



Field of Research (FoR): Classification

*The Research and Innovation Portfolio
The Royal Melbourne Institute of Technology (RMIT) University*

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Research Classifications

1. Division
2. Disciplines
3. **Field and subfields:** Some new fields result from merging of two or more disciplines.

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Division level

1. Mathematical Sciences
2. Physical Sciences
3. Chemical Sciences
4. Earth Sciences
5. Environmental Sciences
6. Biological Sciences
7. Agricultural and Veterinary Sciences
8. Information and Computing Sciences
9. Engineering
10. Technology
11. Medical and Health Sciences
12. Built Environment and Design
13. Education
14. Economics
15. Commerce, Management, Tourism and Services
16. Studies in Human Society
17. Psychology and Cognitive Sciences
18. Law and Legal Studies
19. Studies in Creative Arts and Writing
20. Language, Communication and Culture
21. History and Archaeology
22. Philosophy and Religious Studies

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Mathematical Sciences

Division level

- **Pure Mathematics**
- **Applied Mathematics**
- **Numerical and Computational Mathematics**
- **Statistics**
- **Mathematical Physics**
- **Other Mathematical Sciences**

Group level or
Disciplines (EAR)

Field level

- Algebra and Number Theory
- Algebraic and Differential Geometry
- Category Theory, K Theory, Homological Algebra
- Combinatorics and Discrete Mathematics (
- Group Theory and Generalisations
- Lie Groups, Harmonic and Fourier Analysis
- Mathematical Logic, Set Theory, Lattices and Universal Algebra
- Operator Algebras and Functional Analysis
- Ordinary Differential Equations, Difference Equations and Dynamical Systems
- Partial Differential Equations
- Real and Complex Functions (incl. Several Variables)
- Topology
- Pure Mathematics not elsewhere classified

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Physical Sciences

- Astronomical and Space Sciences
- Atomic, Molecular, Nuclear, Particle and Plasma Physics
- **Classical Physics**
- Condensed Matter Physics
- Optical Physics
- Quantum Physics
- Other Physical Sciences

- Acoustics and Acoustical Devices; Waves
- Electrostatics and Electrodynamics
- Fluid Physics
- Thermodynamics and Statistical Physics
- Classical Physics not elsewhere classified

- Biological Physics
- Complex Physical Systems
- Medical Physics
- Synchrotrons; Accelerators; Instruments and Techniques
- Physical Sciences not elsewhere classified

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Chemical Sciences

- Analytical Chemistry -----
- Inorganic Chemistry -----
- **Macromolecular and Materials Chemistry** -----
- Medicinal and Biomolecular Chemistry -----
- Organic Chemistry -----
- Physical Chemistry -----
- Theoretical and Computational Chemistry -----
- **Other Chemical Sciences** -----

- **Environmental Chemistry** (incl. Atmospheric Chemistry)
- Forensic Chemistry
- Industrial Chemistry
- Organometallic Chemistry
- Chemical Sciences not elsewhere classified

- Chemical Characterisation of Materials
- Nanochemistry and Supramolecular Chemistry
- Optical Properties of Materials
- Physical Chemistry of Materials
- Polymerisation Mechanisms
- Synthesis of Materials
- Theory and Design of Materials
- Macromolecular and Materials Chemistry not elsewhere classified

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Earth Sciences

- **Atmospheric Sciences**
- **Geochemistry**
- **Geology**
- **Geophysics**
- **Oceanography**
- **Physical Geography and Environmental Geoscience**
- **Other Earth Sciences**

- Biological Oceanography
- Chemical Oceanography
- Physical Oceanography
- Oceanography not elsewhere classified

- Atmospheric Aerosols
- Atmospheric Dynamics
- Atmospheric Radiation
- Climate Change Processes
- Climatology (excl. Climate Change Processes)
- Cloud Physics
- Meteorology
- Tropospheric and Stratospheric Physics
- Atmospheric Sciences not elsewhere classified

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Environmental Sciences

- **Ecological Applications**
 - **Environmental Science and Management**
 - **Soil Sciences**
 - **Other Environmental Sciences**
- Carbon Sequestration Science
 - Land Capability and Soil Degradation
 - Soil Biology
 - Soil Chemistry (excl. Carbon Sequestration Science)
 - Soil Physics
 - Soil Sciences not elsewhere classified
- Aboriginal and Torres Strait Islander Environmental Knowledge
 - Conservation and Biodiversity
 - Environmental Education and Extension
 - Environmental Impact Assessment
 - Environmental Management
 - Environmental Monitoring
 - Environmental Rehabilitation (excl. Bioremediation)
 - Maori Environmental Knowledge
 - Natural Resource Management
 - Pacific Peoples Environmental Knowledge
 - Wildlife and Habitat Management
 - Environmental Science and Management not elsewhere classified

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Biological Sciences

- **Biochemistry and Cell Biology**
 - Ecology
 - Evolutionary Biology
 - Genetics
 - Microbiology
 - Physiology
 - Plant Biology
 - Zoology
 - Other Biological Sciences
- Analytical Biochemistry
 - Bioinformatics
 - Cell Development, Proliferation and Death
 - Cell Metabolism
 - Cell Neurochemistry
 - Cellular Interactions (incl. Adhesion, Matrix, Cell Wall)
 - Enzymes
 - Protein Trafficking
 - Proteomics and Intermolecular Interactions (excl. Medical Proteomics)
 - Receptors and Membrane Biology
 - Signal Transduction Document
 - Structural Biology (incl. Macromolecular Modelling)
 - Synthetic Biology
 - Systems Biology
 - Biochemistry and Cell Biology not elsewhere classified

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Agricultural and Veterinary Sciences

- **Agriculture, Land and Farm Management**

- Animal Production

- Crop and Pasture Production

- Fisheries Sciences

- Forestry Sciences

- Horticultural Production

- Veterinary Sciences

- Other Agricultural and Veterinary Sciences

- Agricultural Land Management

- Agricultural Land Planning

- Agricultural Production Systems Simulation

- Agricultural Spatial Analysis and Modelling

- Agricultural Systems Analysis and Modelling

- Farm Management, Rural Management and Agribusiness

- Farming Systems Research

- Sustainable Agricultural Development

- Agriculture, Land and Farm Management not elsewhere classified

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Information and Computing Sciences

- Artificial Intelligence and Image Processing
- Computation Theory and Mathematics
- **Computer Software**
- Data Format
- Distributed Computing
- Information Systems
- Library and Information Studies
- Other Information and Computing Sciences

- Bioinformatics Software
- Computer System Architecture
- Computer System Security
- Concurrent Programming
- Multimedia Programming
- Open Software
- Operating Systems
- Programming Languages
- Software Engineering
- Computer Software not elsewhere classified

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Engineering

- Aerospace Engineering
- Automotive Engineering
- **Biomedical Engineering**
- Chemical Engineering
- Civil Engineering
- **Electrical and Electronic Engineering**
- Environmental Engineering
- Food Sciences
 - Circuits and Systems
 - Control Systems, Robotics and Automation
 - Industrial Electronics
 - Microelectronics and Integrated Circuits
 - Photodetectors, Optical Sensors and Solar Cells
 - Photonics and Electro-Optical Engineering (excl. Communications)
 - Power and Energy Systems Engineering (excl. Renewable Power)
 - Renewable Power and Energy Systems Engineering (excl. Solar Cells)
 - Signal Processing
 - Electrical and Electronic Engineering not elsewhere classified

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Engineering ... (continue)

- Geomatic Engineering
- Manufacturing Engineering
- Maritime Engineering
- **Materials Engineering**
- Mechanical Engineering
- Resources Engineering and Extractive Metallurgy
- Interdisciplinary Engineering
- Other Engineering

- Ceramics
- Composite and Hybrid Materials
- Compound Semiconductors
- Elemental Semiconductors
- Functional Materials
- Glass
- Metals and Alloy Materials
- Organic Semiconductors
- Polymers and Plastics
- Timber, Pulp and Paper
- Materials Engineering not elsewhere classified

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Technology

- Agricultural Biotechnology
- **Environmental Biotechnology**
- Industrial Biotechnology
- Medical Biotechnology
- Communications Technologies
- Computer Hardware
- Nanotechnology
- Other Technology

- Biodiscovery
- Biological Control
- Bioremediation
- Environmental Biotechnology Diagnostics (incl. Biosensors)
- Environmental Marine Biotechnology
- Environmental Molecular Engineering of Nucleic Acids and Proteins
- Environmental Biotechnology not elsewhere classified

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Medical and Health Sciences

- **Medical Biochemistry and Metabolomics**
- **Cardiovascular Medicine and Haematology**
- **Clinical Sciences**
- **Complementary and Alternative Medicine**
- **Dentistry**
- **Human Movement and Sports Science**
- **Immunology**
- **Medical Microbiology**

- Medical Biochemistry: Amino Acids and Metabolites
- Medical Biochemistry: Carbohydrates
- Medical Biochemistry: Inorganic Elements and Compounds
- Medical Biochemistry: Lipids
- Medical Biochemistry: Nucleic Acids
- Medical Biochemistry: Proteins and Peptides (incl. Medical Proteomics)
- Metabolic Medicine
- Medical Biochemistry and Metabolomics not elsewhere classified

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Medical and Health Sciences...(continue)

- Neurosciences-----
- **Nursing**-----
- Nutrition and Dietetics-----
- Oncology and Carcinogenesis-----
- Optometry and Ophthalmology-----
- Paediatrics and Reproductive Medicine-----
- Pharmacology and Pharmaceutical Sciences-----
- Medical Physiology-----
- Public Health and Health Services-----
- Other Medical and Health Sciences-----

- Aged Care Nursing
- Clinical Nursing: Primary (Preventative)
- Clinical Nursing: Secondary (Acute Care)
- Clinical Nursing: Tertiary (Rehabilitative)
- Mental Health Nursing
- Midwifery
- Nursing not elsewhere classified

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Built Environment and Design

- **Architecture**
 - **Building**
 - **Design Practice and Management**
 - **Engineering Design**
 - **Urban and Regional Planning**
 - **Other Built Environment and Design**
- Architectural Design
 - Architectural Heritage and Conservation
 - Architectural History and Theory
 - Architectural Science and Technology (incl. Acoustics, Lighting, Structure and Ecologically Sustainable Design)
 - Architecture Management
 - Interior Design
 - Landscape Architecture
 - Architecture not elsewhere classified

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Education

- **Education Systems** -----
 - **Curriculum and Pedagogy**-----
 - **Specialist Studies in Education**-----
 - **Other Education** -----
- Continuing and Community Education
 - Early Childhood Education (excl. Maori)
 - Higher Education
 - Kura Kaupapa Maori (Maori Primary Education)
 - Primary Education (excl. Maori)
 - Secondary Education
 - Te Whariki (Maori Early Childhood Education)
 - Technical, Further and Workplace Education
 - Education Systems not elsewhere classified

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Economics

- **Economic Theory** -----
- **Applied Economics** -----
- **Econometrics** -----
- **Other Economics** -----

- History of Economic Thought
- Macroeconomic Theory
- Mathematical Economics
- Microeconomic Theory
- Economic Theory not elsewhere classified

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Commerce, Management, Tourism and Services

- **Accounting, Auditing and Accountability**
- Banking, Finance and Investment
- Business and Management
- Commercial Services
- Marketing
- Tourism
- Transportation and Freight Services
- Other Commerce, Management, Tourism and Services

- Accounting Theory and Standards
- Auditing and Accountability
- Financial Accounting
- International Accounting
- Management Accounting
- Sustainability Accounting and Reporting
- Taxation Accounting
- Accounting, Auditing and Accountability not elsewhere classified

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Studies in Human Society

- **Anthropology** -----
- **Criminology** -----
- **Demography** -----
- **Human Geography** -----
- **Policy and Administration** -----
- **Political Science** -----
- **Social Work** -----
- **Sociology** -----
- **Other Studies in Human Society** -----

- Anthropology of Development
- Biological (Physical) Anthropology
- Linguistic Anthropology
- Social and Cultural Anthropology
- Anthropology not elsewhere classified

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Psychology and Cognitive Sciences

- **Psychology** -----
- **Cognitive Science** -----
- **Other Psychology and Cognitive Sciences** -----

- Biological Psychology (Neuropsychology, Psychopharmacology, Physiological Psychology)
- Developmental Psychology and Ageing
- Educational Psychology
- Forensic Psychology
- Gender Psychology
- Health, Clinical and Counselling Psychology
- Industrial and Organisational Psychology
- Kaupapa Maori Psychology
- Personality, Abilities and Assessment
- Psychological Methodology, Design and Analysis
- Psychology of Religion
- Sensory Processes, Perception and Performance
- Social and Community Psychology
- Sport and Exercise Psychology
- Psychology not elsewhere classified

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Law and Legal Studies

- **Law**
 - **Maori Law**
 - **Other Law and Legal Studies**
- Aboriginal and Torres Strait Islander Law
 - Access to Justice
 - Administrative Law
 - Civil Law and Procedure
 - Commercial and Contract Law
 - Comparative Law
 - Conflict of Laws (Private International Law)
 - Constitutional Law
 - Corporations and Associations Law
 - Criminal Law and Procedure
 - Environmental and Natural Resources Law
 - Equity and Trusts Law
 - Family Law
 - Human Rights Law
 - Intellectual Property Law
 - International Law (excl. International Trade Law)
 - International Trade Law
 - Labour Law
 - Law and Society
 - Legal Institutions (incl. Courts and Justice Systems)
 - Legal Practice, Lawyering and the Legal Profession
 - Legal Theory, Jurisprudence and Legal Interpretation
 - Litigation, Adjudication and Dispute Resolution
 - Property Law (excl. Intellectual Property Law)
 - Taxation Law
 - Tort Law
 - Law not elsewhere classified

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Studies in Creative Arts and Writing

- **Art Theory and Criticism** -----
- **Film, Television and Digital Media** -----
- **Journalism and Professional** -----
- **Performing Arts and Creative Writing** -----
- **Visual Arts and Crafts** -----
- **Other Studies in Creative Arts and Writing** -----

- Cinema Studies
- Computer Gaming and Animation
- Electronic Media Art
- Film and Television
- Interactive Media
- Film, Television and Digital Media not elsewhere classified

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Language, Communication and Culture

- **Communication and Media Studies** -----
- **Cultural Studies** -----
- **Language Studies** -----
- **Linguistics** -----
- **Literary Studies** -----
- **Other Language, Communication and Culture** -----

- Communication Studies
- Communication Technology and Digital Media Studies
- International and Development Communication
- Media Studies
- Organisational, Interpersonal and Intercultural Communication
- Communication and Media Studies not elsewhere classified

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History and Archaeology

- Archaeology
 - Curatorial and Related Studies
 - **Historical Studies**
 - Other History and Archaeology
- Aboriginal and Torres Strait Islander History
 - Asian History
 - Australian History (excl. Aboriginal and Torres Strait Islander History)
 - Biography
 - British History
 - Classical Greek and Roman History
 - European History (excl. British, Classical Greek and Roman)
 - Latin American History
 - Maori History
 - Middle Eastern and African History
 - New Zealand History
 - North American History
 - Pacific History (excl. New Zealand and Maori)
 - Historical Studies not elsewhere classified

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Philosophy and Religious Studies

- **Applied Ethics**
 - **History and Philosophy of Specific Fields**
 - **Philosophy**
 - **Religion and Religious Traditions**
 - **Other Philosophy and Religious Studies**
- Bioethics (human and animal)
 - Business Ethics
 - Ethical Use of New Technology (e.g. Nanotechnology, Biotechnology)
 - Human Rights and Justice Issues
 - Legal Ethics
 - Medical Ethics
 - Professional Ethics (incl. police and research ethics)
 - Applied Ethics not elsewhere classified



Diversity of research disciplines

1. Multi-disciplines

- Biological Oceanography
- Chemical Oceanography
- Physical Oceanography
- Environmental Chemistry
- Biochemistry
- Microbiology
- Biomaterials



Diversity of research disciplines

2. Inter-disciplines

- **Global warming**
- **AIDS**
- **Quantum information processing = physics+computer+information sci.**
- **Bioinformatics = molecular biology +computer science**