

INDUSTRY-BASED PROJECTS



Edith Cowan University Bachelor of Science

This course provides high quality studies in a wide range of science and technology disciplines. Students take introductory science and mathematics units, and select two majors relevant to their interests and aspirations.

Available Majors relevant to Data Science

The degree has a number of majors that students choose in the first year of the degree. Those that are relevant to projects in a company's data science team include:

- **Mathematics:** This major provides students with a broad base of mathematics skills across the core areas of applied mathematics, including calculus, statistics, mathematical modelling and linear algebra. The applied flavour of this major provides the necessary background for students wishing to pursue higher studies in areas of applied mathematics and statistics as they develop their core skills in data analysis and modelling.
- **Data Science:** Graduates of this major will gain statistical expertise in analysing and visualising simple and complex data sets from a variety of sources such as disease markers, genomic and transcriptomic data and business data sets. Graduates will be competitive in the data science job market as it is implemented in computing, business and the natural sciences.



Requirement for Industry Projects

Third year students have 2 options for undertaking an industry project:

1) A small project unit that is the equivalent of 1 day per week across their final semester (a total of 10-12 days). Further unit details [here](#).

or

2) A large project unit that they undertake full-time for their final semester (12 weeks). For the full-time projects, they must have a minimum weighted average mark of 65. Further unit details [here](#).



Edith Cowan University Masters of Bioinformatics

This course provides students with skills and experience in bioinformatics, focusing on omics science, computer programming, applied mathematics and statistics.

It provides work experience in relevant organisations within the industry, allowing students to gain an understanding of the application of bioinformatics in a real world context. It also focuses on practical skills for researchers and industry professionals in bioinformatics.

Requirement for Industry Projects

All Masters of Bioinformatics students are required to complete a full-time 12 week project. During this work experience placement the student is supervised by an ECU staff member who is allocated as their academic supervisor in addition to a workplace supervisor who is an experienced staff member of the organisation hosting the work experience student. Students undertaking a work placement will demonstrate discipline knowledge, communication and collaboration skills in addition to a proven professional work ethic whilst undertaking projects in an industry setting.

Students work with the academic and industry supervisors to develop a project plan, outlining the key tasks and milestones required of the project, provide an overview of the workplace skills they are developing, and take ownership of the delivery of the project.

The Legals

All student projects are covered by an Work Integrated Learning (WIL) Agreement. This agreement sets out the terms and conditions for a student undertaking an industry-based Project as a part of their credit-bearing course work for their given degree. More information on the guidelines for students can be found [here](#).

The Student and ECU acknowledge the need to respect commercial-in-confidence and other material owned by the Host. ECU students may have access to privileged or confidential information in the course of their WIL placements or activities. In such cases, the Host may require the student to sign a confidentiality deed.

While there is no cost incurred by the host company to undertake a WIL project, project related costs including equipment, resources and incidentals will be covered by the host company.

More information on the guidelines and responsibilities of the host company and the university can be found [here](#).