

INDUSTRY-BASED PROJECTS



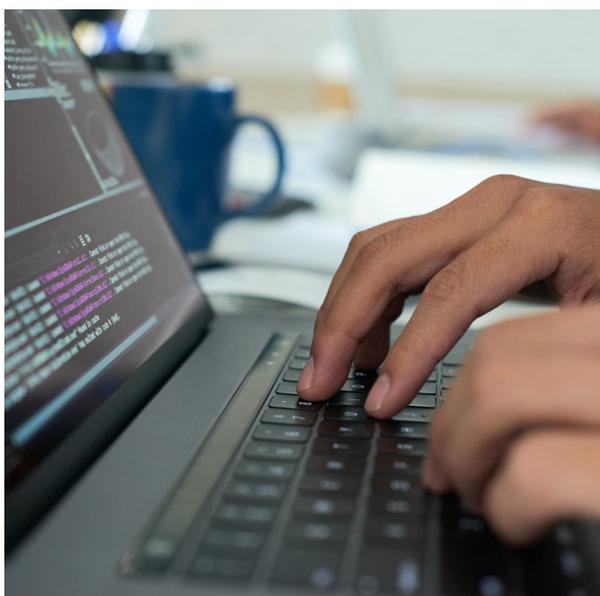
Murdoch University Bachelor of Science

With a degree in science, students can pursue a career that explores the working of the natural world, save and change lives in medical, molecular or health sciences, or discover more about the physical world. Students have the opportunity to undertake fieldwork in on-campus 'living laboratories' and create new materials for the medical, engineering, energy and telecommunications sectors in Murdoch's advanced nanotechnology labs.

Available Majors relevant to Data Science

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

- **Mathematics and Statistics:** Mathematical and statistical skills are in high demand, and the need for graduates proficient in data analysis and modelling is likely to continue to increase as technology and the internet create a data explosion. This major helps students develop a flexible outlook, a range of technical skills and a deep understanding of how mathematics and statistics are applied in a variety of contexts. Graduates can focus on mathematical modelling, which covers methods and applications in the physical, environmental and life sciences and engineering, or applied statistics exploring the life and health sciences, the environment, commerce and industry. Units from both areas can also be combined to give a broad skill set.



Requirement for Industry Projects

Third year students can choose to undertake an industry projects unit. This particular unit is very focused on a self directed (with appropriate support from an academic/ industry supervisor) research project, although in some cases groups of students may conduct coordinated activities.

Specific activities will vary from project to project, but may include elements such as an extensive literature review, writing of a detailed project report, managing an integrated 6-12 week project, industry tours, or communicating the aims and results of the project via seminars to peers and staff via written or oral formats.

Fourth year Honours students' projects would need to be discussed and assessed on a case-by-case basis as to whether the project is enough for a thesis, and contains enough challenge for such a student.

The Legals

All student projects are covered by an Industry Project 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. Murdoch University students can sign confidentiality agreements at the request of the participating company in order protect the project findings, and any associated intellectual property. Murdoch University's legal team is also happy to assist with the preparation of tailored agreements to suit the individual project and its' requirements.