Why Biomedical Science at UQ?
Biomedical scientists understand how the human body works and what goes wrong in disease, and apply this knowledge to develop new treatments. From cancer screening and diagnosing HIV to blood transfusion for surgery, food poisoning and infection control, biomedical scientists provide the foundation of modern healthcare. Working in partnership with doctors, nurses and other healthcare professionals they diagnose disease, evaluate the effectiveness of treatment and research the causes and cures of disease. Biomedical Science at UQ is based on the latest research developments to make sure you will graduate with the skills, knowledge and understanding to enter a rewarding career in modern biomedical science.

What you will study
The Bachelor of Biomedical Science will give you foundation skills in chemistry, biology, physics, statistics and research. In your second and third years, you will specialise in a chosen area and have the option to pursue a research project and study abroad. You will also work on projects in research labs while on placement to give you first-hand experiences to help you graduate job-ready. In your final year* you can undertake an additional research component and gain hands-on skills by conducting your own project.

You can specialise in the following areas:
• Developmental Biology examines how organisms and cells grow and develop according to their genetic blueprint. You will examine how genes contribute to the development of organs and tissues. This knowledge is central to understanding the basis of human health and disease.

• Human Genetics examines the human genome and its significance as the instruction book of life. You can contribute to the ethical debate on the use of genetic information and be a part of future discoveries identifying the genetic mechanisms that define what it is to be human.

Bachelor of BIOMEDICAL SCIENCE (HONOURS)
Get hands-on, practical experience in state-of-the-art laboratories with Biomedical Science at UQ and discover the latest in globally relevant biomedical research. UQ’s Bachelor of Biomedical Science (Honours) will give you the theoretical and practical skills for an exciting career in an industry that’s making incredible advances in modern medical science.
Sample Courses

- Genes, Cells & Evolution
- Biochemistry & Molecular Biology
- Cell Structure & Function
- Applied Immunology
- Developmental Neurobiology
- Cells to Organisms
- Systems Physiology
- Principles of Pharmacology
- Integrated Endocrinology
- Research Project in Biomedical Sciences

- **Immunology and Infectious Diseases** investigates HIV, malaria, tuberculosis and newly emerging threats such as SARS and exotic influenzas that are an ongoing threat to global health. You will study molecular diagnostics to understand how new vaccines and therapeutic treatments are developed.

- **Molecular and Cellular Biology** examines the molecules made by living organisms in a cellular context and the application of this knowledge in developmental biology, neurobiology and immunology. You will gain the research skills to address questions on how cells divide, grow, communicate and die and understand the structure, function and interactions of nucleic acids, proteins, carbohydrates and lipids, and their contribution to cellular activities and processes.

- **Neuroscience** is a rapidly growing field examining animal and human nervous systems. The nervous system is a complex array of billions of interconnected fibres responsible for integrating, processing and co-ordinating sensory information and motor commands. You will examine how neural stem cells are being used in new therapeutic strategies to treat neurological and mental illnesses.

- **Pharmacology and Toxicology** examines drugs and their impact on the molecular structure of the human body. You will learn how pharmacologists are making a significant impact on diseases through advances in drug design and development, which are leading to new drugs or better use of existing drugs.

- **Physiology** studies how the body works, from the molecular and cellular levels to the integrative control of tissues, organs and systems. It aims to understand normal processes in the body and the changes that occur in cells, tissues and organs that lead to disease. Molecular and systems-based approaches allow researchers to gain a unique insight into physiology from many different perspectives.

Your future in Biomedical Science

Biomedical scientists have excellent career prospects in management, research, education and specialised laboratory work including:

- academia and research in universities, research institutes and hospitals
- technical and scientific roles in research projects
- biotechnology companies
- laboratory work in molecular and cellular biology
- other scientific roles that require logical reasoning and independent thinking.

Your postgraduate options

- Research higher degrees (MPhil and PhD) in your area of interest are also available.

International students

Standard UQ English language proficiency requirements apply for this degree. You are required as an international student to complete the degree on a full-time basis.

For more information on Biomedical Science at UQ:
- www.uq.edu.au/sbms
- Email science.enquiries@uq.edu.au
- Phone +61 7 3365 1888

For more information and other Health program details please see:
- www.health.uq.edu.au/careers
- UQhealth