The emerging field of bioelectronics is opening major scientific and technological avenues in the new millennium. It provides a wonderful synergy between biology and electronics and will have a major impact in medicine, technology, forensics, security and the environment.

COURSE OVERVIEW

2011 ATAR
Expected to be approximately 90. (not confirmed)

DEGREE LENGTH
4 years. Can be a combined degree with Arts, Science, IT, Commerce, Law and Medical Science.

COURSE CODE
511749

FOR MORE INFORMATION
T +61 2 9351 3229
F +61 2 9351 3847
E ee.enquiry@sydney.edu.au
sydney.edu.au/engineering/electrical

WHAT IS BIOELECTRONICS?

The Bachelor of Electrical Engineering (Bioelectronics) combines the study of biology and electronics. It merges biological materials such as cells, tissue and organs and electronic devices. This can include medical devices, biomedical engineering, image processing, signal processing and implantable devices.

WHY STUDY BIOELECTRONICS?

The study of biology and the development of electronic devices have been revolutionising biology and medicine for generations, from the electrocardiograph of the last century to 3D visualisation CT scans today.

The study of bioelectronics provides you with an opportunity to assist in improving the quality of life for many people around the world.

CAREER OPTIONS

As a bioelectronic engineer you will fill an important role both locally and internationally in engineering professions, particularly in the medical device field, but also in medicine, medical physics, physiology, sports science, forensics, finance, management, consultancy, the automotive and IT industries and the many areas where accredited engineers are employed.

Career opportunities are also in areas such as transport, smart buildings and new computer interfaces where human interaction and engineering work in tandem.

The degree meets the tertiary study entry requirements for the Graduate Medical Program.
WHAT DO I STUDY AT SCHOOL?
We anticipate the ATAR for this new program to be at least 90 with assumed knowledge of 3 Unit Mathematics and 2 Unit Physics or 2 Unit Chemistry.

WHAT WILL I STUDY DURING MY DEGREE?
In the first two years you will study biology, physiology and anatomy followed by bioelectronic subjects in the later years. These will be taught in addition to standard core electrical engineering courses.

You will be taught by leaders in the field and will utilise state of the art equipment, used and developed by the University’s researchers in this area. Industry, clinical and research guest lectures will also be featured throughout the course.

During your degree, you will undertake industrial work experience in industry or a health care facility where you will work as an engineer. This will provide you with contacts in the area, an appreciation of the working environment of engineers and experience in the area which is what employers are looking for.

In your later years you will complete a practical project where you may be involved in designing, building and testing biomedical devices to help the transition of health care from the hospital to home.

WHY STUDY AT SYDNEY?
We offer a wide range of dynamic courses with flexible degree structures. We don’t believe one model fits all. We encourage you to start working towards your goal, your way, from your first day at university.

As a global university, many of our degrees have a strong international emphasis. We offer comprehensive exchange programs that will allow you to travel and experience a different culture while you learn.

We prepare you for the rigours of higher learning, provide you with skills and versatility for professional employment and help you rise to the responsibility of leadership.