

## Pathway to major in Bioinformatics

| Year 1 / Level I  |   |   |   |  |
|---|---|---|---|--|
| S1  | <a href="#">SCIENCE 1500</a> Introductory Data Science – Becoming Smart About Data  | <a href="#">APP DATA 1010</a> Ethics and Data Management I  | <a href="#">BIOLOGY 1101</a> Biology I: Molecules, Genes & Cells or <a href="#">BIOLOGY 1401</a> Concepts in Biology I  | * <a href="#">CHEM 1100</a> Chemistry IA or<br>* <a href="#">CHEM 1101</a> Foundations of Chemistry IA or<br><a href="#">Approved level I elective</a> |
| S2  | <a href="#">STATS 1000</a> Statistical Practice I or <a href="#">STATS 1005</a> Statistical Analysis and Modelling or <a href="#">ECON 1008</a> Data Analytics  | <a href="#">MATHS 1004</a> Mathematics for Data Science I or <a href="#">MATHS 1012</a> Mathematics IB  | <a href="#">BIOLOGY 1202</a> Biology I: Organisms   | * <a href="#">CHEM 1200</a> Chemistry IB or<br>* <a href="#">CHEM 1201</a> Foundations of Chemistry IB or<br><a href="#">Approved level I elective</a> |
| Year 2 / Level II   |   |   |   |  |
| S1  | <a href="#">APP DATA 2010</a> Data Handling and Visualisation II  | <a href="#">BIOCHEM 2500</a> Biochemistry II: Molecular & Cellular Biology Or<br><a href="#">GENETICS 2510</a> Genetics IIA: Foundations of Genetics or<br><a href="#">MICRO 2501</a> Immunology & Virology III | <a href="#">Approved level II elective</a>  | <a href="#">SCIENCE 2700</a> Science Internship II or<br><a href="#">Approved level II elective</a>  |
| S2  | # <a href="#">APP DATA 2015</a> Statistical Inference and Machine Learning II or<br>+ <a href="#">APP DATA 2020</a> Programming II  | <a href="#">Approved level II elective</a>  | <a href="#">Approved level II elective</a>  | <a href="#">SCIENCE 2700</a> Science Internship II or<br><a href="#">Approved level II 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. |   |   |   |  |
| Year 3 / Level III  |   |   |   |  |
| S1  | # <a href="#">APP DATA 3010</a> Advanced Data Analysis III or<br># <a href="#">APP DATA 3015</a> Numerical Modelling III OR<br>+ <a href="#">APP DATA 3025</a> Machine Learning and Data Analytics III or<br>+ <a href="#">APP DATA 3030</a> Quantitative Decision Making III | <a href="#">BIOINF 3005</a> Transcriptomics Applications III<br>(Not available in 2021)   | <a href="#">BIOINF 3010</a> Genomics Applications III   | <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="#">APP DATA 3020</a> Capstone Project in Domain-Specific Decision Science III  | <a href="#">BIOINF 3000</a> Bioinformatics III  | § <a href="#">BIOCHEM 3520</a> Cancer, Stem Cells & Development (Theory) or<br><a href="#">GENETICS 3520</a> Gene Expression & Human Development Genetics (Theory) III or<br><a href="#">MICRO 3520</a> Infection & Immunity B (Theory) III or<br><a href="#">PUB HLTH 3011</a> Big Challenges in Public Health | <a href="#">Approved level III elective</a>  |

ALL COURSES ARE WORTH 3 UNITS UNLESS OTHERWISE SPECIFIED

## Pathway to major in Bioinformatics

### Key

|                    |                 |                  |
|--------------------|-----------------|------------------|
| <b>Core Course</b> | Elective Course | Course for Major |
|--------------------|-----------------|------------------|

# This core course contributes towards the more quantitative stream

+This core course contributes towards the less quantitative stream

\*Only necessary if choosing Biochemistry in second year

§ You must complete at least one of these courses in addition to BIOINF3005, BIOINF 3010 or BIOINF 3000 to complete the Bioinformatics major

### Enrolment Advice

- 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 Applied Data Analytics program.
- Please consult your [Program Coordinator](#) or contact the Sciences Service Hub for advice.

### 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

Phone: +61 8 8313 5673

Email: [faculty.sciences@adelaide.edu.au](mailto:faculty.sciences@adelaide.edu.au)