

## Bachelor of Biotechnology (BBiotech)

If you are unable to access the information in this study plan, please email [enquire@science.uq.edu.au](mailto:enquire@science.uq.edu.au) for assistance.

### Bachelor of Biotechnology (BBiotech)

Program Code: 2456

Duration: 3 years full time (or part-time equivalent)

Total Units: 48

Commencement:

Semester 1

Semester 2

Entry Requirements: Please refer to [BBiotech](#) future students page

### Key Program Information

- This is an AQF Level 7 program.
- Students in this program must complete one (1) extended major.
- Students can choose to complete a minor in this program. Minors are optional.

### Important Notes

The information contained in this document is intended as general advice only.

Students must follow the program rules & requirements listed on the [Programs and Courses Website](#). This planner must be used in conjunction with your program duration course list and program rules.

Students need to check the prerequisites, incompatibilities and restrictions for all courses they select in their study plan. Future course offerings are subject to change.

This document is not intended as a progression or graduation check. For further information on progression or graduation checks, please contact the Faculty of Science.

### Further Assistance

Check out the [Frequently Asked Questions \(FAQ\)](#) page on this study planner document.

If you need further advice or have other questions, please contact:

#### [Faculty of Science](#)

Email: [enquire@science.uq.edu.au](mailto:enquire@science.uq.edu.au)

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## Bachelor of Biotechnology (BBiotech) Agricultural Biotechnology Extended Major

Students must follow the program rules & requirements listed on the [Programs and Courses Website](#).

### Semester 1 commencement

**Step 1** Start with the base study plan outlining Core Courses and Extended Major Courses including Extended Major Prerequisite Courses (refer to 'Step 4' for further information).

Year 1				
1 <sup>st</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOL1020</b> Genes, Cells & Evolution  2 units – Core Course	<b>CHEM1100</b> Chemistry 1  2 units – Core Course	<b>STAT1201</b> Analysis of Scientific Data  2 units – Core Course <small>Note: STAT1301 offered in Semester 2 only.</small>	<b>BIOL1030</b> Biodiversity and the Environment  2 units – Major Course
2 <sup>nd</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOL1040</b> 2 units – Optional Extended Major Prerequisite OR General Elective Course	<b>BIOT2002</b> Issues in Biotechnology  2 units – Major Course	<b>Option</b>  2 units – General Elective Course*	<b>Option</b>  2 units – General Elective Course*
Year 2				
3 <sup>rd</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>FOOD1001</b> 2 units – Optional Extended Major Prerequisite OR General Elective Course	<b>BIOC2000</b> Biochemistry & Molecular Biology  2 units – Major Course	<b>Option</b> 2 units – Agricultural Biotechnology Level 2 Elective Course OR General Elective Course*	<b>Option</b> 2 units – Agricultural Biotechnology Level 2 Elective Course OR General Elective Course*
4 <sup>th</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOL2202</b> Genetics  2 units – Major Course	<b>Option</b> 2 units – Agricultural Biotechnology Level 2 Elective Course OR General Elective Course*	<b>Option</b> 2 units – Agricultural Biotechnology Level 2 Elective Course OR General Elective Course*	<b>Option</b> 2 units – Agricultural Biotechnology Level 2 Elective Course OR General Elective Course*

Students who have not completed *Senior Chemistry* in Queensland (or equivalent) will need to complete CHEM1090 in their 1<sup>st</sup> semester as a program elective or general elective course and complete CHEM1100 in their 2<sup>nd</sup> semester.

Students complete 4 units from Agricultural Biotechnology Level 2 Elective Courses. Refer to the course list for the course options for your extended major, noting the semester offerings of the courses.

\* Up to 16 units General Elective courses can be completed as part of the program.

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Year 3				
5 <sup>th</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOT3009</b> Quality Management Systems in Biotechnology  <i>2 units – Major Course</i>	<b>Option</b> Agricultural Biotechnology Level 3 Elective Course (section 1)  <i>2 units – Major Course</i>	<b>Option</b> Agricultural Biotechnology Level 3 Elective Course (section 1 or 2)  <i>2 units – Major Course</i>	<b>Option</b> <i>2 units – Agricultural Biotechnology Level 3 Elective Course (section 1 or 2)</i> OR <i>General Elective Course*</i>
6 <sup>th</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOT3004</b> Commercialisation of Biotechnology Products  <i>2 units – Major Course</i>	<b>Option</b> Agricultural Biotechnology Level 3 Elective Course (section 2)  <i>2 units – Major Course</i>	<b>Option</b> Agricultural Biotechnology Level 3 Elective Course (section 2)  <i>2 units – Major Course</i>	<b>Option</b> <i>MUST be Level 2 or higher</i>  <i>2 units – Agricultural Biotechnology Level 3 Elective (section 2)</i> OR <i>General Elective Course*</i>

\* Up to 16 units General Elective courses can be completed as part of the program.

*In the following steps, students should note that Option courses above can be moved to different semesters depending on the courses selected. Students need to ensure they have met the prerequisites of the courses they plan as well as note any incompatibilities and restrictions.*

**Step 2** Students should firstly note the additional comments about completing *Senior Chemistry* in Queensland (or equivalent) on the previous page to determine if they need to complete CHEM1090 and adjust the study plan above.

**Step 3** Decide on which statistics course you would like to take. STAT1201, the standard statistics course, or STAT1301, the advanced statistics courses. Students should note that STAT1201 is offered in Semester 1, Semester 2 and Summer Semester. However, STAT1301 is only offered in Semester 2.

**Step 4** Decide on your Recommended Extended Major Prerequisite – FOOD1001 or BIOL1040, noting the semester offerings of the courses. Completing one (or more) of these courses is highly recommended for progression through your extended major and may be a required prerequisite for later Level 2 and 3 courses. Students who choose not to complete this course, may restrict the courses they can complete later in their study plan.

**Step 5** Decide on the option courses for your extended major, noting the semester offerings of the courses. Not all courses are offered every semester. Note which section of the major list the course must come from and the Level of the course.

**Step 6** Decide on your general elective courses or courses for a minor (completing a minor is optional).

Minor: Students choosing to complete a minor should plan their minor courses in their study plan at this step. Minor courses will replace 8 units of general elective courses in the study planner above.

No Minor: Students who do not complete a minor must choose at least 16 units of general elective courses to put in their study plan.

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General electives can be chosen from any undergraduate program offered at UQ, across any Faculty. Students may wish to search for courses of interest in the UQ [Programs and Courses](#) page or select “Browse by Faculty” on this page to see courses listed in other undergraduate programs. General elective courses can also be additional courses from the BBiotech course list.

Students need to follow the additional program rules when selecting minor courses and general elective courses:

- Students can complete a maximum of 24 units of Level 1 courses across the total program, including core courses, major courses, minor courses, program and general electives.

**Step 7** Check prerequisites, incompatibilities, and restrictions for all courses you have selected in your study plan. You can click on the course codes above or find the course on the UQ [Programs and Courses](#) page. You may need to adjust courses in your study plan at this step.

Students will need to specifically check their general elective courses for semester offerings, course restrictions, prerequisites and incompatibilities. Students will be limited to courses available to them based on these requirements and the program rules.

Please refer to the [BBiotech](#) course list for full course options.


## Bachelor of Biotechnology (BBiotech) Agricultural Biotechnology Extended Major


Students must follow the program rules & requirements listed on the [Programs and Courses Website](#).

### Semester 2 commencement

**Step 1** Start with the base study plan outlining Core Courses and Extended Major Courses including Extended Major Prerequisite Courses (refer to 'Step 4' for further information).

Year 1				
1 <sup>st</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOL1040</b>  2 units – <i>Optional Extended Major Prerequisite</i> OR  <i>General Elective Course</i>	<b>CHEM1100</b>  Chemistry 1  2 units – <i>Core Course</i>	<b>STAT1201</b>  <i>OR</i> <b>STAT1301</b>  2 units – <i>Core Course</i>	<b>BIOT2002</b>  Issues in Biotechnology  2 units – <i>Major Course</i>
2 <sup>nd</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>FOOD1001</b>  2 units – <i>Optional Extended Major Prerequisite</i> OR  <i>General Elective Course</i>	<b>BIOL1020</b>  Genes, Cells & Evolution  2 units – <i>Core Course</i>	<b>BIOL1030</b>  Biodiversity and the Environment  2 units – <i>Major Course</i>	<b>Option</b>  2 units – <i>General Elective Course*</i>
Year 2				
3 <sup>rd</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOL2202</b>  Genetics  2 units – <i>Major Course</i>	<b>Option</b>  2 units – <i>Agricultural Biotechnology Level 2 Elective Course</i> OR <i>General Elective Course*</i>	<b>Option</b>  2 units – <i>Agricultural Biotechnology Level 2 Elective Course</i> OR <i>General Elective Course*</i>	<b>Option</b>  2 units – <i>Agricultural Biotechnology Level 2 Elective Course</i> OR <i>General Elective Course*</i>
4 <sup>th</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOC2000</b>  Biochemistry & Molecular Biology  2 units – <i>Major Course</i>	<b>Option</b>  2 units – <i>Agricultural Biotechnology Level 2 Elective Course</i> OR <i>General Elective Course*</i>	<b>Option</b>  2 units – <i>Agricultural Biotechnology Level 2 Elective Course</i> OR <i>General Elective Course*</i>	<b>Option</b>  2 units – <i>Agricultural Biotechnology Level 2 Elective Course</i> OR <i>General Elective Course*</i>

 Students who have not completed *Senior Chemistry* in Queensland (or equivalent) will need to complete CHEM1090 in their 1<sup>st</sup> semester as a program elective or general elective course.

 Students complete 4 units from Agricultural Biotechnology Level 2 Elective Courses. Refer to the course list for the course options for your extended major, noting the semester offerings of the courses.

\* Up to 16 units General Elective courses can be completed as part of the program.

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Year 3				
5 <sup>th</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOT3004</b> Commercialisation of Biotechnology Products  <i>2 units – Major Course</i>	<b>Option</b> Agricultural Biotechnology Level 3 Elective Course (Section 2)  <i>2 units – Major Course</i>	<b>Option</b> Agricultural Biotechnology Level 3 Elective Course (section 2)  <i>2 units – Major Course</i>	<b>Option</b> <i>2 units – Agricultural Biotechnology Level 3 Elective Course (section 1 or 2)</i> OR <i>General Elective Course*</i>
6 <sup>th</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOT3009</b> Quality Management Systems in Biotechnology  <i>2 units – Major Course</i>	<b>Option</b> Agricultural Biotechnology Level 3 Elective Course (section 1)  <i>2 units – Major Course</i>	<b>Option</b> Agricultural Biotechnology Level 3 Elective Course (section 1 or 2)  <i>2 units – Major Course</i>	<b>Option</b> <i>2 units – OR Agricultural Biotechnology Level 3 Elective Course (section 1 or 2)</i> OR <i>General Elective Course* (MUST be level 2 or higher) Course</i>

\* Up to 16 units General Elective courses can be completed as part of the program.

*In the following steps, students should note that Option courses above can be moved to different semesters depending on the courses selected. Students need to ensure they have met the prerequisites of the courses they plan as well as note any incompatibilities and restrictions.*

**Step 2** Students should firstly note the additional comments about completing *Senior Chemistry* in Queensland (or equivalent) on the previous page to determine if they need to complete CHEM1090 and adjust the study plan above.

**Step 3** Decide on which statistics course you would like to take. STAT1201, the standard statistics course, or STAT1301, the advanced statistics courses. Students should note that STAT1201 is offered in Semester 1, Semester 2 and Summer Semester. However, STAT1301 is only offered in Semester 2.

**Step 4** Decide on your Recommended Major Prerequisite – FOOD1001 or BIOL1040, noting the semester offerings of the courses. Completing one (or more) of these courses is highly recommended for progression through your major and may be a required prerequisite for later Level 2 and 3 courses. Students who choose not to complete this course, may restrict the courses they can complete later in their study plan.

**Step 5** Decide on the option courses for your extended major, noting the semester offerings of the courses. Not all courses are offered every semester. Note which section of the major list the course must come from and the Level of the course.

**Step 6** Decide on your general elective courses or courses for a minor (completing a minor is optional).

Minor: Students choosing to complete a minor should plan their minor courses in their study plan at this step. Minor courses will replace 8 units of general elective courses in the study planner above.

No Minor: Students who do not complete a minor must choose at least 16 units of general elective courses to put in their study plan.

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General electives can be chosen from any undergraduate program offered at UQ, across any Faculty. Students may wish to search for courses of interest in the UQ [Programs and Courses](#) page or select “Browse by Faculty” on this page to see courses listed in other undergraduate programs. General elective courses can also be additional courses from the BBiotech course list.

Students need to follow the additional program rules when selecting minor courses and general elective courses:

- Students can complete a maximum of 24 units of Level 1 courses across the total program, including core courses, major courses, minor courses, program and general electives.

**Step 7**

Check prerequisites, incompatibilities, and restrictions for all courses you have selected in your study plan. You can click on the course codes above or find the course on the UQ [Programs and Courses](#) page. You may need to adjust courses in your study plan at this step.

Students will need to specifically check their general elective courses for semester offerings, course restrictions, prerequisites and incompatibilities. Students will be limited to courses available to them based on these requirements and the program rules.

Please refer to the [BBiotech](#) course list for full course options.



## Bachelor of Biotechnology (BBiotech) Chemical and Nano Biotechnology Extended Major

Students must follow the program rules & requirements listed on the [Programs and Courses Website](#).

### Semester 1 commencement

**Step 1** Start with the base study plan outlining **Core Courses** and **Extended Major Courses** including **Extended Major Prerequisite Courses**.

Year 1				
1 <sup>st</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOL1020</b> Genes, Cells & Evolution  2 units – Core Course	<b>CHEM1100</b> Chemistry 1  2 units – Core Course	<b>STAT1201</b> Analysis of Scientific Data  <small>Note: STAT1301 offered in Semester 2 only.</small> 2 units – Core Course	<b>Option</b>  2 units – <b>Program Elective Course*</b>
2 <sup>nd</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOT2002</b> Issues in Biotechnology  2 units – Major Course	<b>CHEM1200</b> Chemistry 2  2 units – Major Course	<b>Option</b>  2 units – General Elective Course	<b>Option</b>  2 units – General Elective Course
Year 2				
3 <sup>rd</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOC2000</b> Biochemistry & Molecular Biology  2 units – Major Course	<b>CHEM2050</b> Intermediate Chemistry 1  2 units – Major Course	<b>CHEM2054</b> Experimental Chemistry 1  2 units – Major Course	<b>Option</b>  2 units – General Elective Course
4 <sup>th</sup> Semester (July – Nov) <i>Semester 2</i>	<b>CHEM2060</b> Intermediate Chemistry 2  2 units – Major Course	<b>Option</b>  2 units – General Elective Course	<b>Option</b>  2 units – General Elective Course	<b>Option</b>  2 units – General Elective Course

Students who have not completed *Senior Chemistry* in Queensland (or equivalent) will need to complete CHEM1090 in their 1<sup>st</sup> semester as a program elective or general elective course and complete CHEM1100 in their 2<sup>nd</sup> semester. They will then need to complete CHEM1200 over Summer Semester.

\* Up to 16 units General Elective courses can be completed as part of the program. Students will require at least 2 units of program elective courses.

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Year 3				
5 <sup>th</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOT3009</b> Quality Management Systems in Biotechnology  2 units – Major Course	<b>Option</b> Chemical and Nano Biotechnology Level 3 Elective Course (Section 1 or 2)  2 units – Major Course	<b>Option</b> Chemical and Nano Biotechnology Level 3 Elective Course (Section 1 or 2)  2 units – Major Course	<b>Option</b>  2 units – General Elective Course
6 <sup>th</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOT3004</b> Commercialisation of Biotechnology Products  2 units – Major Course	<b>CHEM3016</b> Experimental Chemistry 2  2 units – Major Course	<b>Option</b> Chemical and Nano Biotechnology Level 3 Elective Course (Section 1 or 2)  <i>Note: CHEM3011 (Section 1) only offered in Semester 2</i>  2 units – Major Course	<b>Option</b> <i>MUST be Level 2 or higher</i>  2 units – General Elective Course

In the following steps, students should note that Option courses above can be moved to different semesters depending on the courses selected. Students need to ensure they have met the prerequisites of the courses they plan as well as note any incompatibilities and restrictions.

- Step 2** Students should firstly note the additional comments about completing *Senior Chemistry* in Queensland (or equivalent) on the previous page to determine if they need to complete CHEM1090 and adjust the study plan above.
- Step 3** Decide on which statistics course you would like to take. STAT1201, the standard statistics course, or STAT1301, the advanced statistics courses. Students should note that STAT1201 is offered in Semester 1, Semester 2 and Summer Semester. However, STAT1301 is only offered in Semester 2.
- Step 4** Decide on your Program Elective course. Students will need to choose a course from anywhere on the BBiotech course list (excluding general electives). This will generally be a level 1 course in first year. Students can move this to a later semester, swapping it for a general elective course.
- Step 5** Decide on the option courses for your extended major, noting the semester offerings of the courses. Not all courses are offered every semester. Note which section of the major list the course must come from and the Level of the course.
- Step 6** Decide on your general elective courses or courses for a minor (completing a minor is optional).
- Minor: Students choosing to complete a minor should plan their minor courses in their study plan at this step. Minor courses will replace 8 units of general elective courses in the study planner above.
- No Minor: Students who do not complete a minor must choose at least 16 units of general elective courses to put in their study plan.

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General electives can be chosen from any undergraduate program offered at UQ, across any Faculty. Students may wish to search for courses of interest in the UQ [Programs and Courses](#) page or select “Browse by Faculty” on this page to see courses listed in other undergraduate programs. General elective courses can also be additional courses from the BBiotech course list.

Students need to follow the additional program rules when selecting minor courses and general elective courses:

- Students can complete a maximum of 24 units of Level 1 courses across the total program, including core courses, major courses, minor courses, program and general electives.

**Step 7**

Check prerequisites, incompatibilities, and restrictions for all courses you have selected in your study plan. You can click on the course codes above or find the course on the UQ [Programs and Courses](#) page. You may need to adjust courses in your study plan at this step.

Students will need to specifically check their general elective courses for semester offerings, course restrictions, prerequisites and incompatibilities. Students will be limited to courses available to them based on these requirements and the program rules.

Please refer to the [BBiotech](#) course list for full course options.

## Bachelor of Biotechnology (BBiotech) Chemical and Nano Biotechnology Extended Major

Students must follow the program rules & requirements listed on the [Programs and Courses Website](#).

### Semester 2 commencement

**Step 1** Start with the base study plan outlining Core Courses and Extended Major Courses including Extended Major Prerequisite Courses.

Year 1				
1 <sup>st</sup> Semester (July – Nov) <i>Semester 2</i>	<b>STAT1201</b> <i>OR</i> <b>STAT1301</b> 2 units – Core Course	<b>CHEM1100</b> Chemistry 1 2 units – Core Course	<b>BIOL1020</b> Genes, Cells & Evolution 2 units – Core Course	<b>BIOT2002</b> Issues in Biotechnology 2 units – Major Course
2 <sup>nd</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>CHEM1200</b> Chemistry 2 2 units – Major Course	<b>Option</b> 2 units – Program Elective Course*	<b>Option</b> 2 units – General Elective Course	<b>Option</b> 2 units – General Elective Course
Year 2				
3 <sup>rd</sup> Semester (July – Nov) <i>Semester 2</i>	<b>CHEM2060</b> Intermediate Chemistry 2 2 units – Major Course	<b>Option</b> 2 units – General Elective Course	<b>Option</b> 2 units – General Elective Course	<b>Option</b> 2 units – General Elective Course
4 <sup>th</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOC2000</b> Biochemistry & Molecular Biology 2 units – Major Course	<b>CHEM2050</b> Intermediate Chemistry 1 2 units – Major Course	<b>CHEM2054</b> Experimental Chemistry 1 2 units – Major Course	<b>Option</b> 2 units – General Elective Course

Students who have not completed *Senior Chemistry* in Queensland (or equivalent) will need to consult the Faculty of Science regarding the progression of courses within this major.

\* Up to 16 units General Elective courses can be completed as part of the program. Students will require at least 2 units of program elective courses.

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Year 3				
5 <sup>th</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOT3004</b> Commercialisation of Biotechnology Products  <i>2 units – Major Course</i>	<b>CHEM3016</b> Experimental Chemistry 2  <i>2 units – Major Course</i>	<b>Option</b> Chemical and Nano Biotechnology Level 3 Elective Course (Section 1 or 2)  <i>Note: CHEM3011 (Section 1) only offered in Semester 2</i>  <i>2 units – Major Course</i>	<b>Option</b>   <i>2 units – General Elective Course</i>
6 <sup>th</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOT3009</b> Quality Management Systems in Biotechnology  <i>2 units – Major Course</i>	<b>Option</b> Chemical and Nano Biotechnology Level 3 Elective Course (Section 1 or 2)  <i>2 units – Major Course</i>	<b>Option</b> Chemical and Nano Biotechnology Level 3 Elective Course (Section 1 or 2)  <i>2 units – Major Course</i>	<b>Option</b> <i>MUST be Level 2 or higher</i>  <i>2 units – General Elective Course</i>

In the following steps, students should note that Option courses above can be moved to different semesters depending on the courses selected. Students need to ensure they have met the prerequisites of the courses they plan as well as note any incompatibilities and restrictions.

- Step 2** Students should firstly note the additional comments about completing *Senior Chemistry* in Queensland (or equivalent) on the previous page to determine if they need to complete CHEM1090 and adjust the study plan above.
- Step 3** Decide on which statistics course you would like to take. STAT1201, the standard statistics course, or STAT1301, the advanced statistics courses. Students should note that STAT1201 is offered in Semester 1, Semester 2 and Summer Semester. However, STAT1301 is only offered in Semester 2.
- Step 4** Decide on your Program Elective course. Students will need to choose a course from anywhere on the BBiotech course list (excluding general electives). This will generally be a level 1 course in first year. Students can move this to a later semester, swapping it for a general elective course.
- Step 5** Decide on the option courses for your extended major, noting the semester offerings of the courses. Not all courses are offered every semester. Note which section of the major list the course must come from and the Level of the course.
- Step 6** Decide on your general elective courses or courses for a minor (completing a minor is optional).  
*Minor:* Students choosing to complete a minor should plan their minor courses in their study plan at this step. Minor courses will replace 8 units of general elective courses in the study planner above.  
*No Minor:* Students who do not complete a minor must choose at least 16 units of general elective courses to put in their study plan.

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General electives can be chosen from any undergraduate program offered at UQ, across any Faculty. Students may wish to search for courses of interest in the UQ [Programs and Courses](#) page or select “Browse by Faculty” on this page to see courses listed in other undergraduate programs. General elective courses can also be additional courses from the BBiotech course list.

Students need to follow the additional program rules when selecting minor courses and general elective courses:

- Students can complete a maximum of 24 units of Level 1 courses across the total program, including core courses, major courses, minor courses, program and general electives.

**Step 7** Check prerequisites, incompatibilities, and restrictions for all courses you have selected in your study plan. You can click on the course codes above or find the course on the UQ [Programs and Courses](#) page. You may need to adjust courses in your study plan at this step.

Students will need to specifically check their general elective courses for semester offerings, course restrictions, prerequisites and incompatibilities. Students will be limited to courses available to them based on these requirements and the program rules.

Please refer to the [BBiotech](#) course list for full course options.

## Bachelor of Biotechnology (BBiotech) Medical Biotechnology Extended Major

Students must follow the program rules & requirements listed on the [Programs and Courses Website](#).

### Semester 1 commencement

**Step 1** Start with the base study plan outlining Core Courses and Extended Major Courses including Extended Major Prerequisite Courses (refer to 'Step 4' for further information).

Year 1				
1 <sup>st</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOL1020</b> Genes, Cells & Evolution  2 units – Core Course	<b>CHEM1100</b> Chemistry 1  2 units – Core Course	<b>STAT1201</b> Analysis of Scientific Data  <i>Note: STAT1301 offered in Semester 2 only.</i> 2 units – Core Course	<b>Option</b>  2 units – General Elective Course
2 <sup>nd</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOL1040</b> 2 units – Recommended Extended Major Prerequisite OR <b>Program Elective Course*</b>	<b>CHEM1200</b> Chemistry 2  2 units – Major Course	<b>BIOT2002</b> Issues in Biotechnology  2 units – Major Course	<b>Option</b>  2 units – General Elective Course
Year 2				
3 <sup>rd</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOC2000</b> Biochemistry & Molecular Biology  2 units – Major Course	<b>CHEM2050</b> Intermediate Chemistry 1  2 units – Major Course	<b>Option</b> 2 units – Medical Biotechnology Level 2 Elective Course OR General Elective Course	<b>Option</b>  General Elective Course
4 <sup>th</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOM2402</b> Principles of Pharmacology  2 units – Major Course	<b>Option</b> Medical Biotechnology Level 2 Elective Course OR 2 units – General Elective Course	<b>Option</b> 2 units – General Elective Course	<b>Option</b> 2 units – General Elective Course

Students who have not completed *Senior Chemistry* in Queensland (or equivalent) will need to complete CHEM1090 in their 1<sup>st</sup> semester as a program elective or general elective course and complete CHEM1100 in their 2<sup>nd</sup> semester. They will then need to complete CHEM1200 over Summer Semester.

Students complete 2 units from Medical Biotechnology Level 2 Elective Courses. Refer to the course list for the course options for your extended major, noting the semester offerings of the courses.

\* Up to 16 units General Elective courses can be completed as part of the program. Students will require at least 2 units of program elective courses.

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Year 3				
5 <sup>th</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOM3401</b> Systems Pharmacology  2 units – Major Course	<b>BIOT3002</b> Drug Design & Development  2 units – Major Course	<b>BIOT3009</b> Quality Management Systems in Biotechnology  2 units – Major Course	<b>Option</b>  2 units – General Elective Course
6 <sup>th</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOM3402</b> Experimental Pharmacology  2 units – Major Course	<b>BIOT3004</b> Commercialisation of Biotechnology Products  2 units – Major Course	<b>CHEM3020</b> Medicinal Chemistry & Chemical Biology  2 units – Major Course	<b>Option</b> <i>MUST be Level 2 or higher</i>  2 units – General Elective Course

In the following steps, students should note that Option courses above can be moved to different semesters depending on the courses selected. Students need to ensure they have met the prerequisites of the courses they plan as well as note any incompatibilities and restrictions.

- Step 2** Students should firstly note the additional comments about completing *Senior Chemistry* in Queensland (or equivalent) on the previous page to determine if they need to complete CHEM1090 and adjust the study plan above.
- Step 3** Decide on which statistics course you would like to take. STAT1201, the standard statistics course, or STAT1301, the advanced statistics courses. Students should note that STAT1201 is offered in Semester 1, Semester 2 and Summer Semester. However, STAT1301 is only offered in Semester 2.
- Step 4** Decide on your Recommended Major Prerequisite – BIOL1040. Completing this course is highly recommended for progression through your major and may be a required prerequisite for later Level 2 and 3 courses. Students who choose not to complete this course, may restrict the courses they can complete later in their study plan.
- Step 5** Decide on the option courses for your extended major, noting the semester offerings of the courses. Not all courses are offered every semester. Note which section of the major list the course must come from and the Level of the course.
- Step 6** Decide on your general elective courses or courses for a minor (completing a minor is optional).
- Minor: Students choosing to complete a minor should plan their minor courses in their study plan at this step. Minor courses will replace 8 units of general elective courses in the study planner above.
- No Minor: Students who do not complete a minor must choose at least 16 units of general elective courses to put in their study plan.

General electives can be chosen from any undergraduate program offered at UQ, across any Faculty. Students may wish to search for courses of interest in the UQ [Programs and Courses](#) page or select “Browse by Faculty” on this page to see courses listed in other undergraduate programs. General elective courses can also be additional courses from the BBiotech course list.

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Students need to follow the additional program rules when selecting minor courses and general elective courses:

- Students can complete a maximum of 24 units of Level 1 courses across the total program, including core courses, major courses, minor courses, program and general electives.

**Step 7** Check prerequisites, incompatibilities, and restrictions for all courses you have selected in your study plan. You can click on the course codes above or find the course on the UQ [Programs and Courses](#) page. You may need to adjust courses in your study plan at this step.

Students will need to specifically check their general elective courses for semester offerings, course restrictions, prerequisites and incompatibilities. Students will be limited to courses available to them based on these requirements and the program rules.

Please refer to the [BBiotech](#) course list for full course options.

## Bachelor of Biotechnology (BBiotech) Medical Biotechnology Extended Major

Students must follow the program rules & requirements listed on the [Programs and Courses Website](#).

### Semester 2 commencement

**Step 1** Start with the base study plan outlining Core Courses and Extended Major Courses including Extended Major Prerequisite Courses (refer to 'Step 4' for further information).

Year 1				
1 <sup>st</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOL1040</b> 2 units – Recommended Extended Major Prerequisite OR Program Elective Course*	<b>CHEM1100</b> Chemistry 1  2 units – Core Course	<b>STAT1201</b> <i>OR</i> <b>STAT1301</b> 2 units – Core Course	<b>BIOT2002</b> Issues in Biotechnology  2 units – Major Course
2 <sup>nd</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>CHEM1200</b> Chemistry 2  2 units – Major Course	<b>BIOL1020</b> Genes, Cells & Evolution  2 units – Core Course	<b>Option</b>  2 units – General Elective Course	<b>Option</b>  2 units – General Elective Course
Year 2				
3 <sup>rd</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOM2402</b> Principles of Pharmacology  2 units – Major Course	<b>Option</b> 2 units – Medical Biotechnology Level 2 Elective Course OR General Elective Course	<b>Option</b>  2 units – General Elective Course	<b>Option</b>  2 units – General Elective Course
4 <sup>th</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>CHEM2050</b> Intermediate Chemistry 1  2 units – Major Course	<b>BIOC2000</b> Biochemistry & Molecular Biology  2 units – Major Course	<b>Option</b> 2 units – Medical Biotechnology Level 2 Elective Course OR General Elective Course	<b>Option</b>  2 units – General Elective Course

Students who have not completed *Senior Chemistry* in Queensland (or equivalent) will need to consult the Faculty of Science regarding the progression of courses within this major.

Students complete 2 units from Medical Biotechnology Level 2 Elective Courses. Refer to the course list for the course options for your extended major, noting the semester offerings of the courses.

\* Up to 16 units General Elective courses can be completed as part of the program. Students will require at least 2 units of program elective courses.

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Year 3				
5 <sup>th</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOM3402</b> Experimental Pharmacology  2 units – Major Course	<b>BIOT3004</b> Commercialisation of Biotechnology Products  2 units – Major Course	<b>CHEM3020</b> Medicinal Chemistry & Chemical Biology  2 units – Major Course	<b>Option</b>  2 units – General Elective Course
6 <sup>th</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOM3401</b> Systems Pharmacology  2 units – Major Course	<b>BIOT3002</b> Drug Design & Development  2 units – Major Course	<b>BIOT3009</b> Quality Management Systems in Biotechnology  2 units – Major Course	<b>Option</b> <i>MUST be Level 2 or higher</i>  2 units – General Elective Course

In the following steps, students should note that Option courses above can be moved to different semesters depending on the courses selected. Students need to ensure they have met the prerequisites of the courses they plan as well as note any incompatibilities and restrictions.

**Step 2** Students should firstly note the additional comments about completing *Senior Chemistry* in Queensland (or equivalent) on the previous page to determine if they need to complete CHEM1090 and adjust the study plan above.

**Step 3** Decide on which statistics course you would like to take. STAT1201, the standard statistics course, or STAT1301, the advanced statistics courses. Students should note that STAT1201 is offered in Semester 1, Semester 2 and Summer Semester. However, STAT1301 is only offered in Semester 2.

**Step 4** Decide on your Recommended Major Prerequisite – BIOL1040. Completing this course is highly recommended for progression through your major and may be a required prerequisite for later Level 2 and 3 courses. Students who choose not to complete this course, may restrict the courses they can complete later in their study plan.

**Step 5** Decide on the option courses for your extended major, noting the semester offerings of the courses. Not all courses are offered every semester. Note which section of the major list the course must come from and the Level of the course.

**Step 6** Decide on your general elective courses or courses for a minor (completing a minor is optional).

Minor: Students choosing to complete a minor should plan their minor courses in their study plan at this step. Minor courses will replace 8 units of general elective courses in the study planner above.

No Minor: Students who do not complete a minor must choose at least 16 units of general elective courses to put in their study plan.

General electives can be chosen from any undergraduate program offered at UQ, across any Faculty. Students may wish to search for courses of interest in the UQ [Programs and Courses](#) page or select “Browse by Faculty” on this page to see courses listed in other undergraduate programs. General elective courses can also be additional courses from the BBiotech course list.

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Students need to follow the additional program rules when selecting minor courses and general elective courses:

- Students can complete a maximum of 24 units of Level 1 courses across the total program, including core courses, major courses, minor courses, program and general electives.

**Step 7** Check prerequisites, incompatibilities, and restrictions for all courses you have selected in your study plan. You can click on the course codes above or find the course on the UQ [Programs and Courses](#) page. You may need to adjust courses in your study plan at this step.

Students will need to specifically check their general elective courses for semester offerings, course restrictions, prerequisites and incompatibilities. Students will be limited to courses available to them based on these requirements and the program rules.

Please refer to the [BBiotech](#) course list for full course options.

## Bachelor of Biotechnology (BBiotech)

### Molecular and Microbial Biotechnology Extended Major

Students must follow the program rules & requirements listed on the [Programs and Courses Website](#).

#### Semester 1 commencement

**Step 1** Start with the base study plan outlining Core Courses and Extended Major Courses including Extended Major Prerequisite Courses (refer to 'Step 4' for further information).

Year 1				
1 <sup>st</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOL1020</b> Genes, Cells & Evolution  2 units – Core Course	<b>CHEM1100</b> Chemistry 1  2 units – Core Course	<b>STAT1201</b> Analysis of Scientific Data  <i>Note: STAT1301 offered in Semester 2 only.</i> 2 units – Core Course	<b>Option</b>  2 units – General Elective Course
2 <sup>nd</sup> Semester (July – Nov) <i>Semester 2</i>	<b>CHEM1200</b> 2 units – Recommended Major Prerequisite OR Program Elective Course*	<b>BIOL1040</b> Cells to Organisms  2 units – Major Course	<b>BIOT2002</b> Issues in Biotechnology  2 units – Major Course	<b>Option</b>  2 units – General Elective Course
Year 2				
3 <sup>rd</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOC2000</b> Biochemistry & Molecular Biology  2 units – Major Course	<b>Option</b> 2 units – Molecular and Microbial Biotechnology Level 2 Elective Course (BIOL2200) OR General Elective course	<b>Option</b>  2 units – General Elective Course	<b>Option</b>  2 units – General Elective Course
4 <sup>th</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOL2202</b> Genetics  2 units – Major Course	<b>MICR2000</b> Microbiology & Immunology  2 units – Major Course	<b>Option</b> 2 units – Molecular and Microbial Biotechnology Level 2 Elective Course (BIOC2052) OR General Elective course	<b>Option</b>  2 units – General Elective Course

Students who have not completed *Senior Chemistry* in Queensland (or equivalent) will need to complete CHEM1090 in their 1<sup>st</sup> semester as a program elective or general elective course and complete CHEM1100 in their 2<sup>nd</sup> semester. They will then need to complete CHEM1200 in their 3<sup>rd</sup> Semester (Year 2).

\* Up to 16 units General Elective courses can be completed as part of the program. Students will require at least 2 units of program elective courses.

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Year 3				
5 <sup>th</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOT3009</b> Quality Management Systems in Biotechnology  2 units – Major Course	<b>Option</b> Molecular and Microbial Biotechnology Level 3 Elective Course (Section 1 or 2)  2 units – Major Course	<b>Option</b> Molecular and Microbial Biotechnology Level 3 Elective Course (Section 2)  2 units – Major Course	<b>Option</b>  2 units – General Elective Course
6 <sup>th</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOT3004</b> Commercialisation of Biotechnology Products  2 units – Major Course	<b>Option</b> Molecular and Microbial Biotechnology Level 3 Elective Course (Section 1 or 2)  2 units – Major Course	<b>Option</b> Molecular and Microbial Biotechnology Level 3 Elective Course (Section 2)  2 units – Major Course	<b>Option</b> <i>MUST be Level 2 or higher</i>  2 units – General Elective Course

Students complete 8 units from Molecular and Microbial Biotechnology Level 3 Elective Courses. Refer to the course list for the course options for your extended major, noting the semester offerings of the courses. Section 1 lists 2 courses, 1 offered in semester 1 only and 1 listed in semester 2 only.

*In the following steps, students should note that Option courses above can be moved to different semesters depending on the courses selected. Students need to ensure they have met the prerequisites of the courses they plan as well as note any incompatibilities and restrictions.*

**Step 2** Students should firstly note the additional comments about completing *Senior Chemistry* in Queensland (or equivalent) on the previous page to determine if they need to complete CHEM1090 and adjust the study plan above.

**Step 3** Decide on which statistics course you would like to take. STAT1201, the standard statistics course, or STAT1301, the advanced statistics courses. Students should note that STAT1201 is offered in Semester 1, Semester 2 and Summer Semester. However, STAT1301 is only offered in Semester 2.

**Step 4** Decide on your Recommended Major Prerequisite – CHEM1200. Completing this course is highly recommended for progression through your major and may be a required prerequisite for later Level 2 and 3 courses. Students who choose not to complete this course, may restrict the courses they can complete later in their study plan.

**Step 5** Decide on the option courses for your extended major, noting the semester offerings of the courses. Not all courses are offered every semester. Note which section of the major list the course must come from and the Level of the course.

**Step 6** Decide on your general elective courses or courses for a minor (completing a minor is optional).

Minor: Students choosing to complete a minor should plan their minor courses in their study plan at this step. Minor courses will replace 8 units of general elective courses in the study planner above.

No Minor: Students who do not complete a minor must choose at least 16 units of general elective courses to put in their study plan.

General electives can be chosen from any undergraduate program offered at UQ, across any Faculty. Students may wish to search for courses of interest in the UQ [Programs and Courses](#) page or select “Browse by Faculty” on this page to see courses listed in other undergraduate programs. General elective courses can also be additional courses from the BBiotech course list.

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Students need to follow the additional program rules when selecting minor courses and general elective courses:

- Students can complete a maximum of 24 units of Level 1 courses across the total program, including core courses, major courses, minor courses, program and general electives.

**Step 7** Check prerequisites, incompatibilities, and restrictions for all courses you have selected in your study plan. You can click on the course codes above or find the course on the UQ [Programs and Courses](#) page. You may need to adjust courses in your study plan at this step.

Students will need to specifically check their general elective courses for semester offerings, course restrictions, prerequisites and incompatibilities. Students will be limited to courses available to them based on these requirements and the program rules.

Please refer to the [BBiotech](#) course list for full course options.

## Bachelor of Biotechnology (BBiotech) Molecular and Microbial Biotechnology Extended Major

Students must follow the program rules & requirements listed on the [Programs and Courses Website](#).

### Semester 2 commencement

**Step 1** Start with the base study plan outlining Core Courses and Extended Major Courses including Extended Major Prerequisite Courses (refer to 'Step 4' for further information).

Year 1				
1 <sup>st</sup> Semester (July – Nov) <i>Semester 2</i>	<b>CHEM1100</b> Chemistry 1  2 units – Core Course	<b>STAT1201</b> <i>OR</i> <b>STAT1301</b>  2 units – Core Course	<b>BIOL1040</b> Cells to Organisms  2 units – Major Course	<b>BIOT2002</b> Issues in Biotechnology  2 units – Major Course
2 <sup>nd</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>CHEM1200</b> 2 units – Recommended Extended Major Prerequisite <i>OR</i> Program Elective Course*	<b>BIOL1020</b> Genes, Cells & Evolution  2 units – Core Course	<b>Option</b>  2 units – General Elective Course	<b>Option</b>  2 units – General Elective Course
Year 2				
3 <sup>rd</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOL2202</b> Genetics  2 units – Major Course	<b>MICR2000</b> Microbiology & Immunology  2 units – Major Course	<b>Option</b> 2 units – Molecular and Microbial Biotechnology Level 2 Elective Course (BIOC2052) <i>OR</i> General Elective course	<b>Option</b>  2 units – General Elective Course
4 <sup>th</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOC2000</b> Biochemistry & Molecular Biology  2 units – Major Course	<b>Option</b> 2 units – Molecular and Microbial Biotechnology Level 2 Elective Course (BIOL2200) <i>OR</i> General Elective course	<b>Option</b>  2 units – General Elective Course	<b>Option</b>  2 units – General Elective Course

Students who have not completed *Senior Chemistry* in Queensland (or equivalent) will need to complete CHEM1090 in their 1<sup>st</sup> semester as a program elective or general elective course and complete CHEM1100 in their 2<sup>nd</sup> semester. They will then need to complete CHEM1200 in their 3<sup>rd</sup> Semester (Year 2).

\* Up to 16 units General Elective courses can be completed as part of the program. Students will require at least 2 units of program elective courses.

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Year 3				
5 <sup>th</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOT3004</b> Commercialisation of Biotechnology Products  2 units – Major Course	<b>Option</b> Molecular and Microbial Biotechnology Level 3 Elective Course (Section 1 or 2)  2 units – Major Course	<b>Option</b> Molecular and Microbial Biotechnology Level 3 Elective Course (Section 2)  2 units – Major Course	<b>Option</b>  2 units – General Elective Course
6 <sup>th</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOT3009</b> Quality Management Systems in Biotechnology  2 units – Major Course	<b>Option</b> Molecular and Microbial Biotechnology Level 3 Elective Course (Section 1 or 2)  2 units – Major Course	<b>Option</b> Molecular and Microbial Biotechnology Level 3 Elective Course (Section 2)  2 units – Major Course	<b>Option</b> <i>MUST be Level 2 or higher</i>  2 units – General Elective Course

Students complete 8 units from Molecular and Microbial Biotechnology Level 3 Elective Courses. Refer to the course list for the course options for your extended major, noting the semester offerings of the courses. Section 1 lists 2 courses, 1 offered in semester 1 only and 1 listed in semester 2 only.

*In the following steps, students should note that Option courses above can be moved to different semesters depending on the courses selected. Students need to ensure they have met the prerequisites of the courses they plan as well as note any incompatibilities and restrictions.*

- Step 2** Students should firstly note the additional comments about completing *Senior Chemistry* in Queensland (or equivalent) on the previous page to determine if they need to complete CHEM1090 and adjust the study plan above.
- Step 3** Decide on which statistics course you would like to take. STAT1201, the standard statistics course, or STAT1301, the advanced statistics courses. Students should note that STAT1201 is offered in Semester 1, Semester 2 and Summer Semester. However, STAT1301 is only offered in Semester 2.
- Step 4** Decide on your Recommended Major Prerequisite – CHEM1200. Completing this course is highly recommended for progression through your major and may be a required prerequisite for later Level 2 and 3 courses. Students who choose not to complete this course, may restrict the courses they can complete later in their study plan.
- Step 5** Decide on the option courses for your extended major, noting the semester offerings of the courses. Not all courses are offered every semester. Note which section of the major list the course must come from and the Level of the course.
- Step 6** Decide on your general elective courses or courses for a minor (completing a minor is optional).  
Minor: Students choosing to complete a minor should plan their minor courses in their study plan at this step. Minor courses will replace 8 units of general elective courses in the study planner above.  
No Minor: Students who do not complete a minor must choose at least 16 units of general elective courses to put in their study plan.

General electives can be chosen from any undergraduate program offered at UQ, across any Faculty. Students may wish to search for courses of interest in the UQ [Programs and Courses](#) page or select “Browse by Faculty” on this page to see courses listed in other undergraduate programs. General elective courses can also be additional courses from the BBiotech course list.

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Students need to follow the additional program rules when selecting minor courses and general elective courses:

- Students can complete a maximum of 24 units of Level 1 courses across the total program, including core courses, major courses, minor courses, program and general electives.

**Step 7** Check prerequisites, incompatibilities, and restrictions for all courses you have selected in your study plan. You can click on the course codes above or find the course on the UQ [Programs and Courses](#) page. You may need to adjust courses in your study plan at this step.

Students will need to specifically check their general elective courses for semester offerings, course restrictions, prerequisites and incompatibilities. Students will be limited to courses available to them based on these requirements and the program rules.

Please refer to the [BBiotech](#) course list for full course options.

## Bachelor of Biotechnology (BBiotech) Synthetic Biology and Industrial Biotechnology Extended Major

Students must follow the program rules & requirements listed on the [Programs and Courses Website](#).

### Semester 1 commencement

**Step 1** Start with the base study plan outlining **Core Courses** and **Extended Major Courses** including **Extended Major Prerequisite Courses**.

Year 1				
1 <sup>st</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOL1020</b> Genes, Cells & Evolution  2 units – Core Course	<b>CHEM1100</b> Chemistry 1  2 units – Core Course	<b>STAT1201</b> Analysis of Scientific Data  <i>Note: STAT1301 offered in Semester 2 only.</i> 2 units – Core Course	<b>MATH1051</b> <i>OR</i> <b>MATH1071</b>  2 units – Major Course
2 <sup>nd</sup> Semester (July – Nov) <i>Semester 2</i>	<b>ENGG1500</b> Thermodynamics: Energy and the Environment  2 units – Prerequisite required for CHEE2001	<b>BIOT2002</b> Issues in Biotechnology  2 units – Major Course	<b>Option</b>  2 units – General Elective Course*	<b>Option</b>  2 units – General Elective Course*
Year 2				
3 <sup>rd</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOC2000</b> Biochemistry & Molecular Biology  2 units – Major Course	<b>CHEE2001</b> Process Principles  2 units – Major Course	<b>Option</b> 2 units – Synthetic Biology and Industrial Biotechnology Level 2 Elective Course (SCIE2001) <i>OR</i> General elective course*	<b>Option</b>  2 units – General Elective Course*
4 <sup>th</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOL2202</b> Genetics  2 units – Major Course	<b>Option</b> 2 units – Synthetic Biology and Industrial Biotechnology Level 2 Elective Course (MICR2000) <i>OR</i> General elective course*	<b>Option</b>  2 units – General Elective Course*	<b>Option</b>  2 units – General Elective Course*

Students who have not completed *Senior Chemistry* in Queensland (or equivalent) will need to complete CHEM1090 in their 1<sup>st</sup> semester as a program elective or general elective course and complete CHEM1100 in their 2<sup>nd</sup> semester.

Students who have not achieved/completed *A grade of C or higher in Queensland Year 12 Specialist Mathematics* (or equivalent) will need to complete MATH1050 in their 1<sup>st</sup> semester as a program elective course and complete MATH1051 in their 2<sup>nd</sup> semester.

\* Up to 16 units General Elective courses can be completed as part of the program. Students will require at least 2 units of program elective courses.

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Year 3				
5 <sup>th</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOC3000</b> Structural & Synthetic Biology  <i>2 units – Major Course</i>	<b>BIOE4020</b> Bioprocess Engineering  <i>2 units – Major Course</i>	<b>BIOT3009</b> Quality Management Systems in Biotechnology  <i>2 units – Major Course</i>	<b>Option</b> <i>2 units – Synthetic Biology and Industrial Biotechnology Level 3 Elective Course OR General elective course*</i>
6 <sup>th</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOC3005</b> Molecular Systems Biology  <i>2 units – Major Course</i>	<b>BIOT3004</b> Commercialisation of Biotechnology Products  <i>2 units – Major Course</i>	<b>Option</b> <i>2 units – Synthetic Biology and Industrial Biotechnology Level 3 Elective Course OR General elective course*</i>	<b>Option</b> <i>MUST be Level 2 or higher  2 units – General Elective Course*</i>

\* Up to 16 units General Elective courses can be completed as part of the program. Students will require at least 2 units of program elective courses.

*In the following steps, students should note that Option courses above can be moved to different semesters depending on the courses selected. Students need to ensure they have met the prerequisites of the courses they plan as well as note any incompatibilities and restrictions.*

**Step 2** Students should firstly note the additional comments about completing *Senior Chemistry* in Queensland (or equivalent) and *A grade of C or higher in Queensland Year 12 Specialist Mathematics* (or equivalent) on the previous page to determine if they need to complete CHEM1090 and adjust the study plan above.

**Step 3** Decide on which statistics course you would like to take. STAT1201, the standard statistics course, or STAT1301, the advanced statistics courses. Students should note that STAT1201 is offered in Semester 1, Semester 2 and Summer Semester. However, STAT1301 is only offered in Semester 2.

**Step 4** Decide on your Level 1 Major course – MATH1051 (standard) or MATH1071 (advanced). MATH1071 requires students to have obtained *A grade of B or higher in Queensland Year 12 Specialist Mathematics (or equivalent)*. Students should note that MATH1071 is only offered in Semester 1.

**Step 5** Decide on the option courses for your extended major, noting the semester offerings of the courses. Not all courses are offered every semester. Note which section of the major list the course must come from and the Level of the course.

**Step 6** Decide on your general elective courses or courses for a minor (completing a minor is optional).

Minor: Students choosing to complete a minor should plan their minor courses in their study plan at this step. Minor courses will replace 8 units of general elective courses in the study planner above.

No Minor: Students who do not complete a minor must choose at least 16 units of general elective courses to put in their study plan.

General electives can be chosen from any undergraduate program offered at UQ, across any Faculty. Students may wish to search for courses of interest in the UQ [Programs and Courses](#) page or select “Browse by Faculty” on this page to see courses listed in other undergraduate programs. General elective courses can also be additional courses from the BBiotech course list.

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Students need to follow the additional program rules when selecting minor courses and general elective courses:

- Students can complete a maximum of 24 units of Level 1 courses across the total program, including core courses, major courses, minor courses, program and general electives.

**Step 7** Check prerequisites, incompatibilities, and restrictions for all courses you have selected in your study plan. You can click on the course codes above or find the course on the UQ [Programs and Courses](#) page. You may need to adjust courses in your study plan at this step.

Students will need to specifically check their general elective courses for semester offerings, course restrictions, prerequisites and incompatibilities. Students will be limited to courses available to them based on these requirements and the program rules.

Please refer to the [BBiotech](#) course list for full course options.

## Bachelor of Biotechnology (BBiotech) Synthetic Biology and Industrial Biotechnology Extended Major

Students must follow the program rules & requirements listed on the [Programs and Courses Website](#).

### Semester 2 commencement

**Step 1** Start with the base study plan outlining Core Courses and Extended Major Courses including Extended Major Pre-Requisite Courses.

Year 1				
1 <sup>st</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOL1020</b> Genes, Cells & Evolution  2 units – Core Course	<b>CHEM1100</b> Chemistry 1  2 units – Core Course	<b>STAT1201</b> <i>OR</i> <b>STAT1301</b>  2 units – Core Course	<b>BIOT2002</b> Issues in Biotechnology  2 units – Major Course
2 <sup>nd</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>MATH1051</b> <i>OR</i> <b>MATH1071</b>  2 units – Major Course	<b>Option</b>  2 units – General Elective Course	<b>Option</b>  2 units – General Elective Course	<b>Option</b>  2 units – General Elective Course
Year 2				
3 <sup>rd</sup> Semester (July – Nov) <i>Semester 2</i>	<b>ENGG1500</b> Thermodynamics: Energy and the Environment  2 units – Prerequisite required for CHEE2001	<b>BIOL2202</b> Genetics  2 units – Major Course	<b>Option</b> 2 units – Synthetic Biology and Industrial Biotechnology Level 2 Elective Course (MICR2000) <i>OR</i> General elective course	<b>Option</b>  2 units – General Elective Course
4 <sup>th</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOC2000</b> Biochemistry & Molecular Biology  2 units – Major Course	<b>CHEE2001</b> Process Principles  2 units – Major Course	<b>Option</b> 2 units – Synthetic Biology and Industrial Biotechnology Level 2 Elective Course (SCIE2001) <i>OR</i> General elective course	<b>Option</b>  2 units – General Elective Course

Students who have not completed *Senior Chemistry* in Queensland (or equivalent) will need to complete CHEM1090 in their 1<sup>st</sup> semester as a program elective or general elective course and complete ENGG1500 in their 2<sup>nd</sup> semester.

Students who have not achieved/completed *A grade of C or higher in Queensland Year 12 Specialist Mathematics* (or equivalent) will need to complete MATH1050 in their 1<sup>st</sup> semester as a program elective course.

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Year 3				
5 <sup>th</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOC3005</b> Molecular Systems Biology  2 units – Major Course	<b>BIOT3004</b> Commercialisation of Biotechnology Products  2 units – Major Course	<b>Option</b> Synthetic Biology and Industrial Biotechnology Level 3 Elective Course  2 units – Major Course	<b>Option</b> <i>MUST be level 2 or higher</i>  2 units – General Elective Course
6 <sup>th</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOC3000</b> Structural & Synthetic Biology  2 units – Major Course	<b>BIOE4020</b> Bioprocess Engineering  2 units – Major Course	<b>BIOT3009</b> Quality Management Systems in Biotechnology  2 units – Major Course	<b>Option</b> 2 units – Synthetic Biology and Industrial Biotechnology Level 3 Elective Course OR General elective course

In the following steps, students should note that Option courses above can be moved to different semesters depending on the courses selected. Students need to ensure they have met the prerequisites of the courses they plan as well as note any incompatibilities and restrictions.

**Step 2** Students should firstly note the additional comments about completing *Senior Chemistry* in Queensland (or equivalent) and *A grade of C or higher in Queensland Year 12 Specialist Mathematics* (or equivalent) on the previous page to determine if they need to complete CHEM1090 and adjust the study plan above.

**Step 3** Decide on which statistics course you would like to take. STAT1201, the standard statistics course, or STAT1301, the advanced statistics courses. Students should note that STAT1201 is offered in Semester 1, Semester 2 and Summer Semester. However, STAT1301 is only offered in Semester 2.

**Step 4** Decide on your Level 1 Major course – MATH1051 (standard) or MATH1071 (advanced). MATH1071 requires students to have obtained *A grade of B or higher in Queensland Year 12 Specialist Mathematics (or equivalent)*. Students should note that MATH1071 is only offered in Semester 1.

**Step 5** Decide on the option courses for your extended major, noting the semester offerings of the courses. Not all courses are offered every semester. Note which section of the major list the course must come from and the Level of the course.

**Step 6** Decide on your general elective courses or courses for a minor (completing a minor is optional).

Minor: Students choosing to complete a minor should plan their minor courses in their study plan at this step. Minor courses will replace 8 units of general elective courses in the study planner above.

No Minor: Students who do not complete a minor must choose at least 16 units of general elective courses to put in their study plan.

General electives can be chosen from any undergraduate program offered at UQ, across any Faculty. Students may wish to search for courses of interest in the UQ [Programs and Courses](#) page or select “Browse by Faculty” on this page to see courses listed in other undergraduate programs. General elective courses can also be additional courses from the BBiotech course list.

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Students need to follow the additional program rules when selecting minor courses and general elective courses:

- Students can complete a maximum of 24 units of Level 1 courses across the total program, including core courses, major courses, minor courses, program and general electives.

**Step 7** Check prerequisites, incompatibilities, and restrictions for all courses you have selected in your study plan. You can click on the course codes above or find the course on the UQ [Programs and Courses](#) page. You may need to adjust courses in your study plan at this step.

Students will need to specifically check their general elective courses for semester offerings, course restrictions, prerequisites and incompatibilities. Students will be limited to courses available to them based on these requirements and the program rules.

Please refer to the [BBiotech](#) course list for full course options.



## Frequently Asked Questions (FAQ)

### Program Information

#### Can I study this program part-time?

International students on a student visa must study this program full-time, as per their visa conditions.

Domestic students may choose to complete the program part-time. Part-time students are required to develop their own study plan, however, if you would like assistance with this, please contact the [Faculty of Science](#).

#### Can I study the Bachelor of Biotechnology online?

No, this program requires mandatory in person attendance at the University of Queensland St Lucia campus.

#### Do I have to complete an extended major?

Yes. Completing an extended major is a compulsory part of this program and all students are required to complete a major.

#### Do I have to complete a minor?

No. Minors are optional in the BBiotech program. Students can add or remove minors at any stage provided they have enough room in their program to complete the remaining courses required.

#### Can I change my extended major after I have commenced the program?

Students who are in their first year or second of study can usually change their extended major without impact to their graduation time. However, some extended majors with a more structured progression may require students to extend their studies by a semester or two. If you have concerns about changing extended major, please contact the [Faculty of Science](#).

#### Can I complete two extended majors or two minors in the program?

No, students do not have enough room in the program to complete two extended majors. It may be possible for students to complete two minors, however students should contact the [Faculty of Science](#) for further advice on this and other plan combinations.

#### I cannot decide on an extended major or want to keep my options open, what courses should I do?

Although students do not need to declare an extended major during their first year, they should be aware of the core courses and prerequisite courses of each extended major. During their first year of studies, students can complete all the below courses to keep their major options open:

Semester 1 commencement

1 <sup>st</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>BIOL1020</b>	<b>CHEM1100</b>	<b>STAT1201 or STAT1301</b>	<b>BIOL1030</b>
2 <sup>nd</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOL1040</b>	<b>CHEM1200</b>	<b>BIOT2002</b>	<b>MATH1051*</b>

\*Students can take FOOD1001 in Semester 1 Year 2 to meet the pre-requisite requirement for the Agricultural Biotechnology extended major, or ENGG1500 in Semester 1 Year 2 to meet the pre-requisite requirement the Synthetic Biology and Industrial Biotechnology Extended Major.

Semester 2 commencement

1 <sup>st</sup> Semester (July – Nov) <i>Semester 2</i>	<b>BIOL1020</b>	<b>CHEM1100</b>	<b>BIOT2002</b>	<b>BIOL1040</b>
2 <sup>nd</sup> Semester (Feb – Jun) <i>Semester 1</i>	<b>STAT1201 or STAT1301</b>	<b>BIOL1030</b>	<b>CHEM1200</b>	<b>MATH1051*</b>

\*Students can take FOOD1001 in Semester 1 Year 2 to meet the pre-requisite requirement for the Agricultural Biotechnology extended major, or ENGG1500 in Semester 1 Year 2 to meet the pre-requisite requirement the Synthetic Biology and Industrial Biotechnology Extended Major.

## What are the key semester dates for study in this program?

Please refer to the [Academic Calendar](#) for key dates throughout the year.

## I have completed study at another university, can I be awarded credit towards this program?

Students who have completed study at another institute, at the equivalent level (AQF Level 7) may be eligible for credit towards this program. Students can utilise the [UQ Credit Precedent Database](#) (CPD) to see if their prior completed study has been previously assessed for credit. Please note that the UQ CPD is a guide ONLY and does not guarantee credit will be awarded.

Students can apply for credit via an [online application](#) form which will be processed by the Faculty of Science.

For further information on the credit Policy and Procedures, please refer to [UQ PPL Recognition of Prior Learning](#).

## Does Biotechnology offer a pathway to medicine?

Students who are aspiring to enter the Doctor of Medicine (MD) program can complete the BBiotech program as their undergraduate degree. The Doctor of Medicine (MD) entry requirement includes certain courses students must complete in their undergraduate program, and there can be viewed on the [MD future students website](#). Students who have questions about the entry requirements and courses to complete should consult the [Faculty of Medicine](#).

## Course Information

### What is a course profile?

Please refer to: [What is a course profile?](#)

### Where can I find the course profile?

Please refer to: [Where do I find the course profile for my course?](#)

### Where can I find the course coordinator?

The course coordinator can be found on the course profile. Please refer to question “Where can I find the course profile?”.

### How do I enrol in courses?

Please refer to [Enrolment and class allocation](#) for detailed instructions on enrolling in courses for the upcoming semester.

## What is a prerequisite?

Please refer to: [What does 'prerequisite' mean in a course profile?](#)

## Do I need to complete the prerequisites for a course before I take it?

Some courses will have a block which will not allow students to enrol in the course before they have completed the prerequisite course. Other courses may list a prerequisite but will not block students from enrolling without it. It is the student's responsibility to check the prerequisites listed and complete the prerequisites before enrolling in the course.

Students who choose to take a course without completing the listed prerequisites first, take responsibility for their success in the course. There will be no special dispensation given to students who enrol in a course before completing the prerequisites listed, including (but not limited to) – extension to assessments, deferred exams, extension to CoE, program variation, removal of course.

## What is a recommended prerequisite, and do I need to complete it first?

Recommended prerequisites for a certain course are courses that are suggested you complete before enrolling in the course, however, are not required to be able to complete the course. It is at the student's discretion as to whether they would like to complete the recommended prerequisites before the course they are interested in enrolling.

Recommended prerequisites for your major and courses that ensure successful progression through your major. These courses may be direct prerequisites for optional Level 2 and 3 courses. Depending which Level 2 and 3 courses students choose the recommended prerequisite may become compulsory for progression. It is advised students carefully check any Level 2 and 3 courses for prerequisites to avoid limiting their course options.

## Study Planner

### Can I enrol in a Level 2 or 3 course sooner than is in the study plan if it doesn't have any prerequisites?

Yes, you can enrol in a Level 2 or 3 prerequisite course that has no prerequisites listed. You may wish to view the course profile to see if any prior knowledge/assumed background is required for the course.

Students should be mindful that UQ courses are coded according to their year level. For example, BIOL1020 is a first-year course because the first number in the course code is a 1. BIOL2006 is a second-year course as the first number in the code is a 2. Level 2 and 3 courses (including those without any prerequisites) will involve a greater level of knowledge and work and therefore, it is not recommended students complete these courses in their first year of study.

Students who choose to take a higher-level course earlier in their program take responsibility for their success in the course. There will be no special dispensation given to students who enrol in a course earlier than the coded course year, including (but not limited to) – extension to assessments, deferred exams, extension to CoE, program variation, removal of course.

## General Electives

### **A course I want to study as a general elective has a restriction, can I still enrol?**

You will need to request permission from the school running the course. See which school is listed for the course on the UQ [Programs and Courses](#) page and contact them for permission.

### **A general elective course I want to study is not offered in the semester I need it, what can I do?**

Unfortunately, courses are only available in the semesters on offer as per the UQ website. If a course is not offered in the semester that you have space for it, you will need to select a different course.

### **Is there a list of general electives I can view?**

No. As UQ has so many courses available for students to choose for general electives, there is not a single list of all general elective courses. Students may wish to search for courses in areas of interest in the UQ [Programs and Courses](#) page or select “Browse by Faculty” on this page to see courses listed in other undergraduate programs.

## Timetable

### **How can I find out when my classes will be on?**

Students can view the [2025 Public Timetable](#) online to see what the available classes will be on offer for the upcoming semester. Please see the question below for student’s personal timetable.

### **How do I select my class times?**

When the timetabling system is open for students to preference their classes, they can use the Timetable system via their [my.UQ dashboard](#). Please refer to [Enrolment and class allocation](#).