



real

'Studying Medical Engineering at QUT is very hands-on and focuses on the application of knowledge. I'm only in my second year and I've already worked on several projects that involved actual testing of devices we've designed and manufactured ourselves. By speaking with professionals in the workforce, I've learnt that QUT graduates are better equipped to hit the ground running.' DEAN IRVINE

MEDICAL ENGINEERING



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WHAT IS MEDICAL ENGINEERING?

Medical Engineering involves working with doctors and medical scientists, to research and design ways to improve health care and medical services. The discipline applies engineering and scientific methods to find solutions to problems in medicine and the life sciences.

Medical Engineering uses microcomputers, lasers, and other materials to develop and improve medical research equipment that is used to diagnose health problems. It may involve the development of medical products and different types of equipment used to monitor and treat patients. It may also involve designing and improving equipment for people with disabilities.

Medical Engineers must have a good theoretical and practical knowledge of engineering, a sound understanding of medical sciences and the ability to combine the two. They may be responsible for the safe and effective operation of equipment such as monitoring, diagnostic, and therapeutic medical equipment ranging from CAT scanners to kidney machines.

WHY CHOOSE MEDICAL ENGINEERING AT QUT?

Medical Engineering at QUT integrates physical, chemical, mathematical, and computer sciences with engineering principles to study human biology, medicine, human behaviour and health. High-quality teaching and technical staff will provide you with the skills to design, manufacture, install, monitor and maintain medical and surgical equipment and to provide advice on engineering matters to medical and allied staff.

As part of your study, you will undertake professional work experience, giving you the necessary skills to make an immediate and positive contribution to the industry. You will also be given the opportunity to undertake other hands-on activities such as hospital and industry site visits, industry-based projects and overseas study and work experience.

IS MEDICAL ENGINEERING FOR YOU?

If you are interested in any of the following, you may enjoy a career in Medical Engineering:

- Design
- Problem-solving
- Mathematics and physics.

OTHER CAREERS TO CONSIDER

You may also like to consider a career in a related area which may involve similar interests, such as Electrical Engineering, Industrial Design and Mechanical Engineering.

CAREER OUTCOMES

As a Medical Engineering graduate you may find employment in hospitals as an adviser to health and medical professionals, in firms concerned with the design, manufacture, supply and maintenance of medical, health and sporting equipment, or in occupational health agencies and in research institutions.

In the early stages of your career, you may be involved in the innovative use of technology, in the design of new devices and the assessment of appropriate engineering solutions to medical problems. As you become more experienced, you may manage Biomedical Engineering departments in hospitals and manufacturing companies and lead teams of engineers and technologists in the development of engineering solutions to improve health care.

FURTHER INFORMATION

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