

Bachelor of Biomedical Sciences (BBSC) - BBiomedSc

QTAC code (Australian and New Zealand applicants): Toowoomba campus: 906901; External: 906905

CRICOS code (International applicants): 098990B

	On-campus~^	External@^+
Start:	Semester 1 (February) Semester 2 (July)	Semester 1 (February) Semester 2 (July)
Campus:	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	
Program articulation:	From: Associate Degree of Biomedical Sciences	

Footnotes

~ Not all courses are available on-campus.

^ Semester 2 entry is only available part-time, therefore is not suitable for international students who wish to study full-time on-campus.

@ The external offering is available to international students residing in Australia but there are mandatory and highly recommended residential schools at a USQ campus and block clinical placement in Australia.

+ The external offering is not suitable for international students studying from overseas.

Contact us

Future Australian and New Zealand students	Future International students	Current students
Ask a question Freecall (within Australia): 1800 269 500 Phone (from outside Australia): +61 7 4631 5315 Email: study@usq.edu.au	Ask a question Phone: +61 7 4631 5543 Email: international@usq.edu.au	Ask a question Freecall (within Australia): 1800 007 252 Phone (from outside Australia): +61 7 4631 2285 Email: usq.support@usq.edu.au

Program aims

The Bachelor of Biomedical Sciences aims to provide education and training for a career in biotechnology, medical research, pharmaceutical and diagnostic companies, and public health laboratories. Graduates will have a broad education allowing them to diversify after graduation, including seeking entry via the Graduate Medical School Admissions Test (GAMSAT) into medicine and other professional programs in the allied health sciences. Students will be eligible to apply for membership to professional organisations including [The Australian Society for Microbiology](#), [Australian Society for Biochemistry and Molecular Biology](#) and the [Australian Society for Medical Research](#).

Program objectives

On completion of the Bachelor of Biomedical Sciences, students should be able to:

- apply a broad and coherent body of theoretical and practical knowledge in the biomedical sciences with in depth knowledge in one or more specialist disciplines.
- collect, organise, analyse and interpret biomedical sciences literature and laboratory data using appropriate experimental, computational, statistical and technological approaches.

- exhibit scientific literacy and oral, written and digital communication skills to explain biomedical sciences concepts to a range of audiences.
- apply practical laboratory and technical skills to generate accurate scientific data.
- work independently or collaboratively in teams to critically and creatively analyse issues and develop appropriate solutions to complex problems across a range of cultural, institutional, national and global contexts.
- demonstrate a working knowledge of ethical, professional and workplace health and safety requirements in research and clinical laboratories.

Australian Qualifications Framework

The Australian Qualifications Framework (AQF) is a single national, comprehensive system of qualifications offered by higher education institutions (including universities), vocational education and training institutions and secondary schools. Each AQF qualification has a set of descriptors which define the type and complexity of knowledge, skills and application of knowledge and skills that a graduate who has been awarded that qualification has attained, and the typical volume of learning associated with that qualification type.

This program is at AQF Qualification Level 07. Graduates at this level will have broad and coherent knowledge and skills for professional work and/or further learning.

The full set of levels criteria and qualification type descriptors can be found by visiting www.aqf.edu.au.

Program Information Set

View USQ's admission criteria, student profiles and a summary of all offers made under [Course Admission Information Set](#) via the QTAC website.

Admission requirements

To be eligible for admission, applicants must satisfy the following requirements:

- Have achieved a minimum Australian Tertiary Admission Rank (ATAR) of **65.6**, or equivalent qualification.[^]
- English Language Proficiency requirements for Category 2.

Applicants are advised to also address the following:

- [Assumed knowledge](#) expectations: English; General Mathematics
- Recommended Prior Study: One of Biological Science or Chemistry (Units 3 & 4, C) or equivalent.

All students are required to satisfy the applicable [English language requirements](#).

If students do not meet the English language requirements they may apply to study a University-approved [English language program](#). On successful completion of the English language program, students may be admitted to an award program.

[^] These are determined by the University for specific programs each Semester. The 2021 ATAR and tertiary entrance ranks are based on agreed QTAC schedules which assess formal study at Year 12 or [equivalent level](#), tertiary, preparatory, professional or vocational qualifications or work experience, as detailed in the QTAC Assessment of Qualifications Manual and QTAC Assessor Guidelines.

Adjustment factors may help you get into the program of your choice by increasing your entrance rank. The additional points don't apply to all applicants or all programs. Please read the information about USQ's [Adjustment Factors](#) carefully to find out what you may be eligible for.

Program fees

Commonwealth supported place

A Commonwealth supported place is where the Australian Government makes a contribution towards the cost of a students' higher education and students pay a [student contribution amount](#), which varies depending on the courses undertaken. Students are able to calculate the fees for a particular course via the [Course Fee Schedules](#).

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. Students are able to calculate the fees for a particular course via the [Course Fee Schedule](#)

Domestic full fee paying students may be eligible to defer their fees through a Government loan called [FEE-HELP](#) provided they meet the residency and citizenship requirements.

Australian citizens, Permanent Humanitarian Visa holders, Permanent Resident visa holders and New Zealand citizens who will be resident outside Australia for the duration of their program pay full tuition fees and are not eligible for [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. Students are able to calculate the fees for a particular course via the [Course Fee Schedules](#).

Program structure

This program comprises of 24 units including 8 core courses/units and one of the following combinations:

- one 12-unit Biomedical Sciences major and 4 approved courses; or
- one 12-unit Biomedical Sciences major and one 4-unit minor; or
- one 12-unit Biomedical Sciences major and 4 electives.

Core Courses

Course	Semester(s) offered	Mode
BIO1203 Human Anatomy and Physiology 1 [*]	1,3	ONC, EXT
BIO1103 Pathology Studies	1,2	ONC, EXT (Semester 2 EXT only)
CHE1110 Chemistry 1 [*]	1	ONC, EXT
BIO1204 Introduction to Biomedical Sciences [*]	1,2	ONC, EXT
BIO1104 Medical Microbiology and Immunology 1 [^]	2	ONC, EXT
CHE2120 Chemistry 2 [*]	2	ONC, EXT
STA1003 Fundamental Statistics	1,2,3	ONC, ONL
BIO2107 Cell and Molecular Biology 1 [*]	1	ONC, EXT

Footnotes

* Highly recommended residential school

^ Mandatory residential school

Biomedical Sciences Major Courses

Course	Semester(s) offered	Mode
BIO1206 Human Anatomy and Physiology 2 [^]	2,3	ONC, EXT (Semester 3 EXT only)
BIO2118 Systems Physiology and Pharmacology [*]	1	ONC, EXT
BIO2119 Biochemistry of Nutrition	2	ONC, ONL
BIO2218 Concepts in Endocrinology [*]	2	ONC, EXT
BIO2120 Techniques in Comparative Physiology 1 ⁺	1	EXT
BIO2220 Techniques in Comparative Physiology 2 ⁺	2	EXT
BIO3102 Human Pathophysiology	1	ONL
BIO3103 Applications in Human Tissue Engineering ⁺	1	EXT
BIO3201 Extreme Physiology and Pharmacology	2	ONL
BIO3203 Applications in Medical Biotechnology ⁺	2	EXT
BIO3207 Cell and Molecular Biology 2 [^]	2	ONC, EXT
SCI3302 Industry Placement [#]	1, 2, 3	ONC, EXT

Footnotes

- [^] Highly recommended residential school
- ^{*} Highly recommended residential school (ONC students and EXT students attend Residential School)
- ⁺ Mandatory residential school
- [#] Work placement

Approved Courses

Course	Semester(s) offered	Mode
BIO2106 Medical Microbiology and Immunology 2 [~]	2	ONC, EXT
BIO2219 Genetics	2	ONC, ONL
BIO3216 Immunopathology and Clinical Microbiology [~]	2	ONC, EXT
BIO3219 Biochemistry of Human Diseases	1	ONC, ONL

Footnotes

- [~] Mandatory residential school (ONC students and EXT students attend Residential School)

Required time limits

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

Minor Studies

Biomedical Sciences studies are designed to enable students to widen their knowledge and perspectives, or to complement their choice of major. Courses must be taken over two levels and should be the same discipline or recognised multi-disciplinary area. Enrolment requirements must be satisfied for any course selection.

Electives/Approved courses

Elective courses enable students to further increase their knowledge and widen their perspectives. Electives may be any USQ course. Choice of an elective will depend on the availability of the course(s), timetabling constraints and quotas. Students may consult their Program Director for a recommendation.

IT requirements

Students should visit the USQ [minimum computing standards](#) 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.

Students will need internet access to retrieve course materials, undertake assessment and participate in course online activities.

Residential schools

The attendance requirement of residential schools within this degree is indicated by the following letters: R = Recommended; HR = Highly Recommended; M = Mandatory. To find out more about [residential schools](#), visit the [Residential School Schedule](#) to view specific dates for your degree, or visit the [Policy and Procedure Library](#).

Core Courses

- [BIO1103 Pathology Studies](#)
- [BIO1104 Medical Microbiology and Immunology 1](#)
- [BIO1203 Human Anatomy and Physiology 1](#)
- [BIO1204 Introduction to Biomedical Sciences](#)
- [BIO2107 Cell and Molecular Biology 1](#)
- [CHE1110 Chemistry 1](#)
- [CHE2120 Chemistry 2](#)

Biomedical Sciences

- [BIO1206 Human Anatomy and Physiology 2](#)
- [BIO2118 Systems Physiology and Pharmacology](#)
- [BIO2120 Techniques in Comparative Physiology 1](#)
- [BIO2218 Concepts in Endocrinology](#)
- [BIO2220 Techniques in Comparative Physiology 2](#)
- [BIO3103 Applications in Human Tissue Engineering](#)
- [BIO3203 Applications in Medical Biotechnology](#)
- [BIO3207 Cell and Molecular Biology 2](#)

Exit points

Students who have successfully completed the first 16 units of the Bachelor of Biomedical Sciences in accordance with the recommended enrolment pattern may exit with the [ABSC Associate Degree of Biomedical Sciences](#). Students wishing to undertake this option should consult the Program Director in the School of Health and Wellbeing, Faculty of Health, Engineering and Sciences.

Credit

Exemptions/credit will be assessed based on the [USQ Credit and Exemption Procedure](#).

Enrolment

Progression

Students are advised to consult with student support usq.support@usq.edu.au in situations where their progression is affected either by failure in pre-requisite courses, or where they choose a part-time study pattern.

Recommended enrolment pattern

Students are able to enrol in any offered mode of a course (on-campus, external or online), regardless of the program mode of study they enrolled in.

Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)			
	Year	Sem	Year	Sem	Year	Sem		
Year 1								
BIO1103 Pathology Studies[#]	1	1	1	1,2			M	
CHE1110 Chemistry 1[*]	1	1	1	1			HR	
BIO1203 Human Anatomy and Physiology 1[*]	1	1	1	1,3			HR	
BIO1204 Introduction to Biomedical Sciences[*]	1	1,2	1	1,2			HR	
BIO1104 Medical Microbiology and Immunology 1⁺	1	2	1	2			M	
CHE2120 Chemistry 2[*]	1	2	1	2			HR	Pre-requisite: CHE1110
BIO2119 Biochemistry of Nutrition	1	2			1	2		Co-requisite: CHE2120
BIO1206 Human Anatomy and Physiology 2[*]	1	2	1	2,3			HR	Pre-requisite: BIO1203
Year 2								
STA1003 Fundamental Statistics	2	1,2			2	1,2,3		Enrolment is not permitted in STA1003 if STA2300 or STA8170 has been previously completed.
BIO2107 Cell and Molecular Biology 1[^]	2	1	2	1			HR	Pre-requisite: CHE2120
BIO2118 Systems Physiology and Pharmacology[^]	2	1	2	1			HR	Pre-requisite: BIO1203 Co-requisite: STA2300 or STA1003
BIO2120 Techniques in Comparative Physiology 1⁺			2	1			M	Co-requisite: BIO2118 and (STA2300 or STA1003)
Choose one of the following three courses:								
BIO2219 Genetics	2	2			2	2		Pre-requisite: BIO1100 or BIO1101 or BIO1204 or AGR1101
Or								
Elective course	2	2			2	2		
Or								
Minor course	2	2			2	2		
BIO2218 Concepts in Endocrinology[^]	2	2	2	2			HR	Pre-requisite: BIO2118
BIO2220 Techniques in Comparative Physiology 2⁺			2	2			M	Pre-requisite: BIO2120
Choose one of the following three courses:								
BIO2106 Medical Microbiology and Immunology 2[#]	2	2	2	2			M	Pre-requisite: BIO1104
Or								
Elective course	2	2			2	2		
Or								
Minor course	2	2			2	2		

Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)			
	Year	Sem	Year	Sem	Year	Sem		
Year 3								
BIO3102 Human Pathophysiology					3	1		Pre-requisite: BIO2118 and BIO2218
BIO3103 Applications in Human Tissue Engineering ⁺			3	1			M	Pre-requisite: BIO2220 Co-requisite: BIO3102
SCI3302 Industry Placement	3	1,2,3	3	1,2,3				Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
Choose one of the following three courses:								
BIO3219 Biochemistry of Human Diseases	3	1			3	1		Pre-requisite: BIO2119
Or								
Elective course	3	1			3	1		
Or								
Minor course	3	1			3	1		
BIO3201 Extreme Physiology and Pharmacology					3	2		Pre-requisite: BIO2118
BIO3207 Cell and Molecular Biology 2 [^]	3	2	3	2			HR	Pre-requisite: BIO2107
BIO3203 Applications in Medical Biotechnology ⁺			3	2			M	Pre-requisite: BIO3103 Co-requisite: BIO3207
Choose one of the following three courses:								
BIO3216 Immunopathology and Clinical Microbiology [#]	3	2	3	2			M	Pre-requisite: BIO2106
Or								
Elective course	3	2			3	2		
Or								
Minor course	3	2			3	2		

Footnotes

- # Mandatory residential school (ONC students and EXT students attend Residential School)
- * If studied externally, residential school attendance on-campus in Toowoomba is highly recommended. Candidates with evidence of Recognised Prior Learning (RPL) may seek exemption from some courses and/or residential schools in the 1st year of the major.
- + Mandatory residential school
- ^ Highly Recommended residential school (ONC students and EXT students attend Residential School)