



THE UNIVERSITY OF
MELBOURNE

Melbourne School
of Engineering



BIOMEDICAL ENGINEERING CAREER PATHWAYS

➤ For more information, visit
eng.unimelb.edu.au

BIOMEDICAL ENGINEERING AT MELBOURNE

Biomedical engineering offers you diverse career options in biotechnology, biomedicine, biosignals, pharmaceuticals, medical devices and equipment, health services, and research and innovation.

The Melbourne School of Engineering is the leading provider of engineering and IT education in Australia*.

Our professional master of engineering program is the first graduate program in Australia to offer accreditation from Engineers Australia and EUR-ACE®, enabling graduates to practice as engineers in Australia, Europe, the US, Singapore, Japan, and more.

The Master of Engineering (Biomedical) provides depth, breadth and flexibility to a curriculum taught by world-class educators, access to industry based learning opportunities, and a generous program of scholarships.

Our biomedical engineering programs include:

- » [Master of Engineering \(Biomedical\)](#)
- » [Master of Engineering \(Biomedical with Business\)](#)
- » [Master of Philosophy \(Engineering\)](#)
- » [Doctor of Philosophy \(Engineering\)](#)

Build a career that makes a difference

Matthew Kelly is a graduate of the Master of Engineering (Biomedical).

He works as a Technology Consultant for Cerner Corporation, a supplier of health information technology solutions, services, devices and hardware.

“I enjoy applying technical and problem solving skills, interacting with clients and the challenging nature of the tasks involved in the rapidly growing Health IT industry.

“I know the work that I do makes a difference for patients’ clinical outcomes and the efficiency of healthcare.”

Matthew Kelly
Technology Consultant
Cerner Corporation



Specialisations

As a biomedical engineer, you could specialise in diverse areas including:

- » **Clinical Engineering:** research, develop and maintain instruments and equipment to aid clinical staff.
- » **Rehabilitation Engineering:** work with systems and devices that improve the quality of life for people with disabilities.
- » **Biomedical DSP Engineering:** develop solutions on digital signal processors for control of biomedical devices and systems.
- » **Tissue Engineering:** create materials and structures to augment or repair human tissue.

Job Outlook

Engineering professionals are in demand, not only in Australia, but across the globe.

With a rapidly growing population, the need for engineers will become more critical than ever to ensure our cities have adequate transport, power, water, telecommunications and healthcare. Students are advised to begin building their employability skills whilst at university, to give themselves the best start to their careers. Visit the University Careers Service to find out more: careers.unimelb.edu.au

For more information about the job outlook for this sector, please visit the Australian Government’s Employment Projections and Job Outlook website: joboutlook.gov.au

For information about salaries, see: graduateopportunities.com

*No.1 in Australia; No.28 in the world. QS World University Rankings by Subject 2017.

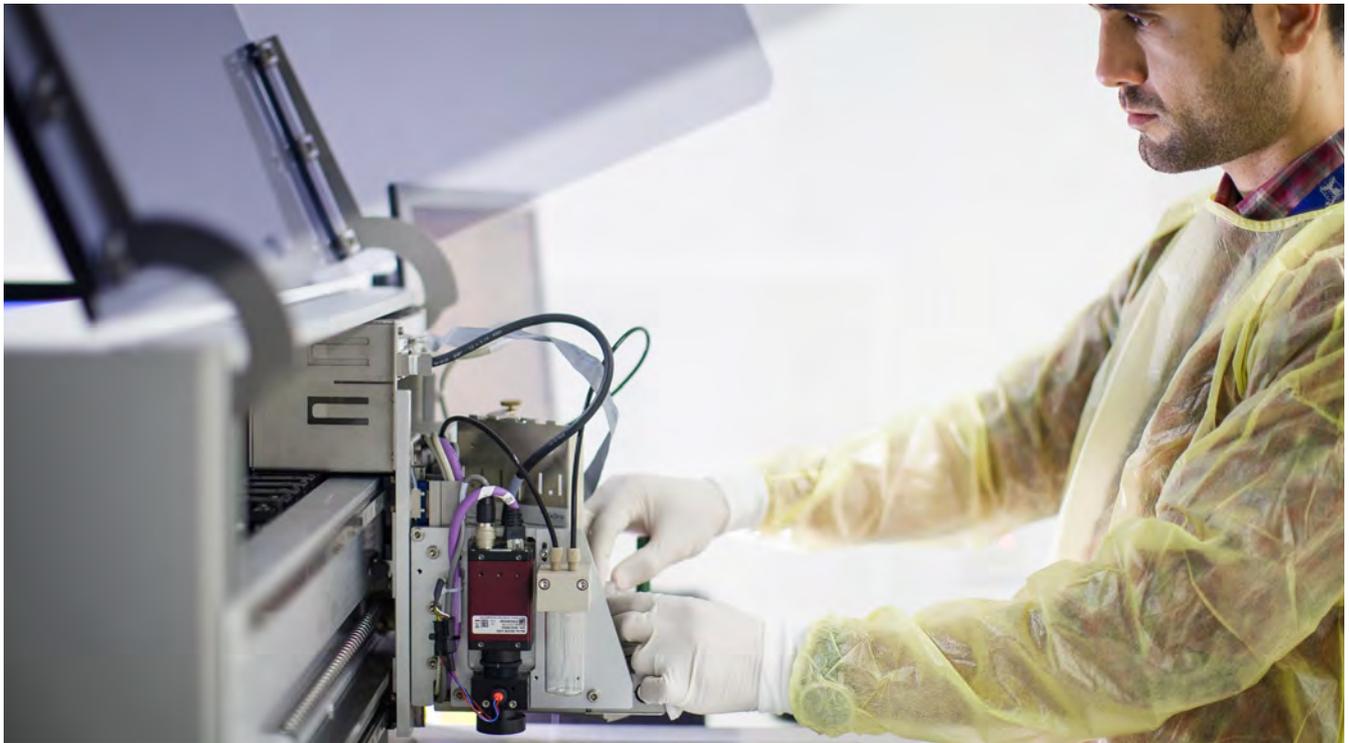


Sectors & Employers

BIOMEDICAL ENGINEERING SECTORS AND INDUSTRIES		EXAMPLES OF EMPLOYERS	
Biotechnology	Medical Devices and Equipment	Agilent Technologies	Defence Materiel Organisation
Biomedicine	Petrochemicals	Bio21 Institute	Device Technologies Australia
Consulting	Pharmaceuticals	Bionics Institute	Genzyme Australasia
Government Departments & Agencies	Research and Development	Chemtronics	GlaxoSmithKline
Health Services		Cochlear	ResMed
Hospitals		Compumedics	Sanofi
		CSL Limited	Therapeutic Goods Administration

Career Progression

GRADUATE	3-5 YEARS EXPERIENCE	10 YEARS
Biomedical Research Engineer Graduate Biomedical Engineer	Biochemical Engineer Biomaterials Engineer Biomechanical Engineer Biomedical Engineer Biomedical DSP Engineer Clinical Engineer Dialysis Engineer Electronics Technician/Biomedical Engineer Field Service Biomedical Engineer Genetic Engineer Rehabilitation Engineer Tissue Engineer	Senior Biomedical Engineer



Alternative Careers

An engineering degree at the University of Melbourne gives you a solid technical and design foundation combined with strong analytical, problem solving and communication skills valued across a range of industries. Other areas our graduates have moved into include:

- » Management consulting
- » Finance, economics and banking
- » Business analysis
- » Project management
- » Technical sales, marketing and communications
- » Intellectual property management
- » Technical writing
- » Government and policy

Careers in Research

If you are passionate about a field of electrical engineering and would like to advance your research skills, enrolling in a graduate research degree could be a great option for you. Graduate research enhances your ability to problem solve, think autonomously and creatively, and analyse. Careers in research are diverse and may include:

- » academic positions at universities;
- » policy-making or research positions at public sector organisations;
- » private sector research and development projects;
- » self-employed consulting positions on technical or policy issues in your area of expertise.

Employability Services and Industry Links

Students undertaking our programs have access to a range of employability services, and benefit from a curriculum that offers excellent opportunities to connect with industry through:

- » an elective internship subject
- » student projects partnered with industry
- » guest lectures led by industry leaders and experts
- » site visits hosted by key organisations
- » industry networking events
- » career panels featuring industry representatives
- » career question drop-in service
- » an online jobs and internships portal



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