

## Pathway to major in Bioinformatics

| Year 1 / Level I (not more than 30 units)   |  |   |   |   |
|---|--|---|---|---|
| S1  | #+ <a href="#">CHEM 1100</a> Chemistry IA <b>OR</b><br>##*+ <a href="#">CHEM 1101</a> Foundations of Chemistry IA <b>OR</b><br><a href="#">Approved Level I Elective</a> | ~+ ¥ <a href="#">BIOLOGY 1101</a> Biology I: Molecules, Genes & Cells <b>OR</b><br>~+ ¥ <a href="#">BIOLOGY 1401</a> Concepts in Biology <b>OR</b><br><a href="#">Approved Level I Elective</a> | <a href="#">Approved Level I Elective</a>   | <a href="#">SCIENCE 1300 Principles &amp; Practice of Research (Advanced) I</a>             |
| S2  | #+ <a href="#">CHEM 1200</a> Chemistry IB <b>OR</b><br>##*+ <a href="#">CHEM 1201</a> Foundations of Chemistry IB <b>OR</b><br><a href="#">Approved Level I Elective</a> | + ¥ <a href="#">BIOLOGY 1201</a> Biology I: Human Perspectives <b>OR</b><br>+ ¥ <a href="#">BIOLOGY 1202</a> Biology I: Organisms <b>OR</b><br><a href="#">Approved Level I Elective</a>        | <a href="#">Approved Level I Elective</a>   | <a href="#">Approved Level I Elective</a>   |
| Year 2 / Level II   |  |   |   |   |
| S1  | π <a href="#">GENETICS 2510</a> Genetics IIA: Foundation of Genetics <b>OR</b><br><a href="#">Approved Level II Elective</a>   | π <a href="#">BIOCHEM 2500</a> Biochemistry II: Molecular and Cell Biology <b>OR</b><br><a href="#">Approved Level II Elective</a>  | <a href="#">Approved Level II Elective</a>  | <a href="#">Approved Level II Elective</a>  |
| S2  | <a href="#">Approved Level II Elective</a>   | <a href="#">Approved Level II Elective</a>  | <a href="#">Approved Level II Elective</a>  | <a href="#">SCIENCE 2300 Principles &amp; Practice of Research (Adv) II [or Semester 1]</a> |
| *Global Experience: The Faculty of Sciences recommends students who want to undertake an exchange in an overseas university plan to go in Semester 2 of Level 2 and/or Semester 1 of Level 3. |  |   |   |   |
| Year 3 / Level III (at least 24 units)  |  |   |   |   |
| S1  | <a href="#">BIOINF 3010</a> Genomics Applications III  | <a href="#">BIOINF 3005</a> Transcriptomics Applications III  | <a href="#">Approved Level III Elective</a> | <a href="#">Approved Level III Elective</a>   |
| *Global Experience: The Faculty of Sciences recommends students who want to undertake an exchange in an overseas university plan to go in Semester 2 of Level 2 and/or Semester 1 of Level 3. |  |   |   |   |
| S2  | <a href="#">BIOINF 3000</a> Bioinformatics III,  | <a href="#">Approved Level III Elective</a>   | <a href="#">Approved Level III Elective</a> | <a href="#">SCIENCE 3100 Principles &amp; Practice of Research (Adv) III</a>                |

ALL COURSES ARE WORTH 3 UNITS UNLESS OTHERWISE SPECIFIED

### Key

|             |                 |                  |
|-------------|-----------------|------------------|
| Core Course | Elective Course | Course for Major |
|-------------|-----------------|------------------|

# Check [Course Planner](#) or with the Sciences Service Hub to ensure you meet the pre-requisites prior to enrolling into these courses.

\*Students who successfully complete CHEM 1101 Foundations of Chemistry IA and CHEM 1201 Foundations of Chemistry IB and who wish to continue their study of Chemistry at Level II will be required to undertake an additional course, CHEM 1312 Foundations of Chemistry IS during Summer School before commencing Level II Chemistry studies.

~ Students who were unsuccessful in completing BIOLOGY 1101 Biology I: Molecules, Genes & Cells or BIOLOGY 1401 Concepts in Biology have the opportunity to undertake BIOLOGY 1001 Fundamentals of Biology in Summer School before commencing Level II courses

+ CHEM 1100 or CHEM 1101 **and** CHEM 1200 or CHEM 1201 **and** BIOLOGY 1101 or BIOLOGY 1401 **and** BIOLOGY 1201 or BIOLOGY 1202 are listed as pre-requisites for BIOCHEM 2500

¥ BIOLOGY 1101 or BIOLOGY 1401 **and** BIOLOGY 1201 or BIOLOGY 1202 are listed as pre-requisites for GENETICS 2510

π GENETICS 2510 or BIOCHEM 2500 are listed as assumed knowledge for BIOINF 3010, BIOINF 3005 and BIOINF 3000

### Complementary Majors

The following majors are often pursued by students as well as the above major, as a complementary field:

- Biochemistry
- Chemistry
- Genetics

## Pathway to major in Bioinformatics

### Enrolment Advice – General

- It is your responsibility to ensure you are correctly enrolled. Enrolment into courses outside of the Study Plan and Enrolment Advice listed could affect your eligibility to graduate.
- A total of **72 units** are required to complete Bachelor of Science (Advanced) program.
- No more than 30 units of courses can be completed at Level I.
- At least 24 units of Science courses must be completed at Level III.
- A candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II.
- There is a limitation on the amount of 'Non-Science' courses that can be presented. **Do not assume that because a course is offered through Sciences, that it automatically counts as 'Science'** (e.g. Animal Science courses). Please refer to your [Program Rules](#).
- No level III course may be used to meet the requirements of more than one major. *(For example, if Soil Ecology and Nutrient Cycling is used to qualify for a Soil Science major, it cannot also be used to qualify for an Ecology Major).*
- Please consult your [Program Coordinator](#) or contact the Sciences Service Hub for advice.

### Enrolment Advice – Courses

- Only ONE of BIOLOGY 1201 Biology I: Human Perspectives or BIOLOGY 1202 Biology I: Organisms may be presented towards the Bachelor of Science.
- The following course cannot be presented towards the Bachelor of Science:
  - COMP SCI 1003 Internet Computing

### Variations for students who commenced in or prior to 2017

- Level I core course SCIENCE 1100 Principles & Practice of Science and SCIENCE 1200 Principles & Practice of Science (Advanced) I, has now been replaced by SCIENCE 1300 Principles & Practice of Research (Advanced) I.

### Electives and Broadening

You may complete up to 9 units of 'non-science' elective courses at Level I and/or Level II. Of these courses a maximum of 6 units can be chosen at Level I. Please refer to your Program Rules for electives and all other requirements, including details on how to meet broadening experience <https://calendar.adelaide.edu.au/faculty/sciences>

For information about electives from other Faculties, course restrictions and pre-requisites, search the course planner:

<https://access.adelaide.edu.au/courses/search.asp>

### Global Experience

The University of Adelaide is committed to offering its students the opportunity to study overseas through an International Experience. This experience is available in a wide range of degrees and can include student exchange (for either one or two full semesters), study tours, internships and placements. There are many exciting opportunities in Europe, Asia, the Americas, Africa, and Oceania ranging from a few weeks to a full academic year.

\* The Faculty of Sciences recommends students who want to undertake an exchange in an overseas university plan to go in Semester 2 of Level 2 and/or Semester 1 of Level 3. To find opportunities available in your study area click [Study Overseas](#).

### Further Information and Enrolment Advice

#### Sciences Service Hub

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