(Honours)/Bachelor of Pharmaceutical Sciences • Bachelor of Engineering (Civil and Infrastructure) (Honours)/Bachelor of Business (Management) • Bachelor of Engineering (Computer and Network Engineering) (Honours)/Bachelor of Computer Science • Bachelor of Engineering (Electronic and Computer Systems Engineering)(Honours)/Bachelor of Business (Management • Bachelor of Engineering (Mechanical Engineering) (Honours)/Bachelor of Business (Management) • Bachelor of Engineering (Mechanical Engineering) (Honours)/Bachelor of Industrial Design (Honours) • Bachelor of Environmental Science/Bachelor of Engineering (Environmental Engineering) (Honours)* • Bachelor of Science (Applied Chemistry)/Bachelor of Engineering (Chemical Engineering) (Honours)*	No change except for double degrees with "Bachelor of Business (Major)" changed to "Bachelor of Business"	• Common First Year Block • Minors now available • Prerequisites changed to any Maths • Business double degrees open to any business major
• Bachelor of Engineering (Automotive Engineering) (Honours)/Bachelor of Business (Management) • Bachelor of Engineering (Automotive Engineering)(Honours)/Bachelor of Industrial Design (Honours) • Bachelor of Engineering (Chemical Engineering) (Honours)/Bachelor of Business (Management) • Bachelor of Engineering (Chemical Engineering) (Honours)/Bachelor of Science (Biotechnology)* • Bachelor of Engineering (Mechanical Engineering) (Honours)/Bachelor of Science (Biotechnology) • Bachelor of Engineering (Sustainable Systems Eng) (Honours)/Bachelor of Industrial Design (Honours) • Bachelor of Engineering(Sustainable Systems Engineering) (Honours)/Bachelor of Business(Management) • Bachelor of Science(Food Technology & Nutrition)/Bachelor of Engineering(Chemical Engineering)(Hons)*	-	• Not open for 2023 intake

*Degrees also listed under Science

Undergraduate Bachelor of Engineering Programs

Advanced Manufacturing and Mechatronics Engineering
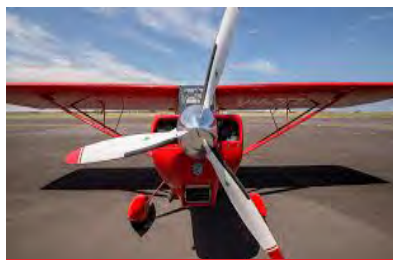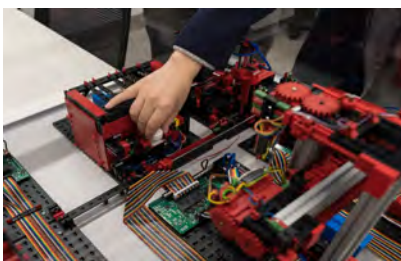

Aerospace Engineering

Biomedical Engineering

Chemical Engineering

Civil Engineering

Electronic and Computer Systems Engineering

Electrical Engineering

Environmental Engineering

Mechanical Engineering

Sustainable Systems Engineering

Select double degrees with Business, Science, Computer Science and Industrial Design

What's next...

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Bachelor of Engineering (Honours)

Structure of Bachelor Engineering (Honours)

- One common year then transfer to the second year of the BENG single degree of your choice

Prerequisites

- English
- Any Maths

Duration

- Bachelor Engineering (Honours) 1 year
- Single Degrees are 4 years
- Double degrees are 5 years

Pathways for Advance diploma and Associate Degrees graduates to enter BEng Year 3

Location

- Depends on the program
- City or City/Bundoora

Why Engineering

At RMIT

Top 100

Among the world's top 100 universities in civil and structural and electronic engineering.

Pathways

A range of RMIT advanced diplomas and associate degrees provide pathways into engineering bachelor degrees

Flexible first year

Unique first year structure where students choose up to 3 "tastes of" subjects.

Any maths prerequisite

Students study an introduction to engineering maths to get their skills up to speed

Globally recognised

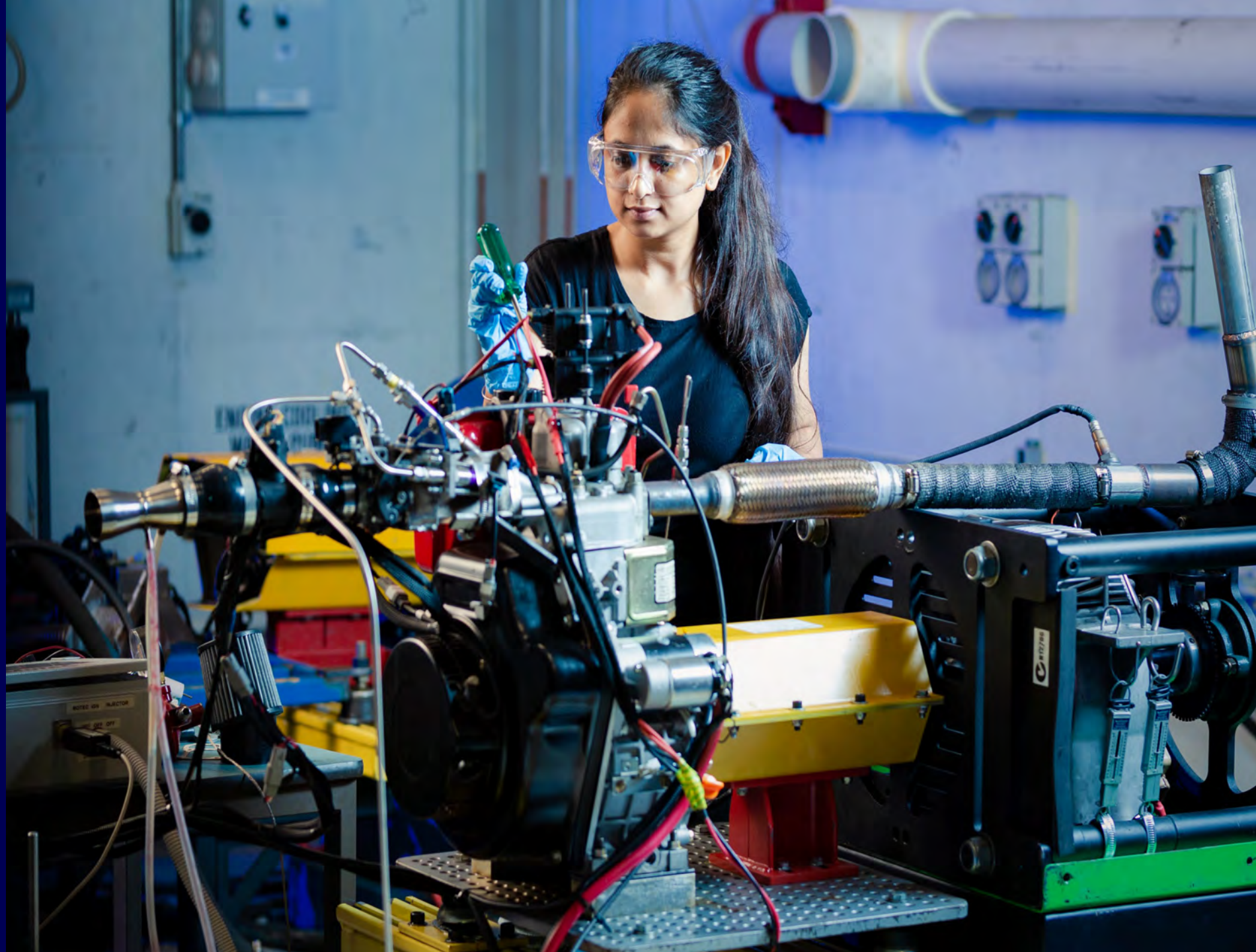As a signatory to the International Engineering Alliance, RMIT's degrees are recognised by the Washington Accord and the Dublin Accord

Industry Connected

- Work placements
- Industry projects with both Australian and global companies
- Accredited by Engineers Australia

Hands on opportunities

- Design based

- Team-based

- Creativity and problem-solving

- Industry projects

Global Opportunities

- RMIT International Industry Experience and Research Program (RIIERP)

- Humanitarian Engineering study tours

- Exchange program
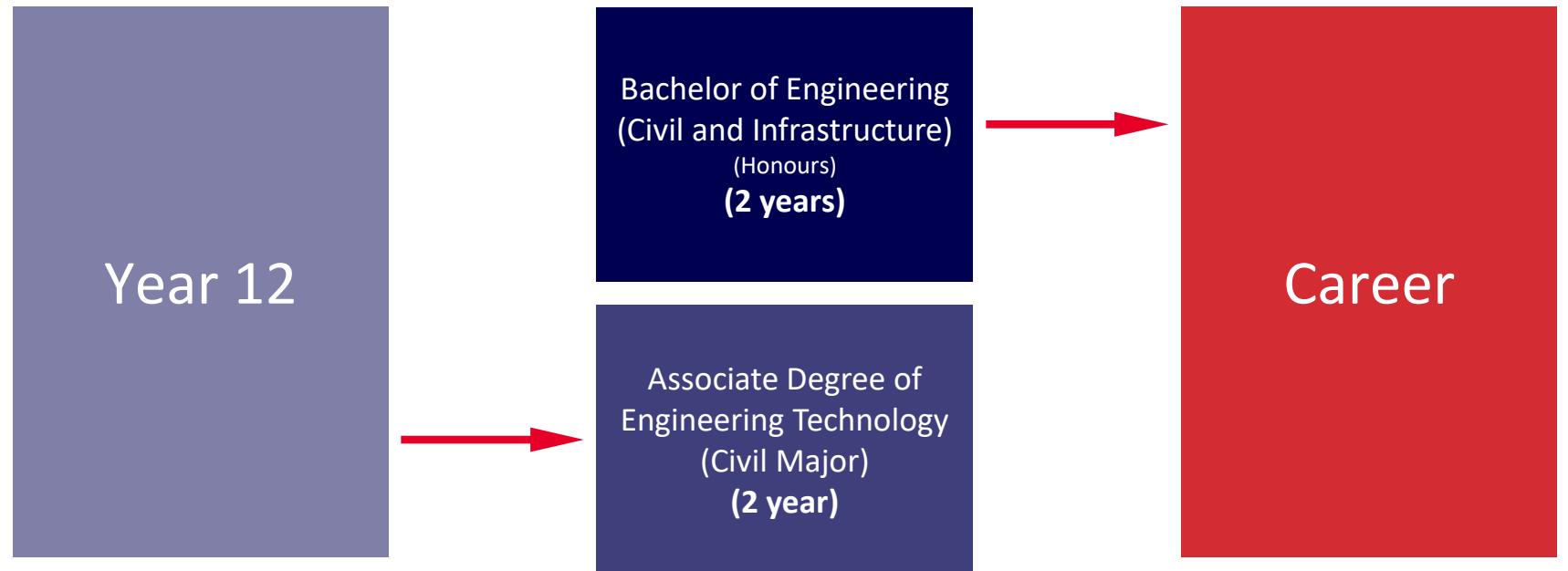
Clubs and Societies

- Aerospace Engineering Student Association

- Biomedical Engineering RMIT Student Society

- Civil Engineering Student Association

- Electrical & Computer Engineering Club

- FIRE (Females in RMIT Engineering)

- Humanitarian Engineering RMIT

- RMIT Association of Chemical Engineering Students

- RMIT Mechanical & Automotive Engineering Association

- Students Association for Sustainable Systems Engineering

What's next…

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Guaranteed Pathway

Secure your place in your dream course by completing your vocational studies first and graduate with two internationally-recognised RMIT qualifications.

Year 12

Bachelor of Engineering
(Civil and Infrastructure)
(Honours)
(2 years)

Associate Degree of
Engineering Technology
(Civil Major)
(2 year)

Career

Thank you!

Any questions?

Elizabeth Verghese

Associate Dean Student Experience-
Learning and Teaching, Health & Science Cluster

Health Science
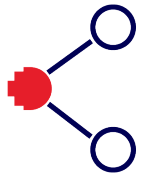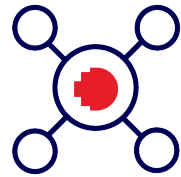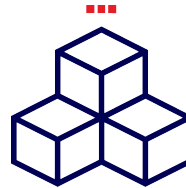At RMIT

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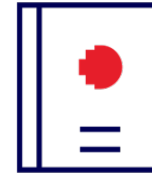UNIVERSITY

Psychology program updates

New common first year subjects

New minors

New program structures

New common *Future Technologies Skill Platform* courses available

Updated Health program overview

Old program	New program	Amendment
Bachelor of Applied Science (Psychology)	Bachelor of Psychology	• Title change • Common First Block • New minors

All other programs in Health Science including Chiropractic, Osteopathy, Medical Radiations, Nursing and Chinese Medicine remain unchanged for the 2023 intake.

Why Health Science at RMIT

- Chinese medicine
- Dental studies
- Medical radiations
- Nursing
- Pharmacy
- Psychology

Excellence in research

RMIT's research is ranked as well above standard in:

- Complementary and alternative medicine
- Pharmacology and pharmaceutical sciences
- Medical physiology
- Physical sciences

Supporting WHO

RMIT's expertise in Chinese medicine supports a WHO program to integrate traditional medical practice into public health care around the globe

Industry leader

RMIT is the only tertiary provider of Chinese medicine education in Victoria

Cutting-edge facilities

Practise on cutting-edge equipment that is widely used in clinical centres around the world

Nursing

Includes theory and practice to develop your skills and enable you to practise as a registered nurse in Australia

- **Bachelor of Nursing**
- **Diploma of Nursing**

Includes clinical practice in a range of healthcare settings, including major metropolitan and/or rural hospitals and the community sector

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Psychology

Psychology is the science of the mind and human behaviour

Examine mental states and processes and how they affect human behaviour

Applies research to actual situations to resolve real human problems

Our courses are **accredited by the Australian Psychological Association**

- **Bachelor of Psychology**
- **Bachelor of Applied Science (Psychology) (Honours)**
- **Master of Clinical Psychology**
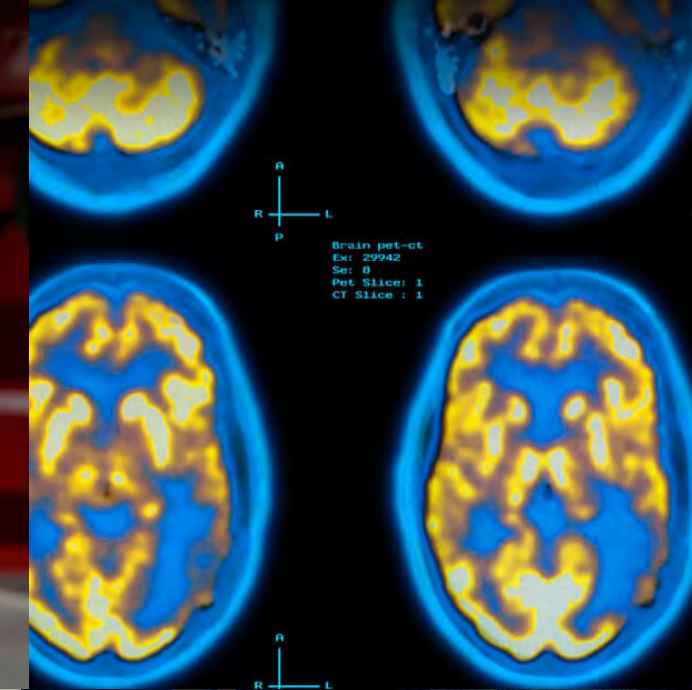
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Medical

Radiations

- Nuclear Medicine
- Medical Imaging
- Radiation Therapy

Medical radiations are qualified in the UK, Ireland, Canada and India

Medical Radiation students are placed at the:
- Royal Childrens Hospital
- Peter MacCallum Cancer Centre
- St Vincent's Hospital
- Private pathology labs

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Osteopathy

Osteopathy uses manual techniques to alleviate stress and bodily disfunction

Focuses on the overall health of patients by treating the muscular and skeletal systems to improve the body's function.

Treat patients using manual techniques including:
- Soft tissue stretching
- Muscle relaxation
- Gentle mobilisation
- Manipulation

Final years focus on clinical practice

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Chiropractic

Chiropractic emphasises the relationship between the spine and the nervous system

Joint and soft tissue manipulation and exercise to help musculoskeletal injuries

Chiropractors see good mechanical health as an important component of good general health

It is involved in the prevention and treatment of health problems related to the nervous, muscular and skeletal systems without the use of drugs or surgery

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Chinese Medicine

Treatment of disorders and illness using medicinal substances that come from roots, flowers, seeds and leaves

Treat patients using manual techniques including:
- Acupuncture
- Cupping
- Tui na (remedial massage)
- Exercise and breathing therapy

First program outside of China offered at University level

Final year Chinese Medicine students undertake clinical internships at Nanjing University in China

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Simulation Labs

RMIT Health Science Clinic

Online Enabled Delivery

Online Tools:

- Recorded lectures that can be accessed at any time

- Collaborate Ultra on Canvas – allows group breakout rooms for interactive tutorials

- Microsoft Teams – for discussion and video conferences

- Access software by myDesktop

In-semester pulse surveys to receive feedback from students and continue improvements throughout teaching period.

Research & Facilities

Dedicated Campus

—

Purpose-built state of the art labs

—

International reputation for excellence in research
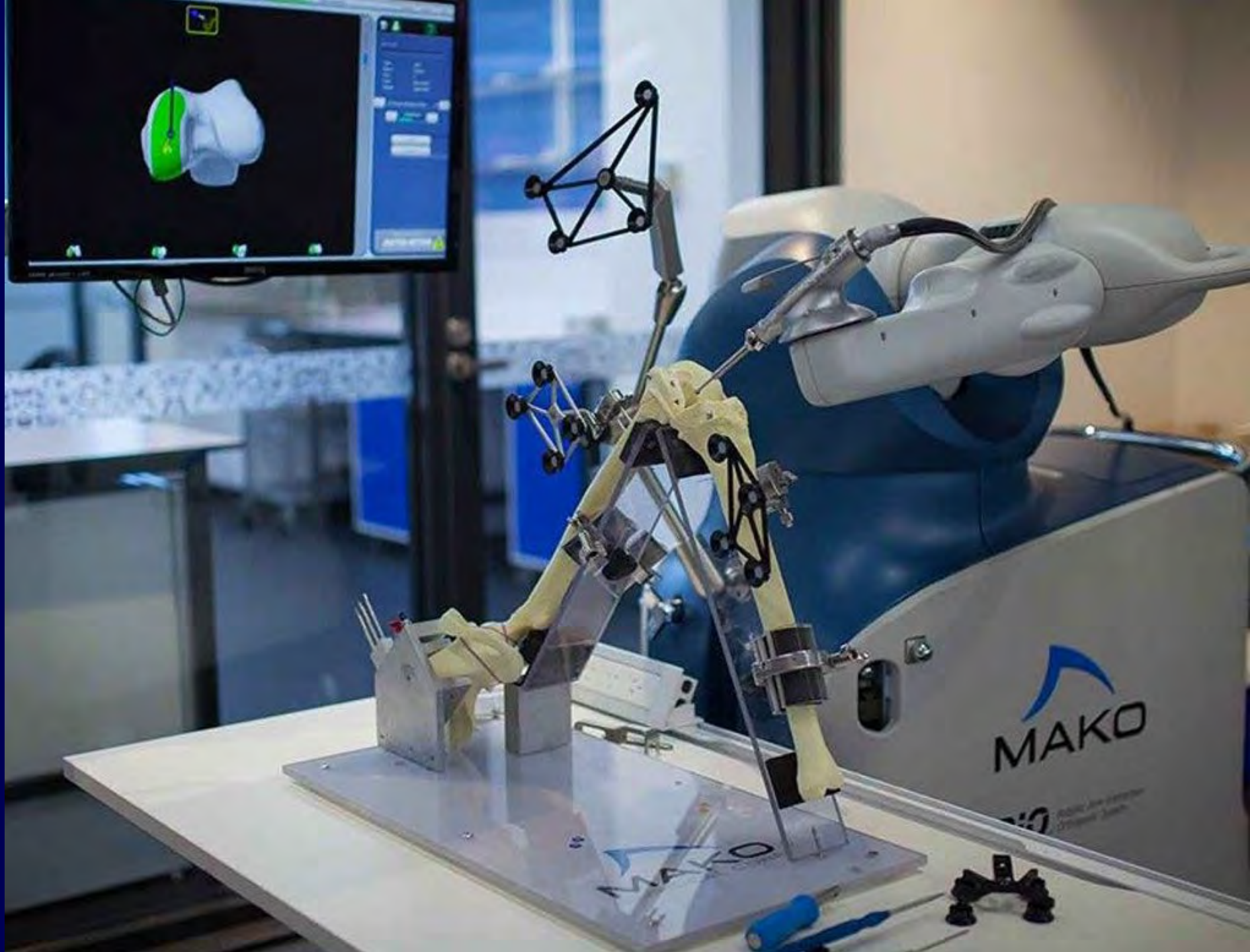
Industry Connected

Accredited by industry

—

Global Opportunities

—

Formulation Science and Research

Clubs and Societies

- Chinese Medicine Student Association
- Chiropractic Student Association
- Laboratory Medicine Student Society
- Medical Radiation Student Association
- PSYCHED! @ RMIT Psychology
- RMIT Association of Pharmacy Students
- RMIT Exercise and Sport Science Club
- RMIT Nursing Student Association
- Student Osteopathic Medicine Association
- Sport Chiropractic Association RMIT

Thank you!

Any questions?

Elizabeth Verghese

Associate Dean Student Experience-
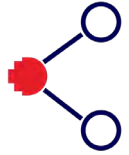Learning and Teaching, Health & Science Cluster
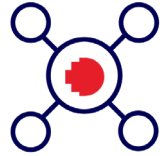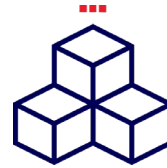
Biomedical Science

At RMIT

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Major program updates
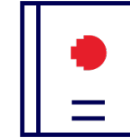
New common first year

New minors

New program structures

New common *Future Technologies Skills Platform* courses available

Biomedical Science program overview

Old program title	New program title	Amendment
Bachelor of Biomedical Science *No title change*	Bachelor of Biomedical science (Clinical and translational science)	• Common First Year • New Minors • Title change
Bachelor of Biomedical Science (Laboratory Medicine)	Bachelor of Laboratory Medicine (Honours)	• Title change • AQF level change (7 to an 8) • Now includes an Embedded Honours
Bachelor of Science (Biotechnology) / Bachelor of Biomedical Science	Bachelor of Science/ Bachelor of Biomedical Science	• Title change • Program structure changes for both degrees
Bachelor of Pharmaceutical Science *No title change*	-	• Common First Year • New Minors

Why Biomedical Science at RMIT

- Biomedical science
- Biotechnology
- Laboratory medicine
- Pharmacy
- Pharmaceutical sciences

Excellence in research
RMIT's research is ranked by the ARC
as well above world standard in:
- Clinical sciences
- Pharmacology and pharmaceutical sciences

Only Victorian university to offer the following majors:
- Haematology
- Anatomical pathology
- Medical microbiology
- Clinical biochemistry
- Transfusions and transplantation science

Australian Institute of Medical Scientist
RMIT's Bachelor of Biomedical Science (Lab Med) is the only Victorian degree accredited by the Australian Institute of Medical Scientist (AIMS)

Study abroad
Opportunities for students to travel overseas and undertake 10 to 13 weeks of professional practice in an approved laboratory

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Bachelor of Biomedical Science

Clinical and translational Science

Biomedical sciences help us understand disease, how it occurs, what happens and how we can control, cure and prevent it.

Careers in research, industry and institutions

Graduates work in:
Hospitals, diagnostic centres, biomedical research organisations & educational institutions

Emerging careers in: Genetic engineering, cancer research, neuroscience, DNA profiling or using stem cells

Graduate entry into health sciences programs such as: Medicine, physiotherapy & dentistry

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Bachelor of Laboratory Medicine (Honours)

Qualified to practice as a medical laboratory scientist in the diagnostic pathology industry.

Growth Industry

- Diagnose diseases
- Provide information about treatment and prevention
- Analyse samples and conduct tests
- Body tissues (e.g. biopsies, pap smears)
- Fluids (e.g. blood, urine)

Overseas placements available in:
United Kingdom, USA, Ireland, Singapore, Korea or Sweden

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Bachelor of Pharmacy (Honours)

Science of preparing and dispensing medicines

Advise members of the public and other health professionals regarding:
- Which medicines to select
- How much to take
- How different medicines interact with each other
- Potential side effects of medication

Research and development of medicines and other health-related products

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Bachelor of
Pharmaceutical Science

Pharmaceutical Science involves discovering, developing, formulating, evaluating and marketing medicines

- Research and development (drug discovery, formulation, clinical trials)
- Manufacturing (including quality control)
- Administration (including sales, marketing, legal and regulatory, and drug information

- The pharmaceutical industry is Australia's leading technology exporter and forms an expanding multi-billion dollar sector

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RMIT Health Science Clinic

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Global Opportunities

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- PSYCHED! @ RMIT Psychology

- RMIT Association of Pharmacy Students

- RMIT Exercise and Sport Science Club

- RMIT Nursing Student Association

- Student Osteopathic Medicine Association

- Sport Chiropractic Association RMIT

Thank you!

Any questions?

Professor Mark Osborn

Associate Dean Student Experience, Science
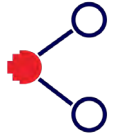
Science

At RMIT

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Major updates

Common first semester across all programs

New Bachelor of Science

10 majors and 14 minors

Option to double major or single major + minor

New common *Future Technologies Platform Skill* courses available

Deans Scholar programs discontinued

RMIT Science Degrees:
A World of Possibilities

Three-year Bachelor Degrees:

- Bachelor of Science (including Majors and Minors in Biological Sciences, Biotechnology, Chemistry, Physics discipline areas)

- Bachelor of Food Technology and Nutrition
- Bachelor of Environmental Science
- Bachelor of Space Science
- Bachelor of Applied Mathematics and Statistics

RMIT Science Degrees:
A World of Possibilities

Four-year Honours Degrees:
- Bachelor of Surveying (Honours)
- Bachelor of Geospatial Science (Honours)

Four-year Double Degrees:
- Bachelor of Science (Biotechnology)/Bachelor of Biomedical Science
- Bachelor of Food Technology and Nutrition/Bachelor of Business

Five-year Double Degrees:
- Bachelor of Environmental Science/Bachelor of Engineering (Environmental Engineering) (Honours)
- Bachelor of Science (Applied Chemistry)/Bachelor of Engineering (Chemical Engineering) (Honours)

Introducing our *new* Bachelor of Science Degrees

Flexible pathways in science

- **Choose your own degree pathway** by choosing from a range of majors and minors. Explore a range of scientific disciplines and study your passions in science.

Industry-Partnered Learning (IPL)

- Take advantage of RMIT's expansive connections by **learning with and from industry**, including industry challenges, placements and through capstone projects.

Work-ready graduates

- Develop a **career-ready skillset** including practical, technology, digital, communication and teamwork skills to prepare you for workplace success.

Create *your* Bachelor of Science Degree
Flexible choices and follow your passions:

- Study four 'Science Reimagined' core courses across the breadth of Science

- Complete two Future Technology Skills Courses building your career ready-skills across STEM.

- Follow your passions across the breadth of Science, by choosing either:
  Two 8-course Majors or One 8-course Major and two 4-course Minors

- Undertake a 24-credit point (two-course) Science Project
  (including Industry-partnered projects) in an area related to your Major

Year 1 'Science Reimagined'

Introductory Courses setting students up for success:

Data for a Scientific World

Physical Sciences in Action

The World of Life Sciences

A Mathematical Toolbox for Scientists

Introducing students to the key concepts and skills across Science and Maths supporting their development on their path to becoming a scientist

Bachelor of Science Degree Majors and Minors:

Following passions and personalised degrees

Majors	Generalist Minors	Specialist Minors

Majors

- Biological Sciences
- Biotechnology
- Chemistry
- Food Science & Technology
- Mathematics
- Nutrition Science
- Physics
- Statistics

Generalist Minors

- Biosciences
- Chemistry
- Environmental Science
- Food Science
- Geospatial Science
- Mathematics
- Nutrition Science
- Physics
- Statistics

Specialist Minors

- Advanced Chemistry
- Advanced Ecology and Ecosystems
- Biotechnology
- Environmental and Analytical Chemistry
- Molecular Biotechnology
- Nanotechnology
- Organisms, Ecology and Evolution
- Specialist Physics
- Space Science

STEM Future Technology Skills Courses:

Building key skills for future careers:

Foundations of AI for STEM

STEM for Sustainable Development

Innovation Ecosystem and the Future of Work

Cyber-Physical-Biological Systems Technology for a Digital World

Experiential Practical- and Field-based Learning

Flexible Digital Learning

CANVAS online learning system provides a single location for all course learning materials and for assessment submission

Recorded learning materials that can be accessed at any time

Labster Virtual laboratories to complement face-to-face laboratory and field activities

Online communication tools (eg. MS Teams) for interactive tutorials, discussions and video conferences

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Industry-Partnered Learning

Challenge 1

SD M3 Industry Challeng... · Safe disposal of medical waste

Transcripts

Challenge 2

Industry Challenge | Plat...

Transcripts

Challenge 3

Industry Challenge | The ...

Transcripts

Challenge 4

Industry Challenge | Org...

Transcripts

Challenge 5

Industry Challenge | repl...

Transcripts

Challenge 6

SD M3 Industry Challeng...

Transcripts

Challenge 7

Industry Challenge | Incl...

Transcripts

Challenge 8

Sustainable motorsports

Transcripts

Challenge 9

Industry Challenge, Hou...

Transcripts

Bachelor of Science program change overview

Old program name	New program name	Type of amendment
• Bachelor of Science (Physics) (Chemistry) (Biological Sciences) (Applied Science) • Bachelor of Science (Biotechnology)	Bachelor of Science	Title change New program structure: Common First Semester **New majors:** • Biological Sciences • Biotechnology • Chemistry • Food Science & Technology • Mathematics • Nutrition Science • Physics • Statistics
• Bachelor of Science (Dean's Scholar) (Honours)	-	Not open for intake in 2023
• Bachelor of Science / Bachelor of Business (Management)	-	Not open for intake in 2023
• Bachelor of Science (Applied Chemistry) / Bachelor of Engineering (Chemical Engineering) (Honours)	-	• New program structure: Common First Semester
• Bachelor of Science (Nanotechnology) / Bachelor of Science (Applied Sciences)	-	Discontinued

Environmental Science program change overview

Old program name	New program name	Type of amendment

Bachelor of Environmental Science
 No change to title
	-	• Program structure: Common First Semester
		 • New minors available:
		     ○ Chemistry
		     ○ Environmental biology
		     ○ Environmental and analytical chemistry
		     ○ Geospatial science
		     ○ Nutrition science
		     ○ Space science
		     ○ Statistics

Bachelor of Environmental Science / Bachelor of Business (Management) *No change to title*	-	• Not open for intake in 2023
Bachelor of Environmental Science / Bachelor of Engineering (Environmental Engineering) (Honours) *No change to title*	-	• Program structure changes: Common First Semester • *Not all minors will be available to double degree students*
Bachelor of Environmental Science / Bachelor of Environment and Society *No change to title*	-	• Program structure changes: Common First Semester • *Not all minors will be available to double degree students*

Food Technology and Nutrition program change overview

Old program name	New program name	Type of amendment
Bachelor of Science (Food Technology and Nutrition)	Bachelor of Food Technology and Nutrition	• Title change • Program structure changes: Common First Semester • New combinations of majors and minors are available
Bachelor of Science (Food Technology) / Bachelor of Business (Management)	Bachelor of Food Technology and Nutrition/Bachelor of Business	• Title change • Program structure: Common First Semester • New combinations of majors and minors are available

Additional Science program change overview

Old program name	New program name	Type of amendment
Bachelor of Science (Applied Mathematics and Statistics)	Bachelor of Applied Mathematics and Statistics	• Title change • Program structure changes: Common First Semester • New combinations of majors and minors available
Bachelor of Science (Geospatial Science) (Honours)	Bachelor of Geospatial Science (Honours)	• Title change • Program structure changes: Common First Semester • New minors are available
Bachelor of Applied Science (Surveying) (Honours)	Bachelor of Surveying (Honours)	• Title change • Program structure changes: Common First Semester • New minors are available
Bachelor of Space Science *No change to title*	-	• Program structure: Common First Semester • New combinations of majors and minors available

Thank you!

Any questions?

Associate Professor Chrystal Zhang

Associate Professor, Aerospace Engineering & Aviation, SOE/STEM

Paul Wyborn

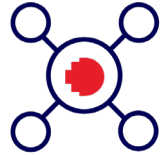Senior Instructor, Flight Training & Aviation

Aviation and Flight Training At RMIT

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Major program updates

All Bachelor degrees to allow new majors and minors
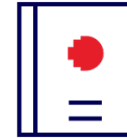
New common *Future Technologies Skills Platform* courses available

Aviation program overview

Old program title	New program title	Duration and campus	Type of amendment
Bachelor of Applied Science (Aviation) (BP070)	-	3 years City campus	• Majors and minors
Bachelor of Applied Science (Aviation) (BP345)	Bachelor of Aviation (Pilot Training) (BP345)	3 years, • City campus for academic components • Point Cook or Bendigo campus for flight training (theory and practicum) components	• Program title change • Majors and Minors
Bachelor of Applied Science (Aviation)/Bachelor of Business (Management)	Bachelor of Applied Science (Aviation)/Bachelor of Business (BP284)	4 years, City campus	• Program title change • Majors and Minors
Associate Degree of Aviation (Professional Pilots)	-		• No changes

Focus of studies

Bachelor of Applied Science (Aviation) (BP070)

- Major: Aviation operations

- Minor: Aviation Management/Business/Supply chain

Bachelor of Aviation (Pilot Training) (BP345)

- Major: Pilot Training

- Minor: Aviation Operations & Management/business/supply chain

Bachelor of Applied Science (Aviation) and Business (double degree) (BP284)

- Major: Aviation operations/Business

- Minor: Aviation Management/business/supply chain

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Areas of Study

- Airline/airport strategies and business models.

- Airline/airport operations/planning/management
- Regulatory environment.

- Safety, security and Human Factors.

- Air traffic management/air cargo/aircraft and aircraft maintenance.

- Data Analytics, Sustainability, AI, and Cybersecurity.

- RPL, PPL, CPL licenses for piloting students.

- Business/marketing/supply chain management/marketing

Why Aviation With RMIT

- **Subject experts: with both academic qualifications and industry experience**

- **Students-centered learning and teaching approaches:**
  - Curriculum: current, relevant, hot topics,
  - Assessment: authentic assessments, giving students the opportunity to apply their knowledge, skills and competencies to the real world problems,
  - Work-integrated learning (WIL):
    - Industry speakers
    - Aviation/Aerospace Masterclass series
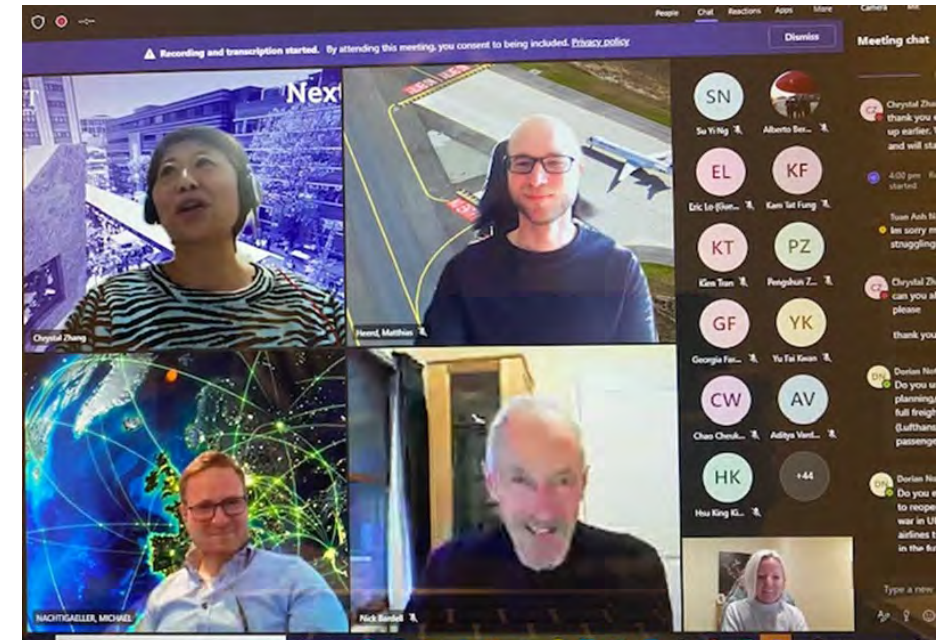   - Internship

Why Aviation With RMIT

Unrivalled students support facilities and services:

- library
- peer-mentoring,
- Industry mentoring,
- Virtual aviation lab, simulators

Students experience:

- synchronised and
- a-synchronised learning activities,
- Technology-enabled, flip classroom
- Events, students association, clubs

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Industry connections

QANTASLINK Partners with RMIT

Students will have the opportunity to be mentored by experienced QantasLink pilots throughout their studies, and, if successful through the selection process, will transition to a job at QantasLink straight after graduation.

ATSB and RMIT Partner in transport safety investigation

RMIT offers a Graduate Certificate in Transport Safety Investigation, which encompasses the aviation, marine and rail transport modes.

Cyber-Physical Autonomous Systems

Supported by the Australian and Victorian Governments as the research is aligned with the CPS, Intelligent Transport Systems (ITS), Cybersecurity and Defence Industry and Innovation (D12) policy frameworks on a national and state level.

Career

Highlights

Students found employment in following organizations in aviation sector:
- Jetstar: warranty officer/scheduling officer
- Qantas: operations assistant
- Air services
- Lufthansa Technique
- Virgin Australia
- Melbourne Airport
- Flight Safety Foundation

Pathways

Pathway	Years
Associate Degree of Aviation (Professional Pilots)	2 Years
Bachelor of Aviation (Pilot Training)	1 Years

Victorian Certificate of Education (VCE)

- Units 3 and 4: a study score of at least 25 in **English** (EAL) or at least 20 in English other than EAL
- Units 3 and 4: a study score of at least 20 in **any Mathematics**, or equivalent studies.

Associate Degree of Aviation

(Professional Pilots)

- **Duration**: 2 years

- **Location**: Point Cook & Bendigo

- Students will fly a **minimum 2 events** per week

- Designed by industry with tertiary pathways.

- Highly **regulated** by Civil Aviation Safety Authority (CASA) woven into TEQSA compliance – Safety is No. 1

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Flight Training Sequence

Fully integrated training taking students from the beginners **Recreational Pilots Licence (RPL)** to **Commercial Pilot Licence** (CPL) with **Multi-engine, Command Instrument Rating (MECIR)** or **Flight Instructor Rating** (FIR).

| Semester 1 RPL | Semester 2 PPL & Intro to CPL | Semester 3 CPL | Semester 4 MECIR or FIR |

RMIT Flight Training locations

- 30 minutes from the Melbourne CBD and is the oldest operating Airforce base in the world.

- Point Cook is a secure and safe training environment for all students and exclusive use for RMIT flight training aircraft.

- Access to three different airspace classifications and precision approach aids are available within a 50KM radius of Point Cook.

Bendigo Airport

- 90mins from the Melbourne CBD

- 4klms from Bendigo CBD

- Excellent weather conditions and access to a variety of airspace

- Features a new 1500m sealed strip and new 2500sqm hangar & classrooms.

- Direct flights from Sydney to Bendigo for international flight connections.

Flight Training

Open days 2022

Bendigo Flight Training and Aviation Open Day

- Sunday 21 August
- 10am – 4pm
- Registrations are required

Tiny.cc/RMITBendigoOpenDay22

Point Cook Training and Aviation Open Day

- Sunday 28 August
- 10am – 4pm
- Registrations are required

Tiny.cc/RMITPointCookOpenDay2022

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Thank you!

Any questions?

Dr. Santha Sumanasekara

Associate Dean, Student Experience, Computing Technologies

Information Technology At RMIT

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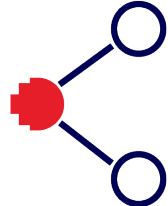
Major program updates
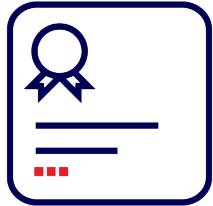
New 4 year professional degree programs

Common first semester across all programs
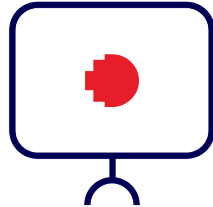
Bootcamp2Studio model

New common Future Technologies Platform Skill courses available
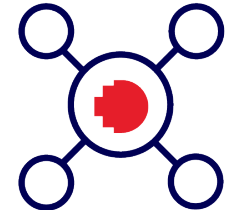
Future Career-focussed majors and minors

Information Technology Program Overview

Old program name	New program name	Type of amendment
• Bachelor of Computer Science • Bachelor of Software Engineering • Bachelor of Information Technology • Bachelor of Data Science *No change to titles*	No change to program titles	• Common First Year • Bootcamp2Studio model • Future Technologies Platform Skill courses • New suite of majors and minors
• Bachelor of Engineering (Computer and Network Engineering) (Honours) / Bachelor of Computer Science *No change to titles*	No change to program title	• Prerequisites change to any Maths • Bootcamp2Studio model
-	• Bachelor of Computer Science (Professional) • Bachelor of Data Science (Professional) • Bachelor of Information Technology (Professional)	• Extend current 3-year programs into 4-year programs • 1-year industry placement embedded

Fast Facts

Information and Communication Technology (ICT) is one of the fastest growing job sectors in Australia.

- **4.1%** -- The 2020 – 2025 projected growth in the ICT sector.

- **532,000** -- The number of people employed in the ICT sector in 2020.

- **90,785** – the number of job adverts in the first half of 2021 alone!

- **AUD 111,612** – The average salary of an ICT employee in 2021.

4.1%

90,785

$111,612
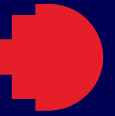
Typical Program Structure – Four choices

Intro to Discipline with Bootcamp → Studio Block

Skills Platform Courses (36 CP)

Core Courses (96 CP)

Minor Block (48 CP)

Cross-disciplinary Minor Block (48 CP)

Internship (96 CP)

+ Optional Professional Year (new program)
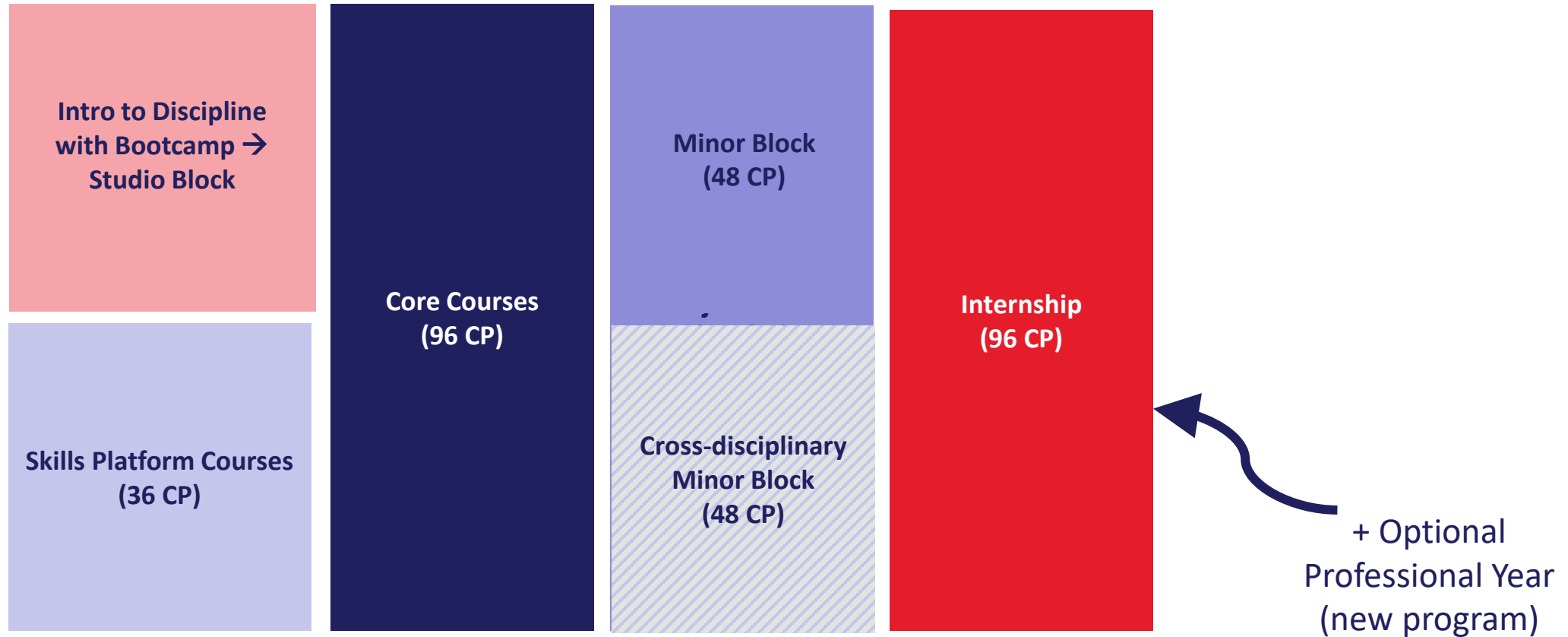
Bootcamp2Studio Model

- Semester based learning outcomes

- Learning-by-doing: experiential learning

- Connecting the concepts learnt via practice in a software project

- Project based on real-world data (e.g. "Closing the Gap" data, Covid-19 data)

- Not just technical skills but also professional practice and standards

- Transferrable skills (problem solving, teamwork, communication)

- Creating lifelong learners who are able to adapt to evolving technologies

- Exposure to Bootcamps and Hackathons as part of the curriculum

Traditional Model

Course 1 (12 CP)

+

Course 2 (12 CP)

+

Course 3 (12 CP)

+

Course 4 (12 CP)

Bootcamp2Studio Model

Programming Bootcamp
(week 1-6) 12 CP

Programming Studio
(week 7-16)
24 CP

+ 12 CP course

Bachelor of Computer Science

Duration: 3 years (plus optional internship year)

Features:

- Learn theoretical and algorithmic foundations to cutting-edge computing
- Develop excellent programming skills
- Design, implement and maintain complex software systems
- Specialize in Artificial Intelligence and Machine Learning, Cloud Computing, Big Data, Enterprise Systems Development, Cyber Security, Blockchain Technologies, Creative Computing

Careers:

- Analyst/Programmer, Software Developer, Full-stack Developer
- ICT Security Specialist, Systems Architect, Research Scientist.

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Bachelor of Software Engineering

🕐 **Duration:** 4 years

🖥️ **Features:**

- Prepares you for large-scale software development
- Work in teams to develop and maintain software systems
- 12-month internship in 3rd year
- 4th year focused on project work in teams

💼 **Careers:**
Software Engineer, Systems Architect, Systems Analyst, Solution Architect

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Bachelor of Data Science

🕐 **Duration: 3** years (plus optional internship year)

🖥 **Features:**

- Prepare you for a career in this emerging and expansive Data Science field
- Develop your ability to analyse and manage large amounts of data from various sources and evaluate their insights and solutions.
- 3rd year involves Work-integrated learning (WIL) with assessment/feedback from a workplace setting.

💼 **Careers:**
Data Scientist, Data Analyst, Data Architect, Data Engineer, Machine Learning Engineer, Social Media Analyst,

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Bachelor of Information Technology

🕐 **Duration: 3 years** (plus optional internship year)

🖥️ **Features:**

- Apply and adapt computing technology
- Plan, design and trouble-shoot ICT infrastructure
- Specialize in Digital Innovation, Cyber Security, and Enterprise Systems Development. Career-focused minors in other areas.
- Available at RMIT Vietnam for Study Abroad options

💼 **Careers:**

- Business Analyst, Entry-level Programmer, Systems Administrator, Software Tester, Dev Ops Specialist, UX Developer, IT consultant

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Future-focused Majors and Minors

Majors (8 courses) and minors (4 courses) develop skills for future careers.

Future Focused Majors

Name (Tentative)	Computer Science	Software Engineering	Data Science	Information Technology
Cybersecurity	✓	Cyber Assurance Minor only	Cyber Assurance Minor only	✓
Digital Innovation	✗	✗	✗	✓
Enterprise Systems Development	✓	Minor only	Minor only	✓
Advanced Computer Science	✓	✗	✗	✗
Advanced Data Science	Minor only	Minor only	Minor only	✓

Major: 96CP, **Minor:** 48CP

Future Focused Minors

Name (Tentative)	Computer Science	Software Engineering	Data Science	Information Technology
Blockchain Technologies	✓	✓	✓	✓
Cyber Assurance	✓	✓	✓	✓
Creative Computing	✓	✓	✓	✓
Enterprise Systems Development	✓	✓	✓	✓
Data Science	✓	✓	✗	✓
AI and Machine Learning	✓	✓	✓	Conditional: pre-req
Cloud Computing	✓	✓	✓	✓
Cyber Physical Systems (planned)	✓	✓	✓	✓
Bioinformatics	✓	✓	✓	Conditional: pre-req
Digital Health (planned)	✓	✓	✓	Conditional: pre-req
Data Analytics	✓	✓	✓	✓

Proposed Future Focused Minors

Name (Tentative)	Computer Science	Software Engineering	Data Science	Information Technology
CISCO Networking	✗	✗	✗	✓
Innovation and Enterprise	✗	✗	✗	✓
Entrepreneurship	✗	✗	✗	✓
Business Analytics	✗	✗	✗	✓
Blockchain Enabled Business	✗	✗	✗	✓
Information Systems	✗	✗	✗	✓

Majors/ Minors

Targeting Jobs of the future

Full-stack Developer	Cloud Engineer	Software Engineer - IoT Cloud Applications	Digital Business Analyst
Develop high-quality code across the end-to-end system, software maintenance and enhancements, delivery of projects	Conduct analysis for computing requirements for business, designs cloud architectures, defends clouds from cyber attacks	Software Platform development engineer to enhance and improve a SaaS platform for remote IoT device management	Works closely with UX Designers, Product Owners, Developers & Testers leading in the ideation, design, and delivery of the digital infrastructure of an enterprise.
Major/ Minor: Enterprise System Development	**Minor:** Cloud Computing	**Degree:** Software Eng **Major/ Minor:** Enterprise System Development	**Major:** Digital Innovation **Minor:** Innovation and Enterprise

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Majors/ Minors

Targeting Jobs of the future

Data Analyst

Gathers, interprets, and uses data to turns data into information which can offer ways to improve a business.

Degree: Data Science

Major/ Minor (in other degrees): Data Science

Minor: Data Analytics

Data Scientist

Data scientists utilise their analytical, statistical, and programming skills to collect, analyse, and interpret large data sets, And use this information to develop data-driven solutions to difficult business challenges.

Degree: Data Science

ML Engineer/ Expert

Machine learning engineers develop self-running AI software to automate predictive models for recommended searches, virtual assistants, translation apps, chatbots, and driverless cars.

Degree: Data Science

Major: Advanced Computer Science

Minor: AI and Machine Learning

AI Engineer

AI Engineers build, test, and deploy AI models, as well as maintain the underlying AI infrastructure. They are problem-solvers who can navigate between traditional software development and machine learning implementations.

Major: Advanced Computer Science Major

Minor: AI and Machine Learning

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Majors/ Minors

Targeting Jobs of the future

Games Programmer

A game programmer is a creative software engineer who develops codebases for video games. Game programmers develop a technical skillset while still managing interactions in a teamwork environment with creative co-workers e.g., game designers/artists.

Minor: Creative Computing

AR/VR/MR Expert

Experts in AR/MR/VR are creative technologists working at the intersection of HCI, software engineering and computer vision. They design and implement new interaction metaphors for software that exists in virtual and physical worlds, paving the way for what is now known as the **metaverse**.

Major: Advanced Computer Science
Minor: Creative Computing

Penetration Tester

Penetration-Tester performs cybersecurity exploitation, penetration testing, creates test cases using analysis of risks and typical vulnerabilities and produce test scripts, materials and packs to test new and existing software or services.

Major: Cyber Security
Minor: Cyber Assurance

Cyber Threat Analyst

Cyberthreat analyst conducts threat assessment of the information systems, cyber event analysis and advice for identified cyber threats

Major: Cyber Security
Minor: Cyber Assurance

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Need to Know

How Long will it take?

- 3 – 4 Years

- Double Degrees are 5 Years

Where do you study?

- Melbourne City Campus

What VCE subjects are needed?

- Maths Methods for Computer Sc or Software Engineering

- Any Maths for Data Science or Information Technology

- English

- Check VTAC

Pathways

Guaranteed

Secure your place in your dream course by completing your vocational studies first and graduate with two internationally-recognised RMIT qualifications.

Year 12 → Bachelor of Information Technology (1 year) → Career

Associate Degree of Information Technology (2 years)

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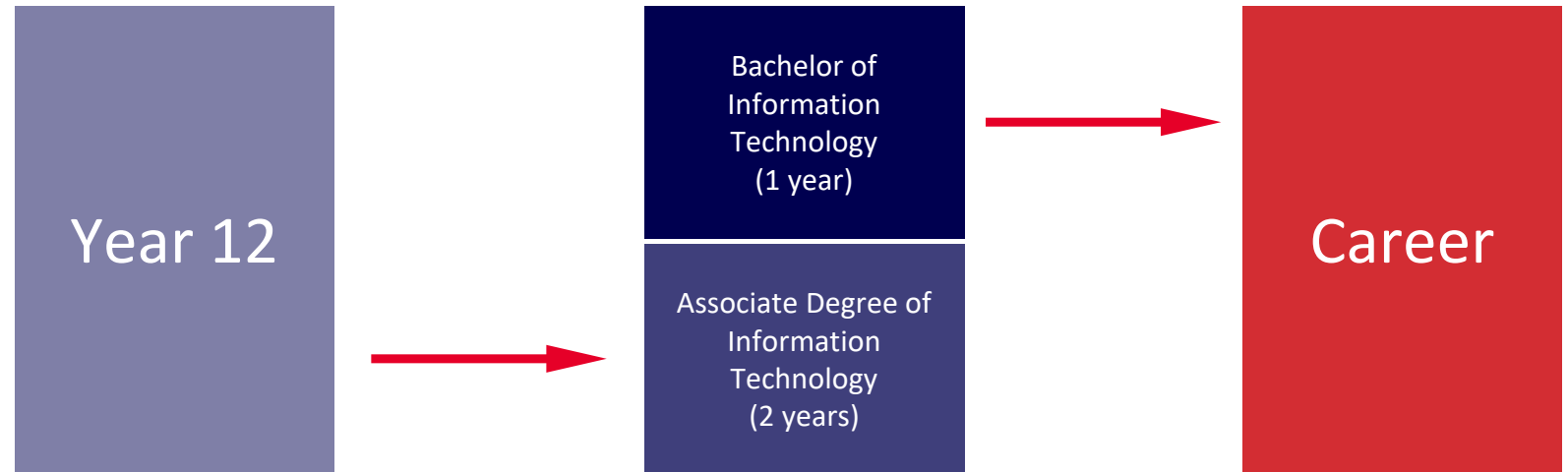
Thank you!

Any questions?

Student Recruitment

Updates and announcements

Kate Tangas

Manager, Student Recruitment

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Next Fest

Open Day '22

Our Team

✉ **student.recruitment@rmit.edu.au**

📞 **9925 2555**

📅 **Monday - Friday
9am – 5pm**

🏢 **Building 22, Level 2**

Ursula Safe
Senior Manager, Domestic
Student Recruitment

Kate Tangas
Manager, Student
Recruitment

Erika Munoz
Student Recruitment
Coordinator | Vocational
Education

Tarika Singh
Student Recruitment Officer

Claudia Nabalarua
Extension Studies and
Student Recruitment

Alexander Watt
Student Recruitment Officer

Brendan Contreras
Student Recruitment Officer

Alec Pangalidis
Student Recruitment Assistant

Jasmine Anusornchonsaree
Marketing &
Recruitment Assistant

Tahlia Furlan
Marketing & Recruitment
Assistant

Lauren Eyres
Marketing &
Recruitment Assistant

Questions?

Feel free to ask any questions about RMIT you may have in the chat box!

We will answer them via chat or live.

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Want to know more?

rmit.edu.au/events

Facebook.com/RMITuniversity

Instagram: @rmituniversity

youtube.com/RMITuniversity

Contact Study@RMIT: **rmit.edu.au**/contact

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Noon Gudgin

Artwork 'Luwaytini' by Mark Cleaver, Palawa