Biotechnology can be defined as the use of various biological processes to make products and perform services. The essential feature of biotechnology therefore is the use of biological processes based on living cells and biochemical macro-molecules such as proteins, DNA and RNA in a rapidly-expanding range of activities of benefit to mankind.
<table>
<thead>
<tr>
<th>Faculty</th>
<th>Faculty of Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>School of Biotechnology and Biomolecular Sciences</td>
</tr>
<tr>
<td>Study Level</td>
<td>Undergraduate</td>
</tr>
<tr>
<td>Minimum Units of Credit</td>
<td>84</td>
</tr>
<tr>
<td>Specialisation Type</td>
<td>Major</td>
</tr>
</tbody>
</table>
Available in Program(s)

Program(s) in which this major is available

Bachelor of Science and Business - **BSc&Bus**

**3925 Science and Business**
Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 144
Typical Duration: 3 Years

Bachelor of Life Sciences - **BLS**

**3966 Life Sciences**
Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 144
Typical Duration: 3 Years

Bachelor of Science - **BSc**

**3970 Science**
Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 144
Typical Duration: 3 Years

Bachelor of Science (International) - **BSc(International)**

**3987 Science (International)**
Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 192
Typical Duration: 4 Years
**Specialisation Structure**

Students must complete 84 UOC.

**Level 1 Core Courses**

Students must take 36 UOC of the following courses.

**BABS1201 | 6 UOC**  
Molecules, Cells and Genes

**BABS1202 | 6 UOC**  
Applied Biomolecular Sciences

One of the following:

**CHEM1011 | 6 UOC**  
Chemistry 1A: Atoms, Molecules and Energy

**CHEM1031 | 6 UOC**  
Higher Chemistry 1A: Atoms, Molecules and Energy

One of the following:

**CHEM1021 | 6 UOC**  
Chemistry 1B: Elements, Compounds and Life

**CHEM1041 | 6 UOC**  
Higher Chemistry 1B: Elements, Compounds and Life

One of the following:

**MATH1031 | 6 UOC**  
Mathematics for Life Sciences

**MATH1131 | 6 UOC**  
Mathematics 1A

**MATH1141 | 6 UOC**  
Higher Mathematics 1A

One of the following:
MATH1041 | 6 UOC  
Statistics for Life and Social Sciences

MATH1231 | 6 UOC  
Mathematics 1B

MATH1241 | 6 UOC  
Higher Mathematics 1B

**Level 2 Core Courses**

Students must take 24 UOC of the following courses.

BABS2011 | 6 UOC  
Current Trends in Biotechnology

BIOC2101 | 6 UOC  
Principles of Biochemistry (Advanced)

BIOC2201 | 6 UOC  
Principles of Molecular Biology (Advanced)

MICR2011 | 6 UOC  
Microbiology 1

**Level 3 Core Courses**

Students must take 24 UOC of the following courses.

BABS3031 | 6 UOC  
Biotechnology and Bioengineering

BABS3061 | 6 UOC  
Medical Biotechnology

BABS3071 | 6 UOC  
Commercial Biotechnology
Suggested Free Electives

Suggested Free Electives;
- ACCT1501 Accounting and Financial Management 1A
- MGMT2010 Innovation & Entrepreneurship

Suggested Science Electives

Level 2 Recommended courses:
- BABS2202 Molecular Cell Biology 1
- BABS2204 Genetics or BABS2264 Genetics (Advanced)

Level 2 Suggested courses:
- BINF2010 Introduction to Bioinformatics
- CHEM2021 Organic Chemistry: Mechanisms & Biomolecules
- CHEM2041 Analytical Chemistry: Essential Methods
- PHAR2011 Introductory Pharmacology and Toxicology
- SCIF2199 Science Work Placement

Level 3 Recommended courses:
- MICR3061 Viruses and Disease
- BABS3081 Bacteria & Disease
- MICR3071 Environmental Microbiology
- BABS3021 Microbial Genetics or MICR3621 Microbial Genetics (Advanced)
- BIOC3261 Human Biochemistry
- BABS3041 Immunology 1
- BIOC3111 Molecular Biology of Proteins
- BIOC3271 Molecular Cell Biology 2 or BIOC3671 Molecular Cell Biology 2 (Advanced)
- BABS3291 Genes, Genomes & Evolution
- BABS3151 Human Molecular Genetics & Disease
- BABS3121 Molecular Biology of Nucleic Acids or BABS3621 Molecular Biology of Nucleic Acids (Advanced)

Level 3 Suggested courses:
- BINF3010 Bioinformatics Methods & Applications
- BABS3281 Molecular Frontiers

Enrolment Disclaimer
Unless advised otherwise by your program authority, you should follow the rules for the handbook for the year you commenced your program. You are also responsible for ensuring you enrol in courses according to your program requirements. myUNSW enrolment checks that you have met enrolment requirements such as pre-requisites for individual courses but not that a course will count towards your program requirements.
Additional Information

Honours

For information about Honours in Biotechnology see the Biotechnology Honours plan or contact the School of Biotechnology & Biomolecular Sciences (BABS).
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

Pre-2019 Handbook Editions
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Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179