COURSE DETAILS

Units of Credit 12
Contact hours as agreed with supervisor
Course Coordinator Professor Ian Turner
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  office: Room 302 in Civil and Environmental Engineering Building
  phone: 807 19800 (Water Research Laboratory, Manly Vale)

INFORMATION ABOUT THE COURSE

This course is the second of two parts (Higher Honours Thesis A and Higher Honours Thesis B). It is being run in T1 2019 only, for students who satisfactorily completed the 12UoC course CVEN4032 Higher Honours Thesis A during 2018.

To ensure that students who fall under this cohort have a fair amount of time in which to complete their Thesis, in T1 2019 Higher Honours Thesis B for this cohort will not follow the new Academic Calendar but will run for the duration of a semester time frame, commencing in Term 1 and ending three weeks into Term 2.

Higher Honours Thesis B 2019 will run from the beginning of Term 1 on 18 February 2019 until the end of Week 3 into Term 2 on Friday 21 June 2019 for a total duration of 18 weeks. This is more than was available in previous semesters.

HANDBOOK DESCRIPTION

The thesis may describe directed laboratory, investigatory, design, field or research work on an approved subject and will be completed under the guidance and supervision of a member of the School’s academic staff.

Online Handbook description is available at MyUNSW:


OBJECTIVES

The purpose of the Higher Honours courses CVEN4032 ‘Part A’ and CVEN4033 ‘Part B’ are to engage the participation of top-performing students with current and leading-edge research activities across the School. Together, the courses promote higher level independence in learning to prepare students for their professional and/or research careers; with a particular emphasis on the development of research, writing and presentation skills that would assist their participation in further (postgraduate) research and for a career in industry.
The Higher Honours Thesis is an individual research project in which each student works under the guidance of a nominated member of the School's academic staff (supervisor). The Higher Honours course requires students to submit both an extended research thesis (as a guide, approximately 30,000 word equivalence) plus a journal-ready manuscript ready for submission. A co-supervisor (either from within, or external to the School) may also be nominated depending on the set up of the project. The research may involve laboratory experiments, field or industry based investigations, design applications or theoretical research.

WHAT IS A RESEARCH THESIS?

That depends quite a bit on your field of study. However, all honours theses have at least two things in common:

- They are based on students' original research.
- They take the form of a written report, which presents the findings of that research.

WHY WRITE AN HONOURS RESEARCH THESIS?

- **Satisfy your intellectual curiosity**
  This is the most compelling reason to write a research thesis. You have studied courses during your degree that perhaps really piqued your interest. Now's your chance to follow your passions, explore further, and contribute some original ideas and research in your field.

- **Develop transferable research skills**
  Whether you choose to pursue further research (e.g. complete a Ph.D) or not, the process of developing and crafting a feasible research project will polish skills that will serve you well in almost any future job. After all, most jobs require some form of problem solving and oral and written communication. Writing an honours thesis requires that you:
  - ask smart questions
  - acquire the investigative instincts needed to find answers
  - navigate libraries, laboratories, archives, databases, and other research venues
  - develop the flexibility to redirect your research if your initial plan flops
  - master the art of time management
  - sharpen your argumentation skills
  - organize a lengthy piece of writing
  - polish your oral communication skills by presenting and defending your research to academic staff and students

- **Work closely with academic staff**
  At large research universities like UNSW, you have likely taken classes where you barely got to know your lecturer. Writing a thesis offers the opportunity to work one-on-one with an academic supervisor. Such relationships can enrich your intellectual development and later serve as invaluable references for postgraduate degree and employment.

- **Open windows into future professions**
  An honours research thesis will give you a taste of what it's like to do research in your field. It also might help you decide whether to pursue that field in your future career.

TEACHING STRATEGIES

The Higher Honours Research Thesis is an individual project in which each student works under the guidance of a nominated member of the School's academic staff (supervisor). A co-supervisor
(including from outside the School) may also be nominated depending on the set up of the project. The research may involve laboratory experiments, field or industry based investigations, design applications or theoretical investigation.

PRIVATE STUDY

- As a rough guide only, an average student would be expected to spend approximately 20+ hours per week on work related to this course.
- More guidance is needed initially from the supervisor when the topic is being defined to establish the objectives and methodology of the thesis.

SUPERVISION

- There are no specific hours assigned to this course, except for the scheduled Workshops (see below).
- Meetings between the supervisor(s) and the student may take place periodically or by private arrangement.
- Should supervisors be on study leave or unavailable for a considerable period of the session, alternative arrangements need to be established and made known to both the student and course coordinator.

CONSULTATION

- The course coordinator will be available by prior appointment to liaise with enrolled students as needed

EXPECTED LEARNING OUTCOMES

This course enhances the student’s skills for undertaking scholarly enquiry by attempting to achieve a specific topic objective within a defined period of time. A significant component of the course (CVEN4032/4042 Part A) relates to the review of literature, which promotes independent and reflective learning as well as increases students’ capacity to develop information literacy. The report and presentation are expected to reinforce the student’s ability and confidence in the written and oral communication of technical information.

At the conclusion of this course, students should be able to:

- Develop a design or a process, or investigate a hypothesis, following industry and professional engineering standards.
- Critically reflect on a specialist body of knowledge related to their thesis topic.
- Apply scientific and engineering methods to solve an engineering problem.
- Analyse data objectively using quantitative and mathematical methods.
- Demonstrate oral and written communication in professional and lay domains.

ASSESSMENT – KEY DATES FOR YOUR DIARY

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<td>1.</td>
<td>Seminar Abstract</td>
<td>Week 10, T1 (Friday 26th April)</td>
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<td>2.</td>
<td>Research Seminar</td>
<td>Week 1-2, T2 (TBA)</td>
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<td>3.</td>
<td>Thesis Submission</td>
<td>Week 3, T2 (Friday 21st June)</td>
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Further details of the requirements for the Thesis Abstract and Seminar format and scheduling will be advised by the Course Coordinator during T1.

The Thesis is to be submitted electronically as a single pdf by 4.00pm on Friday of the submission week via the School’s web portal at: http://intranet.civeng.unsw.edu.au/research-thesis-upload-page

Further document requirements and upload instructions are available at this site. Students are encouraged to print for themselves a hard copy of their work, and supervisors may also request that they be provide a hard copy for their records.

THESIS LATE PENALTY:
In all cases, applications for late submission must be applied for by or before Week 1 T2. Approval is at the discretion of the Honours Research Thesis Coordinator and can only be granted in exceptional circumstances. Students may also apply through myUNSW for special consideration. For thesis – 5 marks off the thesis for every day late. Penalty applies until the marks for the course decrease to 50, and further lateness does not result in failure of the course, but might be a failure of the thesis (weekends count as days). Any thesis not turned in within 6 weeks after the deadline will be finalised at zero (0) marks.

RELEVANT RESOURCES


- Topic material as direct by the supervisor.
- Materials provided by course coordinator.

References on writing style and technical communication skill:


DATES TO NOTE

Refer to MyUNSW for Important Dates available at: https://student.unsw.edu.au/dates

PLAGIARISM

Beware! An assessment that includes plagiarised material will receive a 0% Fail, and students who plagiarise may fail the course. Students who plagiarise are also liable to disciplinary action, including exclusion from enrolment.

Plagiarism is the use of another person’s work or ideas as if they were your own. When it is necessary or desirable to use other people’s material you should adequately acknowledge whose words or ideas they are and where you found them (giving the complete reference details, including page number(s)). The Learning Centre provides further information on what constitutes Plagiarism at: https://student.unsw.edu.au/plagiarism
ACADEMIC ADVICE

For information about:

- Notes on assessments and plagiarism,
- School policy on Supplementary exams,
- Special Considerations,
- Solutions to Problems,
- Year Managers and Grievance Officer of Teaching and Learning Committee, and
- CEVSOC.

Refer to Academic Advice on the School website available at:

http://www.engineering.unsw.edu.au/civil-engineering/resources/academic-advice