

## 8.6 SCIENCE RESEARCH INTERNSHIPS

The Faculty of Science offers two internship subjects, one at 200-level and one at 300-level, that provide research experience opportunities for strong students to develop and hone their practical and research skills. Familiarity with laboratory or field methods in science is fundamental to successful project work.

Through an internship subject, students with an interest in research have an opportunity to gain experience “at the bench” or “in the field” as part of their research training. They learn how research is done by working alongside a PhD student, research fellow, or academic. Because many academic staff members in Science have collaborations with researchers in industry, an internship subject could potentially be taken in an external research workplace.

The objectives of such a program differ significantly from the ‘directed studies’ research subjects that the Schools currently offer, in which students work on a specific mini-project of their own, prepare a report and give a seminar.

### Subject Details

**SCIE292 (Science Research Internship)** is a 6-credit-point subject and **SIE392 (Science Research Internship B)** is an 8-credit-point subject. Both subjects are in the Science schedule, and therefore count towards the 90 credit points of Science subjects required for a BSc. They do not count towards the 60 credit points of a major. Please note that students can only count one Internship subject towards their degree.

These subjects will be available only to students in Faculty of Science degrees and also to selected Study Abroad students as approved by the Associate Dean (Teaching and Learning) in consultation with the Academic Advisor of the School offering the specific internship topic. The subjects are available for Autumn, Spring, and Summer Sessions.

### Entry requirements

Entry into **SCIE292** is by approval of the Associate Dean (Teaching and Learning) and also requires completion of 48 credit points, including 24 credit points of Science Schedule subjects, completed with a credit average or higher.

Entry into **SCIE392** is by approval of the Associate Dean (Teaching and Learning) and also requires completion of 96 credit points, including 24 credit points of 200-level Science Schedule subjects completed with a credit average or higher.

Internship topics will be advertised to students via SOLS messages two to three weeks prior to the start of each Session and placed on the Faculty’s website: [www.uow.edu.au/science/researchinternships](http://www.uow.edu.au/science/researchinternships). Students who qualify, having satisfied the pre-requisites, must apply for an internship by contacting the Faculty Executive Officer on 4221 3481. They will need to submit the names of two academic referees and a list of three placements in order of preference. This must be lodged in the Faculty Office by the deadline (about 1 week prior to semester start).

Students will be selected based on academic record and referee’s comments. Successful applicants will be notified by email and must acknowledge their acceptance within three days. Students can also complete an internship if they identify an academic staff member who has a topic in mind and is willing to supervise them. Enrolment in the appropriate subject must be arranged by the Faculty Officer.

Once selected for a specific internship, the student must meet with the supervising academic staff member in the Science Faculty to plan out the required meetings and laboratory or field work. The day-to-day laboratory or field work may, however, be supervised by a PhD student, a research fellow, or a collaborating researcher at an external organisation. In all cases, an academic staff supervisor will be required to take overall responsibility for the student.

A pro forma is also available on the Faculty’s website: [www.uow.edu.au/science/researchinternships](http://www.uow.edu.au/science/researchinternships) that clearly spells out the requirements of the subjects and the criteria for determining “satisfactory” performance. It states the following:

- (i) The student commits to:
  - a. SCIE292 students - completing 100 hours of laboratory and/or field work (excluding travel time).
  - b. SCIE392 students - completing 120 hours of laboratory and/or field work (excluding travel time).
- (ii) The supervisor provides a written statement of the work experience topic and an outline of the work that is required, including a listing of the practical skills that are expected to be mastered and an explicit statement of other specific outcomes required by the end of the subject (e.g. collation of data, preparation of materials etc.).
- (iii) The student agrees to keep a workbook, in which the following will be recorded:
  - a. start and finish times of each block of work,
  - b. details of methods used and results obtained,
  - c. analysis, and display of analysed results, as appropriate,
  - d. notes on information obtained from research publications and seminars.
- (iv) The supervisor organises an induction session to provide OH&S guidelines and training and to work through the risk assessment process with the student.
- (v) The student and academic staff supervisor timetable 3 meetings (including the direct supervisor, if different) – one to agree on the scope of work at the start, one a mid-subject progress review, and one at the end to discuss the student’s performance and outcomes.
- (vi) The Head of School signs off on the Internship agreement.

These subjects will be assessed as “satisfactory/unsatisfactory”, rather than being graded. Satisfactory performance will be based on:

- (i) completing the OH&S induction and risk assessment;
- (ii) completing the requisite hours of laboratory or field work as recorded in the work book and signed off by the direct supervisor, and attending all three scheduled meetings with the supervisor(s);
- (iii) attending at least six research seminars, and recording details of results and methods in the work book, signed off by the direct supervisor;
- (iv) satisfactorily completing an end-of-project paper critically reflecting on outcomes in relation to research objectives set at start of internship, and using newly gained experience to assess the completeness and effectiveness of published methods in the field [this paper is to be the basis for the final meeting with the supervisor(s)].