

## **Massey University priority research areas to accommodate HEC scholars**

### Accounting

- Financial reporting and governance
- Management accounting and performance measurement
- Auditing
- Communication in new media
- Online advertising
- Retail marketing
- People and Work
- Leadership and organisations
- Sustainability
- Entrepreneurship and Innovation

### Economics

- Economics of innovation & growth
- Agribusiness/Agricommerce
- Natural resource & environmental economics

### Finance and Banking

- Financial markets and regulation
- Financial asset pricing
- International banking and regulation
- Corporate finance and governance

### Property

- Housing policy studies
- Real estate economics and finance studies
- Real estate agency, investment and valuation

### Education

- Special and inclusive education
- Literacy education
- Mathematics education
- Educational leadership
- Early childhood education
- Teaching and learning
- TESOL (Teaching English to Speakers of Other Languages)

### English and Media Studies

- English literary studies
- Media studies
- Academic writing and composition studies
- Creative work in English (includes theatre, media scriptwriting and creative writing)

### People, Environment & Planning

- Resource management
- Conflict and development
- Migration, transnationalism, and mobile livelihoods

- Local polities and sovereignty
- Sport for development
- Tourism and poverty reduction
- Transport
- Social science dimensions of sustainable agriculture
- Natural hazards planning
- Environmental governance
- International security

#### Natural and Fundamental Sciences

- Quantum chemistry
- Co-ordination chemistry
- Structural biology
- Nanotechnology
- Computational chemistry & physics
- Theoretical physics
- Complex systems
- Ecology and evolution
- Molecular biosciences
- Conservation and ecology
- Pure and applied mathematics
- Industrial mathematics
- Computational sciences

#### Molecular Biosciences

- Molecular evolution
- Computational biology
- Molecular & ecological genetics
- Systematics & evolution
- Plant physiology
- Fungal-plant symbiosis
- Molecular plant pathology,
- Microbe-host interactions
- Molecular microbiology
- Microbial biotechnology
- Structural biology
- Human genetics and epigenetics

#### Food, Nutrition and Human Health

- Food science and food engineering
- Sensory and consumer science
- Post harvest technology and refrigeration
- Food safety and food security
- Human nutrition and nutrient metabolism
- Human physiology, especially gut, bone, joint and immune
- Cellular and molecular biology
- Ruminant and monogastric animal nutrition
- Environmental health science
- Noise and vibration hazard
- Metabolic disease and diabetes

- Logistics and supply chain management
- Farm management

#### Information Technology

- Software creation, assessment and governance
- Applied computing (e.g., web, cloud, social, educational, organizational)
- Health Informatics (E-health)
- Complex and intelligent systems
- Emergency decision-making systems
- Socio-technical system design
- "Big data" management and security

#### Computer Science

- Parallel computing and especially GPU programming
- Complex systems simulation including computer game development
- Computer vision and image processing
- Artificial Intelligence
- Domain-specific programming language development

#### Mathematics

- Mathematical modelling
- Flow in porous media
- Mathematical biology
- Epidemiology
- Industrial mathematics
- Mathematics in agriculture
- Number theory
- Nonlinear dynamics
- Computational neuroscience
- Stellar dynamics
- Dynamical systems
- Numerical computation

#### Veterinary, Animal and Biomedical Sciences

- Veterinary science
- Animal science
- Veterinary public health

#### Agriculture and Environment

- Insect behavioural ecology
- Insect pest biological control
- Nutrient management
- Agronomy – pasture, crops, seeds, trees, weeds
- Horticulture
- Precision agriculture – sensing, GIS, mapping, irrigation, drainage
- Soils – productivity, fertiliser, conservation, carbon sequestration
- Earth science
- Natural hazard modelling and prediction
- Ecological economics, life cycle management and industrial ecology

## Engineering and Technology

- Construction management and quantity surveying
- Information technology
- Software engineering
- Chemical and bioprocess engineering
- Mechatronic engineering or mechatronics
- Electronics and computer engineering
- Product design engineering
- Quality systems
- Renewable energy and energy management
- Environmental engineering
- Packaging
- Lighting
- Logistics and Supply Chain Management