

ANU COLLEGE OF HEALTH & MEDICINE

ANU COLLEGE OF SCIENCE

COURSE STUDY GUIDE

**SCIENCE INTERNSHIP (COURSEWORK)**

SCNC2000

SCNC3000

SCNC8000

July 2022

## OVERVIEW

The Science Internship program is an opportunity for you to gain industry experience during your Science degree. Placements are typically with a Host organisation related to a field of science, and you will be required to apply your technical skills and science training in a professional context. An Internship is a great way to see what a career with a degree in a Science field could look like, and will give you exposure to current industry and professional practice.

The ANU College of Science and ANU College of Health and Medicine offer a limited number of internship placements, and applications for these internship places are highly competitive.

### Science Internship Courses

The Science Internship (Coursework) can be taken under one of three course codes listed in Table 1.

*Table 1: Science Internship course codes*

Description	Prerequisites	Target audience
<b>SCNC2000</b>	72 units	For undergraduate students to gain industry exposure during their degree
<b>SCNC3000</b>	96 units	For undergraduate students to transition into industry
<b>SCNC8000</b>	Permission code	For postgraduate students to gain industry exposure

Full details of eligibility requirements and learning outcomes of each of the courses offered can be found on the Programs and Courses website (<https://programsandcourses.anu.edu.au/>).

### Learning Outcomes

Full details of the learning outcomes for each of the Internship courses can be found on Programs and Courses <http://programsandcourses.anu.edu.au/>

In general, students who have successfully completed this course should be able to:

1. Demonstrate the ability to conduct a project with independence in the context of a professional workplace.
2. Communicate clearly and coherently in a professional environment, both orally and in writing.
3. Analyse, apply and synthesise scientific knowledge, data and evidence in a professional context.
4. Exercise critical thinking and evidence-based judgment to enhance business and industry-related activities.
5. Develop insight into how professional development opportunities can enhance a career in Science and related disciplines.

These outcomes are slightly different for each course level, with higher levels requiring higher levels of learning.

### Course Completion

Successful completion of all required tasks in the agreed timelines will result in a grade of CRS (course requirements satisfied). Failure to complete all tasks to a satisfactory level will result in a grade of NCN. See Guidance for Assessment Tasks for more details.

## Project Initiation and Enrolment

Full details for starting an Internship can be found at <http://science.anu.edu.au/study/internships>. Once you have been selected for a placement with the Host organisation, you should:

1. Identify and organise for an appropriate ANU supervisor from a field related to your project
2. Complete the Internship Schedule, which needs to be signed by the Host supervisor, the ANU supervisor and yourself
3. Complete the ANU insurance form and Enrolment Change form

Once these steps have been completed, the Insurance office will issue you with an insurance coverage letter, and the Science Student Administration office will enrol you in the appropriate course code. Note that all students must attend a compulsory Internship Induction Session prior to the start of your placement.

## Expected Workload

Students undertaking a Science Internship should anticipate the time commitment shown in Table 2. An agreement around placement hours and pattern should be discussed with your Host supervisor and ANU supervisor prior to commencing the Internship.

*Table 2: expected breakdown of time commitment*

Description	6-unit	12-unit	Notes
<b>Placement with host</b>	~ 90 hours	~ 180 hours	Suggested 1 day/week for a semester, or equivalent
<b>Independent research/study</b>	~ 30 hours	~ 70 hours	For related activities outside the placement
<b>Career development program</b>	~10 hours	~10 hours	For ongoing support and enrichment
Total	130 hours	260 hours	

## Career Development Program

The Career Development Program (CDP) is based on the Science Career Development Framework, which encourages students to connect their studies to relevant areas, such as industry & innovation, research & impact, policy & governance and teaching & learning. While on placements, students undertaking a Science Internship will be required to undertake at least 10 hours of CDP activities.

To support this, a fortnightly meeting will be held to enhance these CDP Activities. These meetings are not compulsory, but all Science Internship students are expected to attend, and will make the accumulation of CDP hours easier. If you are in a seasonal session (i.e. Summer/Winter), then please attend the overlapping sessions during the relevant semester. If you have an unavoidable conflict, please contact the Science Internships office in advance. Sessions will not be recorded, and may require a small amount of preparation.

Each session will be held via Zoom according to the Timetable. The Zoom meeting details are:

- <https://anu.zoom.us/j/81554709778?pwd=TkcrZjlqenE5WWtYd3hmTWRHaXJjZz09>
- Meeting ID: 815 5470 9778 Password: 475 893

A suggested list of CDP activities can be found under the Career Development Reflection assessment item.

## Roles of the Supervisors

During your Internship, you will have an ANU supervisor and a Host supervisor. It is your responsibility to find an appropriate ANU supervisor before the commencement of your Internship. It is expected that a meeting with the two supervisors and the student takes place within the first week of commencement of the placement to align expectations around the project.

The **ANU supervisor** should be someone who is familiar with and interested in the area of your Internship. They will form the link between the Host organisation and the University and guide you as an academic mentor throughout the placement. It is expected that you organise consultation time with your ANU supervisor at least 4 times during the Internship. This can be through real-time meetings, or appropriate alternatives. The ANU supervisor is expected to uphold ANU policies and procedures regarding coursework assessment.

The **Host organisation supervisor** will provide the hands-on supervision and guidance in the workplace for the duration of the Internship, and guide students through the appropriate processes and any induction within the Host organisation. It is expected that the supervisor will provide regular feedback on the student's progress, directly to the student as a form of professional development, and via monitoring from Science Internships.

You may nominate an **Advisor** for your project, either from ANU or elsewhere, who may bring specialist knowledge that can help you with your placement. The Advisor does not take on an assessment role, but can contribute to these discussions as needed.

## Responsibility of students

Students will be required to attend a compulsory induction session prior to commencing the Internship, run by the Science Internships office. You are encouraged to book an appointment with [ANU Careers](#) to maximise your learning in the placement by providing further guidance in professional behaviour in the workplace and effective communication. Induction sessions will be organised at a time before your placement.

During the internship, students will be expected to act in a professional manner and work under the guidance of the Host supervisor. Students should liaise with the Host supervisor on a regular basis while completing the Internship.

Students will attend the Host premises as agreed and abide by the details listed in the Internship Schedule. Students will be expected to follow any business conduct guidelines, induction processes, safety procedures or workplace directions as required by the Host and specific Internship Schedule.

Students encountering any problems during their placement should, if appropriate, first address these with the Host supervisor. If students feel this is not appropriate under certain circumstances then issues should be raised with the ANU supervisor or the Science Internship Convener ([Science.Internships@anu.edu.au](mailto:Science.Internships@anu.edu.au)).

## Responsibility of Internships Office

The Internships Office is responsible for coordinating the agreements in place for the placements, and for providing support for students and supervisors during the placement. The Internships Office coordinates the Fortnightly Cohort Meetings during semester, and collating and approving the final grades.

## Absences while on placement

In most cases, the work pattern of your placement will be negotiated between you and your Host supervisor. However, if you will be absent without notice in your placement, such as being sick or non-scheduled leave, please contact your Host supervisor and copy in [Science.Internships@anu.edu.au](mailto:Science.Internships@anu.edu.au).

## GUIDANCE FOR ASSESSMENT TASKS

### Indicative Assessment

The Internship should centre on an agreed project that defines the bulk of your placement activity. The intent of the assessment is to scaffold your experience, and should not be the primary driver for the activity within your placement. All activities undertaken as part of the Internship should be of value to your project, your Host organisation, or yourself. Where possible, the assessment tasks should be an output of activities undertaken on the Internship, rather than being 'for the sake of assessment'.

We understand that each placement will be in a different context and with different opportunities, constraints and priorities. The outputs and appropriate timing of your project will depend on the placement. A suggested schedule of indicative assessment is shown in Table 3.

*Table 3: Indicative assessment*

Assessment Task	Suggested Size	Marker	Suggested Timing
<b>Project proposal</b>	~1000 words or aligned with Host practice	ANU Supervisor Host Supervisor	Within two weeks from commencement of placement, or no later than one-quarter of the way through your placement.
<b>Internship report</b>	~3000 words (SCNC2000) ~5000 words (SCNC3/8000)	ANU Supervisor Host Supervisor	At the completion of placement as per date in your internship schedule or end of semester, whichever is earliest.
<b>Oral presentation</b>	15-20 mins (SCNC2000) 20-30 mins (SCNC3000) 30 mins (SCNC8000)	ANU Supervisor Host Supervisor	At a time convenient to the Host and ANU supervisors, no later than 2 weeks after internship report. Preferably at the Host Organisation.
<b>Career development program &amp; reflection</b>	10 hours and ~1000 words	Science Internship Convener	Ongoing through semester, compiled within 2 weeks of completion of internship report.

Variations to the timing or tasks listed in the indicative assessment must be agreed in writing between the Student, ANU Supervisor, Host Supervisor and Science Internship Convener.

### Grading

Assessment in the Science Internship courses is not marked. This is to reflect Industry practice, where work is not marked, but benchmarked to an appropriate level. As a representative of ANU, we expect work to be of high quality (Distinction level and above), and developing your ability to benchmark the quality of your work in the context of your placement is a valuable experience whilst on your placement. If you are unsure, please talk to your Host or ANU supervisor, or the Science Internships office. As each assessment item is completed, a grade of CRS (course requirement satisfied) will be noted against each assessment item in Wattle.

### Submission

All written work should be submitted to Wattle, which is used to keep a record of your submissions. In addition, please email your project proposal and written report to your Host and ANU supervisors as well as the Science Internships office ([science.internships@anu.edu.au](mailto:science.internships@anu.edu.au)).

Your career development reflection is not required to be shared with your Host and ANU supervisors, and need only be submitted on Wattle. However, you may choose to share your reflections where appropriate.

## Human Ethics considerations

Students should be aware that if they intend to conduct interviews with people or use a written survey as part of an applied research project they will need to seek ethics permission from the University Ethics Committee. Further information can be found at: <https://services.anu.edu.au/research-support/ethics-integrity/before-you-begin>

Some organisations may also have an internal ethics committee. Please discuss with your Host Supervisor as to whether there are any additional processes required for your project.

## Project proposal

The project proposal should outline the scope of the project to be undertaken at the start of the placement. It is recognised that the direction and focus of the project may change during the Internship depending on findings and other factors outside of your control. The proposal should be seen as an indication of intent, not necessarily a complete description of the final outcome.

There is no fixed template for the project proposal. Your Host may have an internal process for proposing a project or developing a business case. It would be valuable for your experience to follow and tailor these processes for your project. Use it as an opportunity to scope the project you will undertake whilst on your placement, and set up the expectations with your Supervisors.

Each proposal will cover different topics, but a place to start could be considering the following prompts. These are not required, and should be tailored to your situation:

- Identification of project aims and goals
- An outline of roles and responsibilities of supervisors and yourself
- An indication of stakeholders or other project-enabling resources
- An indicative timeline of milestones or project phases
- A contingency plan in case milestones are not or cannot be met, or stretch goals
- Consideration of how difficult or sensitive situations could be resolved
- A risk assessment for aspects of your project
- An indication of your shared expectations for the placement
- Identification of any resources required for the successful completion of your project
- An indication of handover processes and artefacts, describing the exit conditions for your work within the scope of the project

Please ensure that your ANU and Host Supervisors endorse your Project Proposal prior to submission.

## Internship report

The Science Internship requires the completion of a final report under the direct supervision of a professional in a workplace and with guidance from the ANU supervisor. The written report should be in a format most useful to your Host organisation – ideally, they will use your project outcomes well after your placement is complete.

It is likely that throughout the placement you will develop a variety of resources that may be valuable to the Host organisation that may not fit into the definition of a traditional report, and may involve a mix of physical and digital media. In this light, you should discuss your intended format and expectation around the final 'work package' with your Supervisors.

Students who have undertaken Science Internship previously have produced artefacts such as:

- **A scientific report**, including executive summary, rationale, methods, results, conclusions, recommendations and future research
- **A research paper**, written in the style of a literature research paper or essay in the relevant area or discipline
- **A scientific analysis**, prepared for scientists or other professionals looking to understand and repeat your analysis. This might include artefacts that you have developed, such as apparatus, methodology or code
- **A position paper**, providing insights you've developed through the project for a broader audience, such as a Conversation article or industrial-facing blog entry
- **A business proposal**, that outlines the business case for aspects of your work for the application of funding or as part of an accelerator program
- **A digital storymap** or other platform-based documentation of a scientific analysis
- **A portfolio of work**, highlighting the various artefacts you have developed and how they fit together
- **A physical artefact**, such as an object or body of work that displays the outputs of the placement
- **A repository of work**, showcasing and containing the artefacts you have developed
- **A collaborative report**, where you can highlight your contribution through a rationale or explainer
- **A handover document**, so that someone else can continue your project into the future
- **Any combination or extension of these relevant to your Host or your science discipline**

The report will be assessed by the ANU supervisor with input from the Host supervisor. You should discuss their expectations for this throughout your project. To meet the CRS requirement of the course, your Host and ANU supervisor must agree that you have demonstrated on your placement the relevant learning outcomes:

- Undertaken an industry-based project and provided adequate background to understand the nature of the project
- Communicated the outcomes of your project in a professional manner
- Demonstration of analysis, including efforts to consolidate and synthesise knowledge relevant to your project
- Exercised critical thinking and judgement in the context of your project

## Oral presentation

The Science Internship requires the completion of an oral presentation to a professional and academic audience. Your presentation is an opportunity to showcase the work that you have done within the Host organisation, and is a great opportunity for all the stakeholders of the project to meet face-to-face. Generally, it is expected that the oral presentation will take place at the Host institution to allow attendance and participation from staff not directly involved in supervision. Please make sure that all attendees are introduced to one another during your presentation.

As a guide, some points that you may cover in the presentation include:

- What was the goal or aim of your project?
- What is the current state of scientific knowledge related to your project?
- What activities did you undertake during your project, including phases and milestones?
- What are the outputs that your project has generated?
- What are the limitations of your work, or areas for future research?
- What have you learned, or what would you do differently in the future?
- Who do you need to acknowledge as part of the project?

## Career Development Program and Reflection

The Career Development Program is a flexible activity designed to enhance your awareness of transferable industry skills after your Science Internship placement. During the placement, you are required to collect '10 points' of CDP Activity. The Career Development Program should be undertaken across the duration of your placement. A guide on CDP Points and Activities are shown in Table 4.

*Table 4: CDP Points and Activities. Note: 1 point is approximately equivalent to 1 hour of work*

CDP Points and Activity	CDP Points and Activity – ANU Careers Toolkit
1 Attend the Science Internship Fortnightly Cohort meetings (1 point per session)	1 Complete the Career Pulse Survey on the ANU Careers Toolkit
1 Attend a relevant Careers Fair or other Employment event	1 Complete Careers Core Capability 1 – Understanding Yourself Part 1 on the ANU Careers Toolkit
1 Attend a workshop or appointment run by ANU Careers or ANU Academic Skills	1 Complete Careers Core Capability 1 – Understanding Yourself Part 2 on the ANU Careers Toolkit
1 Maintain a work log or diary over the course of your internship	1 Complete Careers Core Capability 2 – Understand the Labour Market on the ANU Careers Toolkit
1 Undertake professional development or training at the Host organisation (max 2 points)	1 Complete Careers Core Capability 3 – Find and Secure Work Parts 1 & 2 on the ANU Careers Toolkit
1 Attend a professional networking event through the Host organisation (max 2 point for 2 hours)	1 Complete Careers Core Capability 4 – Create and Maintain Work Parts 1 & 2 on the ANU Careers Toolkit
1 Participate professional networking or training, such as through the Canberra Innovation network (max 2 points for 2 hours)	1 Improve your CV after completing the CV360 activity on the ANU Careers Toolkit
1 Develop your professional profile through a relevant industry platform, such as LinkedIn	1 Use the Resume Builder activity to enhance your CV on the ANU Careers Toolkit
1 Undertake a self-defined opportunity that meets the intent of this task (max 2 points for 2 hours)	1 Undertake an Interview360 assessment on the ANU Careers Toolkit

A complementary program of activity is organised during semester between the Science Internship office and ANU Careers during 'odd weeks' in semester to support the CDP Activities, and is a great way to keep in touch with the Science Internship office and collect CDP points. These sessions will be advertised via Wattle, but include topics such as Science Internship alumni advice, an Introduction to the ANU Careers Toolkit, a session on the Understanding Yourself module, Building your Resume and CV and Reflections and next steps.

Submission of the CDP requires:

- A ~1000-word personal reflection based on the completion of CDP activities.
- Documented evidence of completion of 10 points of CDP activity. This could include screenshots and artefacts depending on the nature of the activity, which may be embedded in the reflection.

The purpose of the personal reflection is to reflect on your learning in the Internship as a launching point for the next part of your career. The Reflection should not be a mere retelling of what happened, but should include insights about relating and applying judgement and demonstrate your learning. [ANU Academic Skills has a good resource](#) on reflective writing. This task should be built-up over the semester. Some formats students have used in the past include: learning journals, blogs, opinion pieces, work diaries, job applications and selection criteria, letters to future students, reflective essays. You can present this in any media format, including written formats, video or audio, or any other format you believe appropriate to reflect on your experience. If there are confidential elements, please discuss this with the Science Internship Convener.