



Bachelor of Science

Honours

Handbook for Students

2023

Faculty of Science and Technology



Contents

1. About the Bachelor of Science Honours course	3
Why Honours?.....	3
2. Meet the Honours Coordinator	4
Dr Dylan Irvine.....	5
3. Role of the project supervisor.....	5
4. Course structure and study plans.....	7
Honours Thesis units SCI711 / SCI712 / SCI713.....	7
Compulsory core unit (coursework)	8
Specialist elective unit (coursework).....	8
5. Applications and enrolment	8
Entry requirements	8
How to apply.....	9
Enrolment.....	9
6. Getting started	10
Honours project timeline	10
Research training activities.....	11
Desk space	11
Research expenses.....	12
Workplace health and safety, including fieldwork.....	12
Ethics clearances	12
7. Key tasks and assessments.....	16
Timeline of key tasks and assessments.....	16
Extension requests and late submissions	16
Key task: Supervision agreement	17
Assessment 1: Research proposal	18
Assessment 2: Research proposal seminar.....	18
Assessment 3: Results seminar.....	19
Assessment 4: Honours thesis	20
8. Honours grading	24
9. Where to get help, and other information	25

1. About the Bachelor of Science Honours course

The Bachelor of Science Honours course is a stand-alone award, available to graduates with an undergraduate degree in a relevant science discipline (e.g., Bachelor of Science, Bachelor of Environmental Science), who fulfill the entry requirements. An Honours degree is designed to give you a competitive advantage for employment, or to provide a first step in a research or academic career. Honours is the typical route to a postgraduate research degree, such as a PhD. The course provides an opportunity for you to:

- develop an advanced level of understanding about a specific field of research;
- gain experience and training in research techniques and principles;
- develop written and oral communication skills;
- learn and demonstrate project management skills; and
- work collaboratively on projects with peers, industry and government partners.

The major component of this course is a two semester (full-time), or four semester (part-time) research project. It can be done in a wide range of fields, including:

- environmental science (e.g., aquaculture, biochemistry, botany, marine, freshwater and terrestrial ecology, molecular biology, water resources, and zoology);
- biomedical science, social work and other allied health areas;
- sports science;
- chemistry;
- GIS and remote sensing; and
- information technology.

The other components of the course are two course-work units designed to develop specific research skills, including the communication of research results which are studied concurrently with the research project.

The program is fully flexible, offering:

- 1-year full-time study or 2 years part-time study;
- first or second semester start; and
- internal or external study mode.

However, the choice of program may be constrained by supervisor and project availability.

Why Honours?

The Bachelor of Science Honours provides an opportunity for you to research a particular area in depth and gain experience in project management. Honours students are expected to successfully manage a complex project as well as demonstrate research skills and technical or clinical skills.

The course teaches you research techniques and principles, develops advanced information acquisition, analysis and problem-solving skills, and develops skills to effectively communicate the results of research in written and oral formats. You develop these skills through pursuing in depth research, under the guidance of experienced researchers, with coursework also targeted to provide appropriate

research training. While undertaking your research project, you are mentored and advised by experts in your discipline.

As well as providing advanced, and often a prerequisite, preparation for work in industry and government, an Honours course is also essential preparation for postgraduate research at Master and Doctoral levels. Honours research projects at Charles Darwin University may be hosted by a range of Faculties and Institutes including the Research Institute for the Environment and Livelihoods and Menzies School of Health Research.

Opportunities for Honours graduates exist in careers/roles such as: scientist; environmental scientist; exercise and sports scientist; environmental manager; exercise and sport scientist; biomedical scientist; teacher; scientific technical officer; and laboratory manager. Students gain professional recognition and are introduced to research practices and culture. Many students develop professional networks with researchers and managers in industry and in government during their Honours research.

2. Meet the Honours Coordinator

The Bachelor of Science Honours course is coordinated through the Faculty of Science and Technology, with projects and supervisors from a range of disciplines, with supervisors potentially from a range of Faculties across the University. The role of the Honours Course Coordinator is to support you, and your supervisor(s), towards your successful completion of the course. The Honours Coordinator does not play any role in supervising you.

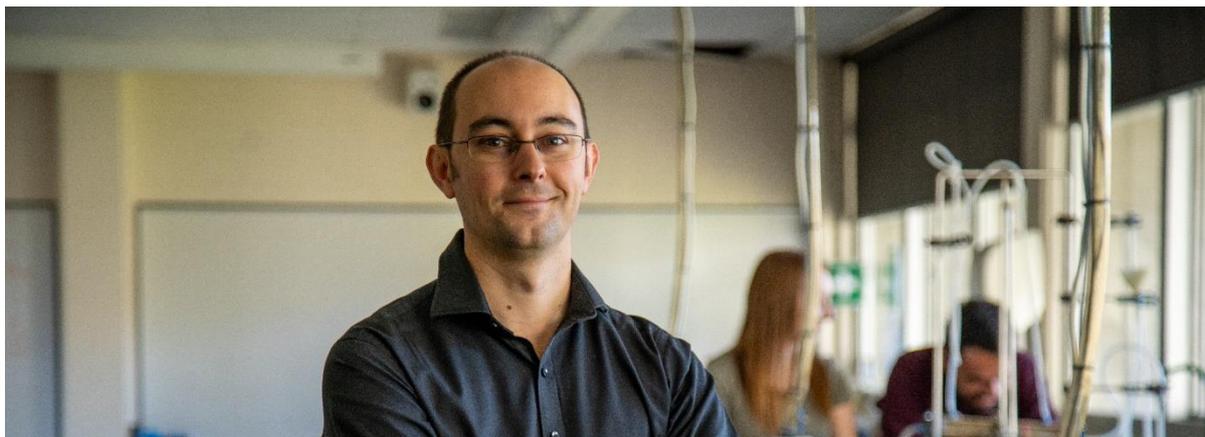
Specifically, the role of the Honours Coordinator includes:

- assessing the credentials of applicants and approving admission to the course;
- providing advice on course rules and policy to ensure they are adhered to;
- advising on study plans and research training options;
- approving supervision agreements and research proposals;
- convening research proposal and results seminars, with the support of supervisors and students;
- providing advice and direction to the supervisor and student at key times in the process of completing the course requirements;
- assisting with any supervision or student conflict issues;
- considering and approving extension requests; and
- implementing the thesis examination process.

If you are thinking about doing Honours, you should contact the Honours Coordinator at an early stage.

The current Honours Coordinator is Dr Dylan Irvine (see contact details, below).

Administrative support for Honours students (e.g., providing inductions, help organising seminars, building access, reimbursing project expenses etc) is provided by the Faculty of Science and Technology administration team (FST-support@cdu.edu.au).



Dr Dylan Irvine

Email: dylan.irvine@cdu.edu.au

Phone: (08) 8946 6762 or 0418 560 551

Office: CDU Casuarina campus, Yellow 2.2.27

Dylan's research focuses on global water resources, with a particular focus on groundwater systems. Through a multidisciplinary approach combining field-based activities and numerical modelling, he utilises a range of approaches, including the use of water chemistry and isotopic data to shed light on the origins and ages of groundwater sources. This work seeks to improve our understanding of processes including groundwater recharge and the interactions between groundwater and surface water systems. He is especially interested in understanding potential impacts to groundwater-dependent ecosystems. He also has a strong interest in data science, utilising Python for large-scale data analyses that complement empirical observations. Furthermore, Dylan's research extends to the development and application of groundwater flow models, providing valuable insights into sustainable water resource management.

<https://researchers.cdu.edu.au/en/persons/dylan-irvine>

<https://scholar.google.com.au/citations?user=R200FJkAAAAJ&hl=en>

3. Role of the project supervisor

Your supervisor(s) has responsibility for overseeing, advising and guiding your research project, the preparation of your seminars, and the production of your thesis. Your supervisor(s) will ensure that you receive clear direction as to the aim(s) of the project and that the project is achievable as an Honours project.

Your principal supervisor needs to be a CDU academic staff member experienced in undertaking research. They are responsible for the administration of the project and supporting the student's work on the project. Students may have more than one supervisor, and this is particularly advisable when the additional supervisors have recognised expertise in the area of study, or the project is multidisciplinary. Associate supervisors may be from CDU or from outside agencies with relevant expertise. In some cases, associate supervisors can provide additional resources for the project through

their agency. Examples of institutions which have been involved with projects in the past are the NT Government, AIMS, NT Parks and Wildlife, CSIRO and the NT Museum.

The supervisory relationship should be characterised by (for both parties):

- professional, ethical and respectful behaviour;
- clearly articulated roles, responsibilities and expectations, established early in the Honours candidature;
- a thorough understanding of the program requirements; and
- provision of adequate commitment of time during planning, implementation and completion.

At the commencement of the project, you and your principal supervisor should work together to prepare a supervision agreement, which sets out the expectations and responsibilities of both you and your supervisor. A template for the supervision agreement is available via Learnline (you will have access to the Honours Learnline site from the beginning of your first semester). If you want this document before you have access to Learnline, ask the Honours Coordinator to email you a copy.

Some tips for managing your supervisor (also called upwards management)

This is your chance to do your thesis and you should not be reserved about asking for exactly what you need, so you can produce the best thesis you can. Don't wait for your supervisor to notice that you need something, and don't wait until everything is perfect before discussing your work with your supervisor.

As much as possible, identify your own needs, so you know whom to ask for help. For example, if you just need some encouragement, it might be better to call a friend or drop in to see the Honours Coordinator, rather than see your supervisor, if they are not the type of person to offer empathy.

Get to know how your supervisor works. Is it best to contact them by phone or email? When are they most busy and therefore least likely to be receptive?

Choose the best communication method. Email is usually the best for university academics. Also, email gives both you and the recipient more time to put thought into your communication. You also then have a record of agreements.

Prepare for meetings! Taking a written list of topics that you want to talk about, a draft chapter, or written summary of your problem makes it easier for your supervisor to help, and for you both to get the most out of the meeting time. Find a system that works for you. I used to bring along a set of 5-8 slides that set the scene of what I'd been up to, showed a recent result, then outlined the problems that I was having/ input that I was looking for. The main thing is to find out what works for you.

Do not avoid your supervisor because you 'don't know enough'. Knowing enough is not the issue. At the beginning of your project especially, it is highly likely that your supervisor will know more about the theory and practicalities behind your project than you do, or has additional skills in writing, research or analysis. At least you would hope so! So just accept that as a given. The issue is that you get exactly the help you need, to do the best possible job you can, in the available amount of time. Don't squander precious time waiting until things are perfect.

Be as clear as you can be about what you want from a meeting with your supervisor. This will help make sure you get the assistance you need.

Expect to get lost. It is a normal part of the research process. Seek your supervisors help whenever you get lost.

Put thought into the suitability of different people for different problems. It is unrealistic to think that your supervisor will be able to provide all the help and insight you need. Consult widely, and build a network

Don't be put off by a negative response. It is important to develop professional resilience. It may be that you asked the wrong person for what you needed, or that you asked someone for whom how they provide feed-back is not important.

Seek support from a range of people, in addition to your supervisor. Your candidature is an opportunity to build your professional network. Plus, it is unlikely that your supervisor will have all the answers.

4. Course structure and study plans

Students should develop a study plan in discussion with their supervisor(s) and the Honours Coordinator at the commencement of their course. Students should refer to the CDU Course Catalogue for the appropriate study plan for their discipline area.

The course structure consists of a major research project (Honours Thesis units SCI711 / SCI712 / SCI713), a core coursework unit on research writing, and an elective coursework unit relevant to the discipline.

Over the duration of their course, students need to complete a total of 80 credit points, comprising 60 points of Honours Thesis units and 20 credit points of coursework units. A full-time study load for one semester is 40 credit points. Standard coursework units are normally 10 credit points each, and the Honours Thesis units (SCI711, SCI712, SCI713) have different credit points to allow flexibility in arranging the course.

Honours Thesis units SCI711 / SCI712 / SCI713

The Honours Thesis units cover the research project of the Bachelor of Science Honours course. Students need to complete a total of 60 credit points of Honours Thesis units during their course. This can be any appropriate combination of 10 credit points (SCI711), 20 credit points (SCI712), or 30 credit points (SCI713).

Students only need to select the units necessary to make up the required 60 credit points. There is no need for students to do all three units unless their study plan requires it. A student can enrol in the same unit more than once, if their study plan requires it, but should not enrol in the same unit twice in the same semester.

Compulsory core unit (coursework)

SID403 Research Skills is a compulsory core unit for all Honours students. It enhances the academic, research and professional skills of students. The unit consists of three components: research writing, analysis planning, and research communication. Students learn and practice these critical skills which are required for the successful production of the Honours thesis, the key assessable component of the Bachelor of Science Honours course.

Specialist elective unit (coursework)

Honours students select **one specialist elective** relevant to their discipline area of study. The specialist elective should complement their research project and unit choice should be discussed with the project supervisor and the Honours Coordinator. The specialist electives are as follows:

Environmental Science

- ENV511 Real-World Statistics and Data Reasoning
- 400 or 500 series units approved by the project supervisor and Honours Coordinator

Health and Clinical Science

- PHM524 Clinical Trials
- PHM526 Research Design
- PHM527 Health Research Skills
- PHM552 Epidemiology
- PHM553 Biostatistics
- PHM588 Qualitative Research Methods
- PSY447 Research Methods and Practice
- PSY426 Ethics and Professional Issues
- HEA409 Practice Evaluation Strategies
- 400 or 500 series units approved by the project supervisor and Honours Coordinator

Information Technology

- 400 or 500 series units approved by the project supervisor and Honours Coordinator

General Science

- 400 or 500 series units approved by the project supervisor and Honours Coordinator

5. Applications and enrolment

Entry requirements

Entry requirements for the Bachelor of Science Honours course are:

- undergraduate degree in a relevant science discipline; and
- GPA ≥ 5 .

Prospective students must identify both the area of investigation for their research project and their supervisor when they apply for Honours. Even if applicants meet the entry requirements, they are only admitted to the course if they have identified a project and a CDU academic who has agreed to supervise them, and the Honours Coordinator has formally approved their admission.

How to apply

Information on applying to study at CDU can be found here:

www.cdu.edu.au/prospectivestudents/apply.

Applications for places in CDU courses, including the Bachelor of Science Honours, are made through the SATAC website: www.satac.edu.au. Select the 'Postgraduate' option and search or navigate to the Bachelor of Science Honours course at CDU. There are two SATAC codes for the Bachelor of Science Honours course:

- 1BH017. This is for students who plan to study at the Casuarina Campus. This is also the code students should use if they are external but will be supervised by staff associated with the Casuarina Campus. This includes the Menzies School of Health Research.
- 1BH018. This is for students who plan to study at the Alice Springs Campus. This is also the code students should use if they are external but will be supervised by staff associated with the Alice Springs Campus. Applicants will be contacted by CDU admissions once their application has been processed by SATAC.

The application process is as follows:

1. Identify a project and supervisor;
2. Discuss application with Honours Coordinator and supervisor;
3. Apply through SATAC (domestic students) or the CDU International Office (international students);
4. Application goes to the CDU Admissions Team who will contact the student;
5. Submit the following details to the Honours Coordinator:
 - name of CDU academic who has agreed to supervise;
 - brief overview (one or two paragraphs) outlining the proposed project aims and objectives and work to be undertaken;
6. Once a student has demonstrated that they meet the course entry requirements and has identified a supervisor and project, the Honours Coordinator may approve admission to the course.

Enrolment

Students can enrol once their admission to the course has been confirmed. They should discuss their study plan with their supervisor, and Honours Coordinator if necessary, prior to enrolment.

There are detailed instructions for activating a student account and enrolling in units on the CDU website: www.cdu.edu.au/current-students/student-admin.

Closing dates for enrolment and other important dates are also available on the Student Central website: www.cdu.edu.au/current-students/important-dates.

6. Getting started

The Honours year is designed so that you complete a major research component, within two semesters (full-time equivalent). For that reason, you and your supervisor(s) need to plan the research project and course carefully. Below are several areas that should help to streamline and simplify the Honours experience.

It is strongly recommended that you have agreed on a project with your supervisor at least four weeks prior to the start of semester. This will ensure that you are ready to commence at the start of semester and will be able to complete and submit your project proposal, and give your proposal seminar, on time. The Honours course is relatively short, so timing and planning are very important! You are strongly encouraged to discuss the timing of the different components of your research with your supervisor(s) and the Honours Coordinator, so that you know when you have to achieve milestones towards your research goals. To avoid problems associated with inappropriate experimental design, it is strongly recommended that you discuss the design and expected data analyses of your experiments or observations with researchers who are experienced in these areas. Honours students are strongly encouraged to attend any tutorials offered relating to the use of computer software and statistics packages relevant to their studies.

You and your supervisor must consider, at an early stage in the project, if any ethics clearances are required (for research involving human or animal subjects) and factor time required to obtain ethics clearances into your timeline. In some situations this will mean you or your supervisor will need to have applied for ethics clearance prior to commencement of your candidature. Your supervisor can advise whether this will be necessary.

Honours project timeline

Below are two example timelines, one appropriate for a full-time student (completing in two semesters) and one appropriate for a part-time student (completing in four semesters, as is typical):

Full-time Honours student

Timing	Phase
At least four weeks prior to commencement of semester	Initiation and planning of project
Several weeks prior to commencement of semester	Applications for admission and enrolment
First semester: week 1	Workplace inductions; preparation of supervision agreement (due Friday of week 3)
First semester: weeks 1–3	Preparation of research proposal (due Friday of week 3)

First semester: weeks 3–6	Preparation and delivery of research proposal seminar (due weeks 4–6)
First semester: weeks 4–Final semester: week 11	Research
Final semester: weeks 10–14	Preparation of thesis
Final semester: weeks 10–12	Preparation and delivery of results seminar (due weeks 11–13)
Final semester: Monday, week 15	Submission of thesis

Part-time Honours student

Timing	Phase
At least four weeks prior to commencement of semester	Initiation and planning of project
Several weeks prior to commencement of semester	Applications for admission and enrolment
First semester: weeks 1–2	Workplace inductions; preparation of supervision agreement (due Friday of week 6)
First semester: weeks 1–6	Preparation of research proposal (due Friday of week 6)
First semester: weeks 8–11	Preparation and delivery of research proposal seminar (due weeks 7–12)
First semester: week 7–Final semester: week 7	Research
Final semester: weeks 5–14	Preparation of thesis
Final semester: weeks 9–11	Preparation and delivery of results seminar (due weeks 8–13)
Final semester: Monday, week 15	Submission of thesis

Research training activities

You are encouraged to consider, in consultation with your supervisor(s) and early in your project, additional research training activities you may require. These may include activities such as attending (in person or online) training sessions focussed on literature searching or database skills. These training activities are not assessable.

Desk space

If you are studying internally, i.e. on campus, your supervisor can work with the relevant Faculty administration team to provide access to a desk space in that Faculty. In the first instance, talk to your supervisor, and contact the Faculty of Science and Technology administration team (FST-support@cdu.edu.au) for advice about the availability of desk space.

Research expenses

Each student is eligible to claim up to \$600 from the Faculty for operational expenses related to their project. It is the supervisor's responsibility to source and provide any additional operational funds (i.e. > \$600) if required.

All expenditure has to be approved by the supervisor. Once approved, notify the Faculty of Science and Technology administration team (FST-support@cdu.edu.au) to claim a reimbursement. They can also give you a current tally of the expenses claimed, and how much of the \$600 student allocation remains.

Equipment purchased during the Honours project from University funds remains the property of the University at completion of the project.

Workplace health and safety, including fieldwork

Any laboratory, fieldwork or clinical activities undertaken as part of an Honours project must be approved by the relevant Faculty.

All documentation relating to fieldwork and travel must be completed by the student, checked and authorised by the supervisor and approved by Pro Vice-Chancellor of the Faculty. Your supervisor can provide more information.

For some projects, students may need to go into the field to collect data. Depending upon the project, fieldwork may be required only occasionally, or it may be a regular and integral part of the research. The actual requirements of the process depend upon the nature and location of the fieldwork.

As the Honours course is hosted by the Faculty of Science and Technology, students doing fieldwork for their project will need to follow the guidelines and procedures of this Faculty.

Please email riel@cdu.edu.au for the relevant forms and information and talk to your supervisor about what is required.

Ethics clearances

Any project which involves researching animals or humans will require CDU ethics approvals. This process can be time consuming, so students and supervisors should start this process as soon as the research project has been established. If you need more information about ethics, contact CDU's research ethics team (ethics@cdu.edu.au).

Animal research ethics

Research involving animals must follow established procedures and guidelines. Students and supervisors should refer to information on CDU's Animal Ethics Committee, found by Googling "CDU Animal Ethics Committee". This includes details of meeting and submission dates, forms and guidelines for applications.

The objective of the Animal Ethics Committee (AEC) is to ensure the humane care of animals used for scientific purposes under the auspices of Charles Darwin University. The AEC reviews proposals for the use of animals for scientific purposes and monitors the care and the use of animals.

Honours students conducting research projects involving vertebrate animals will need to obtain approval from the AEC for their project. The supervisor will be listed on the application as the Principal Investigator, and the student will also be listed as an Investigator on the project. However, even though the supervisor is the Principal Investigator, students are encouraged to download the application form from the University's AEC website and complete the first draft of the application before passing it to their supervisor for completion. The University's Animal Welfare Officer can assist in this process, and should be consulted if there is any doubt about the most appropriate procedures to use. If the project lasts more than one year (as would be the case for a part-time student), a Progress Report will be submitted at the end of the first year. On completion of the project, a Final Report must be provided to the AEC, and this must include details of the total number of animals used in the project. Students proposing to work with animals should discuss ethics approval with their supervisor at the earliest opportunity because it may take some time to obtain AEC approval, and the work involving animals cannot begin before approval is granted. If the supervisor has ongoing research in the area of the project, then it may be possible to add the student to a previously approved project using a "Project Personnel Amendment Form". The CDU AEC currently meets six times per year, and applications must be lodged approximately two weeks before each meeting (meeting dates and deadlines for submitted applications are posted on the website). As stated above, projects must be approved before work with animals can commence.

Animal ethics issues are an integral component of research using animals, and they cannot be taken lightly. Breaches of the Code of Conduct carry serious consequences. Students should, however, consider the AEC as a source of information and advice, rather than a bureaucratic obstacle that has to be overcome. The Committee members have a broad range of expertise and experience within animal experimentation and ethics issues. The aim of the committee is not to impede research, but rather to assist students by making sure that animal research is conducted with the appropriate respect and care. Learning about animal ethics issues is an important component of the research training of all scientists who use animals in their research careers. Most funding agencies require approval from an ethic committee as a condition for funding, and the Parks and Wildlife Commission requires ethics approval before permits to conduct scientific research on native animals are issued. The information required on the application is straightforward and, regardless of AEC requirements, these issues should have already been planned well in advance for the sake of an orderly and well managed research project. It is important that the form is filled in completely and carefully and with sufficient detail so that the procedures can be understood by the committee. Students should note the following important points: All research involving vertebrate animals requires AEC approval, even if it is fieldwork which is purely observational in nature.

Online animal ethics training is offered by the University, and if you are using vertebrate animals in your project, then you will be expected to complete the online training session.

Human research ethics

Students and supervisors should refer to information on CDU's Human Research Ethics Committee (HREC), found by Googling "CDU Human Research Ethics Committee". This includes details of meeting and submission dates, forms and guidelines for applications.

The University has a duty of care toward members of the university community and also toward members of the general community where the University's activities impact upon them. The primary purpose of ethical review is for the protection of the welfare and rights of participants in research and other activities, and also non-participants who may be affected by the activities. This objective is based on the principle of respect for the inherent dignity and autonomy of individuals. Historically, the development of ethics committees to ensure protection of participants in research was in response to situations in which the welfare and rights of participants were not well protected. Where involvement of individuals has a potential for infringing basic ethical principles, review by an ethics committee is warranted. Protection of the welfare and rights of participants entails scrutiny of the impact of research and other projects on participants' rights in relation to the following:

- **Privacy.** Claims to privacy are part of the claim that the autonomy of each individual should be protected and his or her integrity respected. Individuals should not be interfered with without their consent and they should have a measure of control over their own privacy.
- **Confidentiality.** Individuals have a right to expect that their wishes in regard to information given to another party in confidence will be respected.
- **Avoidance of harm.** Project managers have an obligation to protect the right of individuals to be free of risk of harm, unless the risk has been explained and accepted, and can be justified in terms of the benefits likely to accrue as a result of the project. The term "harm" includes any discomfort, inconvenience, mental, physical or emotional distress, suffered by participants.

With respect to research and similar activities which involve humans, CDU fulfils its duty of care through the establishment of a system of ethical review of such activities. The system of ethical review conforms to national guidelines established and published by the National Health & Medical Research Council (NHMRC). CDU recognises that ethical review of research and other activities undertaken under its auspices is conducted at many levels and by various bodies and individuals. Researchers undertaking research themselves explicitly or implicitly conduct an ethical review of their research. Peer review is also an established mechanism at the University, including formally through Office of Research and Innovation committees and university ethics committees. The CDU HREC is an important mechanism in assisting the University to meet its duty of care through the identification of ethical issues which need to be addressed by researchers, lecturers and students, and through its educative role vis a vis applicants. The HREC is constituted and operates in accordance with the NHMRC National Statement on ethical conduct in research involving humans.

All University staff and students who intend to undertake research involving humans are required to obtain ethics clearance from the HREC. Where ethical clearance is required for projects funded or administered by the Research Committee, funds will not be released until ethical clearance has been obtained. Ethical clearance for research must be obtained prior to the commencement of activities involving humans. Where applications are submitted to the Office of Research and Innovation Ethics Committee, that committee may issue a provisional clearance, which enables commencement of activities involving humans, pending a final clearance by the HREC. The HREC guidelines assist further with the identification of projects which must be submitted to the HREC for review.

Honours students conducting research projects involving humans must obtain prior approval from the HREC. The committee currently meets seven times per year, and applications must be lodged well in advance of each meeting. Projects must be approved by the HREC before research projects involving humans can commence.

Application forms, meeting dates and other information can be downloaded from the HREC website.

7. Key tasks and assessments

Timeline of key tasks and assessments

The research project is normally completed over two semesters (full-time) or four semesters (part-time). If you want to switch from full-time to part-time (or vice versa) part-way through the course, you should discuss this with your supervisor and the Honours Coordinator.

The tables below show the due dates for the key tasks and assessment items (and their contribution to the final mark for the Honours Thesis units (SCI711 / SCI712 / SCI713).

Full-time Honours student

Task or assessment item	Due date
Supervision agreement (0%)	First semester: Friday of week 3
Research proposal (0%)	First semester: Friday of week 3
Research proposal seminar (0%)	First semester: weeks 4–6
Results seminar (5%)	Final semester: weeks 11–13
Honours thesis (95%)	Final semester: Monday of week 15

Part-time Honours student

Task or assessment item	Due date
Supervision agreement (0%)	First semester: Friday of week 6
Research proposal (0%)	First semester: Friday of week 6
Research proposal seminar (0%)	First semester: weeks 7–12
Results seminar (5%)	Final semester: weeks 8–13
Honours thesis (95%)	Final semester: Monday of week 15

Extension requests and late submissions

A big part of a research thesis is time management!

Common submission dates are set for all students, and these are expected to be adhered to. The due dates differ depending on whether you are a full-time or part-time student, so if you are unsure of any due dates, please contact the Honours Coordinator for clarification.

Extension requests

If you are going to be unable to meet your due date, let the Honours Coordinator know as soon as possible, as there may be scope for you to get an extension, depending on your circumstances. However, extension requests are only granted in response to circumstances beyond your control. For example,

not allowing enough time for your supervisor(s) to provide feedback is not a circumstance beyond your control. You should be communicating with your supervisors about when you need to submit, when you will require their feedback, and when they will be able to provide feedback. Extension requests after the due date will not be considered, unless there are exceptional circumstances.

For extensions of up to 2 days, and due to minor logistical or other reasons, an extension request can take the form of an email (explaining the reasons why the request is required), sent to the Honours Coordinator, who has the authority to approve (or not) a short (≤ 2 day) extension.

For extensions exceeding 2 days, students must complete the extension request form, and seek the support of their supervisor. Appropriate evidence (e.g., medical certificate) should be sent along with the request. The request must be sent to the Honours Coordinator, who will provide a recommendation to submit the request to the Pro Vice-Chancellor of the Faculty of Science and Technology for consideration.

The extension request form is available via Learnline (you will have access to the Honours Learnline site from the beginning of your first semester). If you want this document before you have access to Learnline, ask the Honours Coordinator to email you a copy.

Late penalties

The penalty for late submissions (i.e. without an extension) is 5% per day.

Key task: Supervision agreement

Due date:

- For full-time students: Friday of week 3 in first semester of the course); or
- For part-time students: Friday of week 6 in first semester of the course).

Candidates must have a primary (main) supervisor from CDU's Faculty of Science and Technology but may also have additional supervisors within or external to the Faculty or the University. Students should consult regularly with their supervisor(s) for guidance and feedback on their work. It is recommended that you negotiate a schedule of regular meetings with your supervisor. It is typical for students to meet with their supervisor(s) weekly for full-time students, or fortnightly for part-time students. Students should seek advice from their supervisor regarding all aspects of their project, including the experimental design, methodology and the structure and format of their thesis. The supervisor should read drafts of the major sections of the thesis as they are prepared and return these to the candidate with comments.

Discuss and complete a supervision agreement with your supervisor at the beginning of your project, using the template provided on Learnline (you will have access to the Honours Learnline site from the beginning of your first semester). If you want this document before you have access to Learnline, ask the Honours Coordinator to email you a copy.

Your supervision agreement must be submitted to the Honours Coordinator via the Learnline submission point.

Assessment 1: Research proposal

Assessment contribution to final mark: 0%

(i.e. hurdle assessment)

Due date:

- For full-time students: Friday of week 3 in first semester of the course; or
- For part-time students: Friday of week 6 in first semester of the course.

The proposal must:

- outline the project background, aims and design, with appropriate referencing of the published literature;
- include a list of all the resources needed for the successful completion of the project, indicating those that can be provided by the supervisor and those that must be sought from elsewhere;
- describe any ethics clearances (e.g., animal ethics, human ethics) and research permits (e.g., NT Government) required;
- include a timeline for stages of the research. This should be revisited frequently by student and supervisor to make sure adequate progress is maintained during candidature.

The research proposal should be about 4–6 pages in length. Some suggested headings are as follows:

- Background;
- Aims, objectives and/or hypotheses;
- Relevance and significance of study;
- Research design and proposed statistical analyses;
- Resources required;
- Permits required (e.g., ethics, NT Government);
- Proposed timeline;
- References.

These headings are suggestions only. There is a research proposal template which you might find helpful; but again this is not intended to be prescriptive. The research proposal template is available via Learnline (you will have access to the Honours Learnline site from the beginning of your first semester). If you want this document before you have access to Learnline, ask the Honours Coordinator to email you a copy.

Your research proposal must be submitted to the Honours Coordinator via Learnline.

Assessment 2: Research proposal seminar

Assessment contribution to final mark: 0%

(i.e. hurdle assessment)

Due date:

- For full-time students: weeks 4–6 in first semester of the course; or
- For part-time students: weeks 7–12 in first semester of the course.

The proposal seminar is a short (20 minutes, including 5 minutes for questions) unmarked seminar intended to inform staff and fellow students of the proposed research program. This is a hurdle, i.e. unmarked, assessment. Its purpose is to provide you with:

- experience giving a seminar; and
- suggestions for improving the research project from other experienced academics and peers attending the seminar.

You should work with their supervisors on the content and presentation of the seminar. For example, it is expected that your supervisor would watch you give a practice seminar and provide feedback.

Following the submission of your written research proposal, the Honours Coordinator will contact you and ask you to liaise with the Faculty of Science and Technology administration team (FST-support@cdu.edu.au) to organise a suitable date/time and venue, and publicise the seminar within the Faculty.

Throughout the Honours course, you are strongly encouraged to attend proposal and results seminars of your fellow Honours students, as well as other academic seminars at the University. This will help you develop an understanding of what makes a good seminar.

Although the seminar is unmarked, the rubric used for the final results seminar can help you to familiarise yourself with some of the features of a good seminar. The rubric is available via Learnline (you will have access to the Honours Learnline site from the beginning of your first semester). If you want this document before you have access to Learnline, ask the Honours Coordinator to email you a copy.

Assessment 3: Results seminar

Assessment contribution to final mark: 5%

Due date:

- For full-time students: in weeks 11–13 in final semester of the course; or
- For part-time students: in weeks 8–13 in final semester of the course).

The results seminar is a 20-minute presentation (with an additional 10 minutes for questions) which is assessed. It gives you an opportunity to clearly and succinctly present your results to an audience with broad interest and to answer questions from that audience.

The seminar will usually be held at least a week before your thesis is due for submission, so you have sufficient time to make minor clarifications or adjustments to your thesis in response to any feedback received after the results seminar. The Honours Coordinator will contact you, and ask you to liaise with the Faculty of Science and Technology administration team (FST-support@cdu.edu.au) to organise a suitable date/time and venue, and publicise the seminar within the Faculty.

Throughout the Honours course, you are strongly encouraged to attend proposal and results seminars of your fellow Honours students, as well as other academic seminars at the University. This will help you develop an understanding of what makes a good seminar.

The results seminar is assessed by at least five academics in attendance, using a rubric available via Learnline (you will have access to the Honours Learnline site from the beginning of your first semester). If you want this document before you have access to Learnline, ask the Honours Coordinator to email you a copy.

Assessment 4: Honours thesis

Assessment contribution to final mark: 95%

Due date:

For all students: Monday of week 15 in final semester of the course.

The Honours thesis is the major assessable outcome of the research project. It is worth 95% of the mark for the Honours thesis units SCI711 / SCI712 / SCI713. It must not be longer than 20,000 words, not including references and any appendices; however, most modern Honours theses are much shorter than this, reflecting a trend in science towards concise writing.

Thesis structure

Thesis structure will vary considerably depending on the project undertaken, and the field of research. The results of the thesis project may be in a range of forms, including a research report, or systematic review and/or meta-analysis.

Students are urged to actively consult with their supervisor(s) about the format, referencing and editing of draft chapters, but are reminded that it is not the supervisor's responsibility to write or re-write all or part of the work. Students are also advised to review past Honours theses for reference (see notes below about accessing other theses for review).

In writing, students should conform to both scientific and grammatical conventions. Students should familiarise themselves with the standards which are considered appropriate by consulting previous theses or a style manual (such as 'Style Manual for Authors, Editors and Printers of Australian Government Publications'). Students should also consult their supervisor(s) on the specific conventions required in scientific writing. These include the use of standard abbreviations for chemical substances, the use of the SI system of units, the use of scientific names of plants, animals and micro-organisms, and the use of standard statistical abbreviations and conventions.

It is important to note that writing and formatting styles can vary significantly between fields of research, so students should be guided by the advice of their supervisor(s).

Regardless of the nature of your project the following elements are required for all theses:

- Title cover page (see following for more details);
- Statement of authorship;

- Acknowledgments;
- Table of contents;
- Abstract (see following for more details).

Most Honours theses will have the following structure. The actual names of the sections may vary according to the field of research and specific circumstances of the study.

Abstract (mandatory), 300–500 words

The abstract is written in introduction-body-conclusion form, and all information contained in it must be discussed within the main part of the dissertation. This is a concise statement that outlines the objectives, methods, results and principal conclusions. A useful structure to follow is: What did you do? Why did you do it now? How did you do it? What did you find? What does it mean (and for applied research, what are your recommendations)?

Introduction

This should introduce the topic that is being investigated and include background on the project topic (review of previous work), a description of the significance and scope of your project, and a clear statement of the project aim and objectives. You should assume that the readers are unfamiliar with the thesis topic, and therefore you must provide them with information about the topic and convey to them the significance of the work, and justify why the topic is important.

In your introduction, you should lay the foundations for the questions you plan to address later in the discussion. Your Introduction and Discussion are like two sides of the one coin. In the Introduction you raise the questions and in your Discussion you resolve those questions, and see if any new ones have been uncovered.

Methods

This should include a concise description of the methods used in a field or laboratory study, statistical analyses, legislation or procedural protocols, interview procedures or questionnaires used, ethical considerations or a theoretical justification for the approach you have used. This section should contain sufficient information to enable the reader to repeat the procedures you used, or to locate the appropriately detailed references that described them to you.

Results

This section will include a detailed description of the results of an experiment or field study, or description of what you found from a review of literature, or analysis of a current practice, depending on the approach of your thesis.

Discussion

Make sure you do not repeat results here but presume your reader had read your Results section already. Focus on the bigger picture – what do your results mean? This could include a discussion of the significance or application of the results of an experiment or field study, or recommendations

arising from the review or analysis of the literature. The discussion should describe the significance of project outcomes, and a comparison of outcomes with expected/intended outcomes. You should also suggest recommended actions based upon your research topic.

Recommendations (optional)

This optional section should focus on the application of your findings, how they might be used and by whom and specific gaps in knowledge you have identified that may benefit from further research.

References

For reference formatting, see 'Thesis specifications', below.

Appendices (optional)

This section can be used for material that is too long or detailed to be included in the main body of the dissertation or is not essential to the main argument being presented, but which substantiates it. It may include raw data used to derive summary tables which are included in the main body of your thesis. It may include copies of field data sheets or interview questionnaires. You must ensure appendices are referenced in the body of the thesis, and that each appendix starts with a paragraph that summarises the content and outlines its relevance to the thesis.

Thesis specifications

Your final thesis must be in PDF format (so that formatting is preserved), submitted via Learnline.

Text should be at least 1.5 spacing, with a 4 cm margin on the inner and 2.5 cm on the outer, top and bottom. Font size for the main body of the text should be consistent throughout the thesis and either 11 or 12 point. The thesis pages must be numbered, but not line numbers.

The Title page will include the title of the thesis in full, the full names and degrees of the candidate, the Faculty in which the candidate carried out the work, the degree for which the thesis is submitted, and the date of submission.

The Statement of Authorship should be worded similarly to the following, but modified to suit your circumstances if necessary:

"I declare that this thesis my own work and has not been submitted in any form for any other degree or diploma at any university or other institute of tertiary education. Information derived from the published and unpublished work of others has been acknowledged in the text and list of references."

This page should be signed and dated.

Illustrations, diagrams, tables, maps etc are to be incorporated into the text. Photos or figures should be of high resolution and clearly legible. They must be clearly and sequentially numbered and identified and referred to by these numbers throughout the text.

Full-page figures should be inserted at the first opportunity after reference to them in the text. Otherwise figures should be inserted directly into the text as soon as possible after the text which refers

to them. The legends should be below figures, or if insufficient room, on the left-hand page facing the figure or figure.

A table may be inserted as part of a text page, or as a full-page table. The legend for a table is placed above the table, or in the case of full-page tables, if insufficient room, on the left-hand page facing the table.

After the conclusion of the main text, there shall be a list of the references cited in the text. References not cited in the text must not be included. The style of citation of references must be consistent through the text and the list of references.

Accessing completed Honours theses

Past Honours theses are available through CDU's Research Web Portal:

<http://researchers.cdu.edu.au/en/studentTheses/>.

Your supervisor can probably also provide you with copies of recent theses in your field of research. You can also contact the Honours Coordinator for copies of recent Honours theses.

Thesis assessment criteria

Your thesis mark will reflect your demonstrated ability to:

- plan and conduct research;
- present, analyse and interpret the results; and
- examine, discuss and defend ideas.

Your examiners will be asked to assess the thesis according to the following criteria (with their weightings shown in brackets):

INTRODUCTION (20%)

- Sufficient background provided to justify the aims of the study? (5%)
- Understanding of previous research in this field? (5%)
- Clarity of aims of the investigation explicitly stated? (5%)
- Clarity of scope of the research (5%)

METHODS (20%)

- Appropriateness of methods to the research aims (10%)
- Understanding of the assumptions and limitations of methods used (10%)

RESULTS (20%)

- Analysis and interpretation of data (10%)
- Clarity of presentation of results (10%)

DISCUSSION (30%)

- Discussion of results with adequate reference to other published studies (6%)
- Coherent arguments and supporting evidence (6%)

- Relationship between results and aims (6%)
- Discussion of limitations of results (6%)
- Contribution of the study to the topic (6%)

PRESENTATION (10%)

- Sources of information comprehensive and correctly cited (4%)
- English expression (3%)
- General presentation, e.g., lack of typographical and spelling errors, appearance (3%)

Thesis examination process

Your thesis will be assessed by at least two examiners, neither of whom may be a supervisor. If there is a significant disparity (>10%) in the marks awarded by the two examiners, your thesis will be sent to a third examiner. All examiners' marks are averaged to derive the final mark.

Your examiners are chosen by the Honours Coordinator, upon the recommendation of the principal supervisor. You and your supervisor should discuss potential examiners in advance of your thesis submission date. You are entitled to object to an examiner, prior to the dispatch of the thesis. You are also welcome to recommend potential examiners to your supervisor and the Honours Coordinator.

The examiners will be selected on the basis of:

- appropriate formal academic qualifications (or in special cases, equivalent professional experience);
- relevant discipline expertise;
- an absence of any conflict of interest with the student, their supervisor or the approach taken in the research;
- understanding of the educative role of examination; and
- their availability to return a report in a timely manner.

At least one examiner must be external to the Faculty in which you were based.

The examiners will be contacted by the Unit Coordinator. You must not contact a potential examiner yourself, nor have contact with an examiner while your thesis is being examined.

Examiners are requested to return their reports within three weeks of receiving the thesis. However, the examination process typically takes 6–9 weeks, and possibly longer if a third examiner is needed.

8. Honours grading

You will receive a grade for the Honours Thesis units (SCI711 / SCI712 / SCI713) (i.e. High Distinction; Distinction; Credit; Pass; Fail). All of these units will be awarded the same grade. This grade is based on the results seminar mark (5%) and the Honours thesis mark (95%).

If you successfully complete the Bachelor of Science Honours course, you will also receive an overall Honours class (i.e. H1, H2A, H2B, H3). This is based on your coursework units (20 credit points) as well

as the Honours Thesis units (60 credit points), with the numerical marks for the units weighted according to each unit's credit points. Hence, your overall Honours class is based on:

Assessment item/unit	Contribution to Honours class
Honours thesis	71.25%
Compulsory core (coursework) unit	12.50%
Specialist elective (coursework) unit	12.50%
Results seminar	3.75%

The Honours classes are defined as:

Honours class	Mark
H1: First Class Honours	≥80%
H2A: Second Class Honours, Division A	70–79%
H2B: Second Class Honours, Division B	60–69%
H3: Third Class Honours	50–59%

9. Where to get help, and other information

The Honours course is short. Don't hesitate to ask for help at an early stage.

If you are having trouble, consider getting in touch with:

- Your supervisor(s).
- Honours Coordinator.
- Other academics or researchers.
- For administrative support, the Faculty of Science and Technology administration team, FST-support@cdu.edu.au, (08) 8946 6781.
- CDU Student Central: student.central@cdu.edu.au, 1800 061 963, www.cdu.edu.au/student-central.
- CDU Equity and Inclusion: inclusion@cdu.edu.au, (08) 8946 6264, www.cdu.edu.au/current-students/life-wellbeing.
- CDU Library: askthelibrary@cdu.edu.au, (08) 08 8946 7016, www.cdu.edu.au/library.
- CDU Library Research students: www.cdu.edu.au/library/researcher.

Contact Officers

CDU's Contact Officers are a group of individuals from different backgrounds who have come together to be the first point of contact for students (and staff) experiencing discrimination, harassment, victimisation or bullying and want to talk to someone about their options or would like further information.

The role of a Contact Officer is to:

- provide information to the student/staff to enable them to make an informed choice as to how to deal with their concern;
- provide information about the options available to them for resolution;
- provide the individual with information relating to counselling and/or other support services that they are able to access; and/or
- if the individual wishes to make a formal complaint, provide them with the appropriate information of how this can be completed.

Contact details of Contact Officers are available at www.cdu.edu.au/opc/contact-officers.

Other

The official rules, entry requirements, fees and other stipulations for this course are available from the CDU website (www.cdu.edu.au), by searching the course catalogue for 'Bachelor of Science Honours'. Prospective and current students should ensure that they are familiar with this material. Please note that the official repository takes precedence, in the event of any conflict between information in this document and on that site.

CDU's 'Common Course Rules - Bachelor Honours Degree' are available at: www.cdu.edu.au/files/2022-01/rul-003.pdf.