COURSE STUDY GUIDE
SCIENCE INTERNSHIP (HDR)

SCNC8001

ANU COLLEGE OF HEALTH AND MEDICINE

ANU COLLEGE OF SCIENCE

SCIENCE TEACHING AND LEARNING CENTRE

April 2023

OVERVIEW

The Science Internship program is an opportunity for you to gain industry experience during your PhD 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 develop your professional skills and networking opportunities, and will give you exposure to current industry and professional practice.

The ANU College of Health and Medicine and ANU College of Science offer a limited number of internship placements, however, candidates are encouraged to self-source their own opportunities through collaborations and networks.

Science Internship Courses

Candidates undertaking an internship placement would enrol in the SCNC8001 Science Internship course.

Full details of eligibility requirements and learning outcomes 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, candidates who have successfully completed this course should be able to:

1. Demonstrate the ability to work under professional supervision, and gain useful background of a professional context and how that workplace operates;
2. Communicate complex concepts clearly and coherently in a professional context;
3. Analyse, consolidate and synthesise advanced theoretical and professional knowledge through research to identify and propose solutions to complex problems with intellectual independence;
4. Exercise critical thinking and judgement in the context of developing advanced professional knowledge;
5. Independently conduct a research project; and
6. Demonstrate the ability to deliver outcomes as per the terms negotiated in the Placement Agreement.

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.

Eligibility

1. Both domestic and international candidates can undertake an internship. (Should check the eligibility of the specific industry placement and internationals should check their visa conditions prior to applying.)
2. Candidates enrolled full-time or part-time in an ANU Higher Degree Research (HDR) program.
3. Candidates should have successfully completed their "Thesis Proposal Review" milestone, and must not have submitted their thesis for examination.

4. Candidates should have all milestones up to date and be demonstrating satisfactory progress.
5. Candidates must discuss with their Primary Supervisor regarding an appropriate time to undertake the internship, and obtain written approval from both the Primary Supervisor and Delegated Authority to undertake the internship.

Project Initiation and Enrolment

Full details for starting an Internship can be found at https://students.science.anu.edu.au/careers-opportunities/internship-program/science-health-medicine-hdr-internships.

Once you have identified or been selected for a placement with the Host organisation, you should:

1. Seek approval from your Primary Supervisor and Delegated Authority (School Associate Director HDR), and complete the *HDR Internship Application form*. This document forms the commitment agreement between the ANU, Host and candidate.

   NB: This is important to complete, if possible, within the first 18 months of commencement of your PhD program.
2. The College Science Internship team will confirm the eligibility of the internship for RTP or General Internship funding.
3. Candidate must then complete the Host Placement Agreement (ST01), Candidate Placement Agreement (ST02) and the Placement Details (ST03) forms, signed by the Host supervisor, the ANU supervisor and candidate.
4. Once the paperwork has been approved and returned to the College Science Internship team the candidate will be notified of the class enrolment details. The candidate should then "Change their enrolment – add/drop coursework" through the ISIS Manage My Degree – HDR portal to enrol in SCNC8001 for the duration of the internship program.

Scholarships

As part of the Research Training Program, eligible RTP internships can be considered for additional up to 6 months funding from the ANU. For general internships candidate can apply for up to 3 months funding.

In order to access this funding the candidate must submit the "Extension of Scholarship" eForm via ISIS, MMD-HDR and include details of the industry placement and dates/duration.

In addition, internship awards may be available and are managed through the College / School, or some industry placements may pay an award to candidates undertaking internships with them. It is important that in order to retain any existing scholarship from the ANU (such as RTP, ANU PhD Scholarship etc.) the additional internship payment does not exceed 75% of the main stipend value.

For further information, please contact science.internships@anu.edu.au.

Career Development Framework

The Science, Health & Medicine Career Development Framework encourages HDR Candidates to develop and get recognition for a broad range of academic and work-relevant skills.

During your PhD studies, this framework will help you think about the skills you would like to develop, identify opportunities and facilitate discussions with your supervisor about your

options. Candidates are encouraged to participate in the Career Development Program and submit evidence of an internship placement to obtain Career Development Skill points.

Further details on the program can be found on the [Science, Health & Medicine Career Development Framework](#) Wattle Site.

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 (this does not have to be your PhD Primary Supervisor) before the commencement of your Internship. It is expected that a meeting with the two supervisors and the candidate take 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 fortnightly 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, and HDR candidature progression.

The **Host organisation supervisor** will provide the hands-on supervision and guidance in the workplace for the duration of the Internship, and guide candidates through the appropriate processes and any induction within the Host organisation. It is expected that the supervisor will provide regular feedback on the candidate's progress, directly to the candidate 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 Candidates

As a continued member of the ANU community you are obliged to adhere to the [Student Code of Conduct](#) in all activities undertaken during your enrolment as a HDR candidate. The Code of Conduct sets out the ANU values, principles and behaviours and conduct required of all students, and directs students to the rules that apply to the code. This applies to all activities endorsed by the ANU, including Internships.

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

Candidates will attend the Host premises as agreed and abide by the details listed in the Internship Schedule. Candidates 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.

Candidates encountering any problems during their placement should, if appropriate, first address these with the Host supervisor. If candidates 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).

Responsibility of Internships Office

The Internships Office is responsible for coordinating the agreements in place for the placements, and for providing support for candidates and supervisors during the placement. The Internships Office coordinates collating of assessment documentation 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 complete the "Apply for Leave eForm" via ISIS, Manage My Degree – HDR, and contact your Host supervisor and copy in 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 below.

Assessment Task	Suggested Size	Marker	Suggested Timing
Internship report	~5000 words	ANU Supervisor Host Supervisor	At the completion of placement as per date in your internship schedule.
Oral presentation	30 mins	ANU Supervisor Host Supervisor	At a time convenient to the Host and ANU supervisors, no later than 4 weeks after internship report. Preferably at the Host Organisation.
Reflection	~500 words	Science Internship Convener	At the completion of placement, within 4 weeks of completion of internship report. In the event of non-completion the reflection piece should still be submitted.
Qualtrics Survey	NA	Office of Dean HDR (ODHDR)	Within 4 weeks of completion of the internship placement.

Variations to the timing or tasks listed in the indicative assessment must be agreed in writing between the Candidate, 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).

Your internship 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

Candidates 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.

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.

Candidates who have undertaken Science Internships previously have produced artefacts such as:

- **A scientific report**, including executive summary, rationale, methods, results, conclusions, recommendations and future research (a template is available from the Science Internship Office)
- **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:

- Demonstrate the ability to work under professional supervision, and gain useful background of a professional context and how that workplace operates;
- Communicate complex concepts clearly and coherently in a professional context;
- Analyse, consolidate and synthesise advanced theoretical and professional knowledge through research to identify and propose solutions to complex problems with intellectual independence;
- Exercise critical thinking and judgement in the context of developing advanced professional knowledge;
- Independently conduct a research project; and
- Demonstrate the ability to deliver outcomes as per the terms negotiated in the Placement Agreement.

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?

Reflection

At the completion of the internship placement, you are required to provide a reflection piece of approximately 500 words. The reflection piece is not graded and is an opportunity to reflect on the learning experience of the placement, including consideration of questions such as:

- Did the placement add to your professional knowledge and skills as a Scientist?

- What was your impression of the experience, including your impression of the industry placement – for example access to facilities, and resources?

- How welcome did you feel during the placement? Were you looked after and taken care of?

- What were the expectations from the host – how was this demonstrated, and were the expectations clearly defined?

- Did the placement provide adequate training opportunities and skill development?

- Were there opportunities for networking within the industry placement or the general research area?

- Do you have any suggestions for improvement? Relative to the industry placement directly or the internship process in general?

Qualtrics Survey

Following completion of the internship placement the ANU require all candidates to complete the [HDR Internship Data Form](). The purpose of this form is to collect data about Higher Degree Research (HDR) Internship(s) undertaken during your candidature. You will be required to confirm the placement location and dates of attendance, as well as the agreement / schedule signed when commencing your placement. If you require any assistance with this information, please reach out to the Science Internships team for advice.

QUESTIONS?

E: Science.Internships@anu.edu.au