

Bachelor of Biomedical Science (BBMS) - BBioMedSc

QTAC code (Australian and New Zealand applicants): Toowoomba campus: 906341; Distance education: 906345; Fraser Coast campus: 916341

CRICOS code (International applicants): 042222E

This program is offered only to continuing students. No new admissions will be accepted. Students who are interested in this study area should consider the [Bachelor of Health Biomedical Science](#) major which will be offered from Semester 1, 2012.

	On-campus~	Distance education+
Semester intake:	No new admissions	
Campus:	Fraser Coast, Toowoomba	-
Fees:	Commonwealth supported place Domestic full fee paying place International full fee paying place	Commonwealth supported place Domestic full fee paying place International full fee paying place
Standard duration:	3 years full-time, 8 years part-time maximum	

Footnotes

- ~ Only the first year of this program is undertaken via distance education. The practical component of some of the courses require compulsory residential schools.
- + Only the first year of this program is undertaken at Fraser Coast. Students complete their second and third year studies at Toowoomba.

Contact us

Current Students

[Ask a question](#)

Freecall (within Australia): 1800 007 252

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Email: usq.support@usq.edu.au

Program focus

The Bachelor of Biomedical Science aims to provide education and training for a career in biomedical sciences. Biomedical scientists provide the scientific support and research for medicine and support industries related to medicine, such as the pharmaceutical and diagnostic companies. Graduates will have a knowledge-base and skills that will fit them for a career in medical research, pathology services, public health laboratories, diagnostic and pharmaceutical industries. They will have a broad education allowing them to diversify after graduation, including seeking placement into professional programs, including medicine, pharmacy, veterinary science, dentistry, optometry, physiotherapy and occupational therapy.

Career opportunities

Medical Scientist, Research Scientist, Medical, Clinical or Research Technicians in Hospital Laboratories, University and Health or Biotechnology Industry; Pharmaceutical/Biotechnology Industry and Medical Technologies Marketing, Clinical Physiology and Diagnostic Industries, Pathology Laboratory Scientist. The Bachelor of Biomedical Science is an excellent pathway to seek entry into professional programs in the health sciences.

Program aims

The Bachelor of Biomedical Science aims to provide education and training for a career in biomedical sciences. Biomedical scientists provide the scientific support and research for medicine and support industries related

to medicine, such as the pharmaceutical and diagnostic companies. Graduates will have a knowledge base and skills that will fit them for a career in medical research, pathology services, public health laboratories, diagnostic and pharmaceutical industries. They will have a broad education allowing them to diversify after graduation, including seeking entry into professional programs in the health sciences.

Program objectives

Graduates from the Bachelor of Biomedical Science will:

- be able to demonstrate a sound grounding in biological sciences with a major emphasis on human health and disease
- have a working knowledge of the fundamentals of chemistry
- understand the principles underlying key disciplines in biomedical science, in particular in physiology, pharmacology, biochemistry, microbiology, immunology and molecular biology
- be capable of applying these principles to problem-solving
- be capable of interacting with people trained in other disciplines towards the solution of common problems in biomedical science
- possess skill in drawing upon the growing content of knowledge in these disciplines
- have demonstrated competence in laboratory techniques and the use of instrumentation relevant to the biomedical sciences
- have an awareness of the principles of laboratory safety as applicable in the areas studied in the program
- be able to prepare concise, accurate reports of experimental work
- be competent in the use of statistics and data analysis
- be able to use computers to assist them to obtain and analyse data and solve problems in the areas studied in the program
- be able to access appropriate scientific literature and understand and apply the results of scientific research at a level appropriate to a new graduate
- be skilled in the communication of ideas and concepts
- be motivated to sustain life-long learning
- be aware of the social, moral, and legal responsibilities of professional scientists
- be qualified for admission to an appropriate professional body
- possess skills and knowledge that allow successful career diversification on graduation.

Admission requirements

For entry into the Bachelor of Biomedical Science program, applicants will require Queensland Senior School Certificate (Year 12) or equivalent with the following:

- English (four semesters Sound Achievement) or equivalent. International applicants must have met the [University's English language requirements](#) or have completed the University's [ELICOS/EAP](#).
Recommended Study: Mathematics B (four semesters Sound Achievement). If applicants do not have the Mathematics B level pre-requisite for entry then they will be recommended to undertake [MAT1000 Mathematics Fundamentals](#) as an elective. Study in one of Biological Science, Chemistry, Physics or Multi-strand Science or equivalent.

Candidates for admission to this program must satisfy the normal USQ entry requirements for undergraduate programs. Please refer to [Section 2.2 of the Admissions Policy](#), Section 2.2.1 (for Australian students) and Section 2.2.3 (for international students).

Program fees

Commonwealth supported place

A Commonwealth supported place is where the Australian Government makes a contribution towards the cost of your higher education and you as a student pay a [student contribution amount](#), which varies depending on the courses undertaken. You are able to calculate the fees for a particular course via the [Course Fee Finder](#). Commonwealth Supported students may be eligible to defer their fees through a Government loan called [HECS-HELP](#).

Domestic full fee paying place

Domestic full fee paying places are funded entirely through the full fees paid by the student. Full fees vary depending on the courses that are taken. You are able to calculate the fees for a particular course via the [Course Fee Finder](#).

Permanent Humanitarian Visa holders, Permanent Resident visa holders and New Zealand citizens who reside outside Australia pay full tuition fees.

Domestic full fee paying students may be eligible to defer their fees through a Government loan called [FEE-HELP](#).

International full fee paying place

International students pay full fees. Full fees vary depending on the courses that are taken and whether they are studied on-campus, via distance education/online. You are able to calculate the fees for a particular course via the [Course Fee Finder](#).

Program structure

To qualify for the award of Bachelor of Biomedical Science, a candidate must complete or be exempted from courses with a total value of at least 24 units according to the following recommended enrolment pattern.

Required time limits

Students have a maximum of 8 years to complete this program.

Elective courses

Students will also choose four electives at levels 1, 2 or 3 from another area in the Faculty of Sciences or another Faculty, in order to enhance their intended program emphasis, including at least one unit of level three electives, (so that they complete at least eight units of study of level three courses). Suggested elective packages include those from pathophysiology, psychology, physics or microbiology. For students considering Medicine, a choice of the minors below, including physics and psychology, may be preferable:

Pathophysiology Electives:

- [BIO3620](#) (Semester 1)
- [BIO3630](#) (Semester 2).

Physics Electives:

- [PHY1104 Physics Concepts 1](#) (Semester 1) *

* Both courses only offered externally.

- [PHY2206 Medical Physics](#) (Semester 2).*

*

Psychology Electives:

- [PSY1010 Foundation Psychology A](#) (Semester 1 or Semester 3)
- [PSY1020 Foundation Psychology B](#) (Semester 1 or Semester 2)
- [PSY2020 Motivation and Emotion](#) (Semester 1)
- [PSY2030 Developmental Psychology](#) (Semester 2).

Other Electives

- [BIO3333 Cardiorespiratory and Sports Physiology](#) (Semester 2).

IT requirements

Students should visit the USQ [Recommended Hardware](#) and [Recommended Software](#) sites to check that their computers are capable of running the appropriate software and versions of Internet web browsers and to check the minimum and recommended standards for software.

Recommended enrolment pattern

Course	Year of program and semester in which course is normally studied						Residential school (compulsory /optional)	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)			
	Year	Sem	Year	Sem	Year	Sem		
Year 1[^]								
BIO1101 Biology 1*	1	1	1	1			C	
CHE1110 Chemistry 1*	1	1	1	1			C	
BIO1103 Pathology Studies	1	1	1	1				
BIO1104 Medical Microbiology and Immunology 1	1	1	1	1			C	
BIO1204 Introduction to Biomedical Sciences	1	1	1	2			C	
CHE2120 Chemistry 2*	1	2	1	2			C	Pre-requisite: CHE1110
Choose one of the following two courses:								
BIO1203 Human Anatomy and Physiology	1	2	1	2			C	
BIO1205 Pathology Clinical Placement 1			1	2				Pre-requisite: BIO1103 and BIO1104
STA2300 Data Analysis	1	1, 2	1	1, 2, 3				
Year 2								
BIO2201 Biochemistry 1	2	1						Pre-requisite: CHE2120
BIO2203 Human Physiology	2	1						Pre-requisite: BIO1203 or BIO1204
BIO2209 Cell Biology	2	1						Pre-requisite: BIO1101 and Co-requisite: BIO2201
CMS1100 Communicating in the Sciences	2	1	2	1				
Elective 1	2	2	2	2				
BIO2207 Genetics	2	2						Pre-requisite: BIO1101 and STA2300
BIO2213 Pharmacology	2	2						Pre-requisite: BIO2203
Elective 2	2	2	2	2				
Year 3								
BIO3313 Human Physiology and Pharmacology in Disease 1	3	1						Pre-requisite: BIO2203 and BIO2213
BIO3315 Medical Microbiology 2	3	1						Pre-requisite: BIO1104
BIO2106 Medical Microbiology and Immunology 2			3	1				Pre-requisite: BIO1104
Elective 3#~	3	1						
BIO3301 Biochemistry 2	3	2						Pre-requisite: BIO2201
BIO3309 Molecular Biology	3	2						Pre-requisite: BIO2209 Co-requisite: BIO2205
BIO3323 Human Physiology and Pharmacology in Disease 2	3	2						Pre-requisite: BIO3313 or e equivalent
Elective 4#	3	2						

Footnotes

- [^] Please note that first year courses are available on-campus at Fraser Coast with the exception of [STA2300](#) and [MAT1000 Mathematics Fundamentals](#) (if required) which can be studied externally.
- * If studied externally, residential school attendance on-campus in Toowoomba is compulsory.
- # Psychology and Pathophysiology electives may be studied externally.
- ~ If students do not have the recommended Mathematics B level for entry then they will be required to undertake MAT1000 as an elective.

Recommended enrolment pattern for students commencing prior to 2011

Course	Year of program and semester in which course is normally studied						Residential school (compulsory /optional)	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (WEB)			
	Year	Sem	Year	Sem	Year	Sem		
Year 1[^]								
BIO1101 Biology 1*	1	1	1	1			C	
CHE1110 Chemistry 1*	1	1	1	1			C	
STA2300 Data Analysis	1	1, 2	1	1, 2, 3				
CMS1100 Communicating in the Sciences	1	1	1	1				
BIO2103 Biology 2*	1	2	1	2			C	Pre-requisite: BIO1101
CHE2120 Chemistry 2*	1	2	1	2			C	Pre-requisite: CHE1110
BIO1203 Human Anatomy and Physiology	1	2	1	3			C	
Elective 1	1	2	1	2				
Year 2								
BIO2201 Biochemistry 1	2	1						Pre-requisite: CHE2120
BIO2203 Human Physiology	2	1						Pre-requisite: BIO1203 or BIO1204
BIO1104 Medical Microbiology and Immunology 1	1	1	2	1			C	
BIO2209 Cell Biology	2	1						Pre-requisite: BIO1101 and Co-requisite: BIO2201
Elective 2	2	2	2	2				
BIO2207 Genetics	2	2						Pre-requisite: BIO1101 and STA2300
BIO2213 Pharmacology	2	2						Pre-requisite: BIO2203
Elective 3	2	2	2	2				
Year 3								
BIO3313 Human Physiology and Pharmacology in Disease 1	3	1						Pre-requisite: BIO2203 and BIO2213
BIO3315 Medical Microbiology 2	3	1						Pre-requisite: BIO1104
BIO2106 Medical Microbiology and Immunology 2			3	1				Pre-requisite: BIO1104
Elective 4#~	3	1						
BIO3301 Biochemistry 2	3	2						Pre-requisite: BIO2201
BIO3309 Molecular Biology	3	2						Pre-requisite: BIO2209 Co-requisite: BIO2205
BIO3323 Human Physiology and Pharmacology in Disease 2	3	2						Pre-requisite: BIO3313 or e quivalent
Elective 5#	3	2						

Footnotes

- [^] Please note that first year courses are available on-campus at Fraser Coast with the exception of [STA2300](#) and [MAT1000 Mathematics Fundamentals](#) (if required) which can be studied externally.
- * If studied externally, [residential school](#) attendance on-campus in Toowoomba is compulsory.
- # Psychology and Pathophysiology electives may be studied externally.
- ~ If students do not have the recommended Mathematics B level for entry then they will be required to undertake MAT1000 as an elective.