

# **COURSE DETAILS**

Units of Credit 4 + 4 + 4

Contact hours as agreed with supervisor

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This course is in three parts. Research Thesis A is undertaken in the first term of enrolment. Research Thesis A is a prerequisite for Research Thesis B, which in turn is a prerequisite for Research Thesis C.

By default, students must ordinarily take Research Thesis A, B and C in three

## 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:

www.handbook.unsw.edu.au/undergraduate/courses/2022/CVEN4951.html www.handbook.unsw.edu.au/undergraduate/courses/2022/CVEN4952.html www.handbook.unsw.edu.au/undergraduate/courses/2022/CVEN4953.html

## PROCEDURE FOR SELECTION AND CONFIRMATION OF A RESEARCH THESIS TOPIC

Your priority is to find a Supervisor and agree on a topic BEFORE ENROLLING in Research Thesis A.

 Browse online ('Search Projects') the selection of available topics and identify potential supervisors http://intranet.civeng.unsw.edu.au/info-about/student-intranet/honours

Note: It is unlikely that this list is fully up-to-date and comprehensive. It is essential that <u>during the Term prior to enrolment in Research Thesis A</u> that individual students approach School teaching & research staff in area(s) of potential interest, to explore the range of possible thesis topics that may be available.

- Discuss your selection with potential topic supervisors
- Once you have a Supervisor and topic, you will need to download, complete and sign (both you <u>and</u> your Supervisor) a <u>Research Thesis Form</u> Æenrol yourself on myUNSW Æthen upload the signed form to the Student Intranet here: <a href="http://intranet.civeng.unsw.edu.au/info-about/student-intranet/submitthesis-application-form">http://intranet.civeng.unsw.edu.au/info-about/student-intranet/submitthesis-application-form</a>
- Please note that you will only be able to complete course enrolment for CVEN4951. The School will
  complete your class registration once you've submitted your topic nomination form to the Student
  Intranet

PLEASE NOTE THAT, IF YOU CANNOT FIND AN HONOURS RESEARCH THESIS SUPERVISOR BY THE START OF TERM A, THEN YOU WILL NOT BE ALLOWED TO ENROL/CONTINUE IN THE COURSE AND IT WILL BE AUTOMATICALLY DROPPED FROM YOUR ENROLMENTS. AS THE ALTERNATIVE, YOU MAY ENROL IN THE PARALLEL HONOURS COURSE CVEN4050 (THESIS A) FOR WHICH AN INDIVIDUAL SUPERVISOR IS NOT REQURIED.

## **OBJECTIVES**

The Honours Research Thesis is an individual project in which each student works under the guidance of a nominated member of the academic staff (supervisor). A co-supervisor 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.

The Honours Research Thesis aims to provide students with the opportunity to:

- Undertake and execute an academic research project;
- Produce a self-contained research thesis, which may be understood and used by others with technical background knowledge in the same discipline area as the thesis topic, and may potentially be suitable for publication;
- Present their research in a seminar/video.

#### WHAT IS AN HONOURS 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.

# SUMMARY OF ALL RESEARCH THESIS MARKED ASSESSMENTS

	rch Thesis A:			
1.	Component A1	Week 7	satisfactory/unsatisfactory	
2.	Component A2	Week 10	10 % of Final Mark	
Research Thesis B:				
1.	Component B1	Week 8 (B+C: Week 3	3) 5 % of Final Mark	
Research Thesis C:				
1.	Abstract	Week 7	5 % of Final Mark	
2.	Research Seminar/Video Presentation	Week 10	10 % of Final Mark	
3.	Thesis Submission	Week 11	70 % of Final Mark (incl. 10 % Supervisor)	

Further details of the requirements for the Abstract and Presentation will be advised by the Course Coordinator during the term.

The Research Thesis is to be

Fail in research Thesis B & C (when taken simultaneously) — Students must re-enrol in Research Thesis B again, and cannot concurrently enrol in C. They can then take Research Thesis C when Thesis B has been satisfactorily completed

Late Procedure – In all cases, applications for late submission can be applied for BEFORE the due date. This is at the discretion of the Thesis Coordinator, but should only be granted in exceptional circumstances. As per normal, students can also apply through myUNSW for special consideration.

- For all other assignments beside thesis zero (0) mark is awarded
- 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

Honours Thesis Writing for Engineering Students: <a href="https://student.unsw.edu.au/honours-thesis-writing-engineering-and-scienceand">https://student.unsw.edu.au/honours-thesis-writing-engineering-and-scienceand</a>

9		Expand on literature review and prepare draft project skeleton  Consult on your proposed Research Methodology with supervisor	
10	Submit Component A2 – more detailed, revised and improved Introduction (Statement of Problem) & Literature Review.  If seeking to apply for permission to enrol concurrently in Research Thesis B + C next Term, refer to the Course Profile for further information on the additional content for A2 that is required, and the online application process.	Agree on your proposed Research Methodology with supervisor	Component A2 Due – submit to your supervisor by 4pm Friday

## HONOURS RESEARCH THESIS B COURSE PROGRAM

Week	Milestones	Suggested Activities	Assessment/Workshops
1	Review and discuss of Component A2 feedback from supervisor(s)	Undertake thesis research with Supervisor(s) guidance	
2		Undertake thesis research with Supervisor(s) guidance	
3	Thesis B+C students only : discuss with Supervisor(s) & finalise submission B1	Attend Lunchtime Workshop – 'Thesis Writing Workshop"	Thesis Writing Workshop SEE MOODLE FOR DETAILS  Thesis B+C students only: Component B1 Due – submit to your supervisor by 4.00 pm Friday
4	Thesis B+C students only: Receive review of Component B1 from supervisor(s)	Undertake thesis research with Supervisor(s) guidance Work on Progress Report	
5		Undertake thesis research with Supervisor(s) guidance Work on Progress Report	
6		Undertake thesis research with Supervisor(s) guidance Work on Progress Report	
7		Undertake thesis research with Supervisor(s) guidance. Work on Progress Report	

Finalise and submit Progress Report to supervisors

## HONOURS RESEARCH THESIS C COURSE PROGRAM

Week	Milestones	Suggested Activities	Assessments
1		Complete remaining thesis research with Supervisor(s) guidance Analyse data	
2		Complete remaining thesis research with Supervisor(s) guidance Analyse data	
3	Complete remaining research work	Complete remaining thesis research with Supervisor(s) guidance Analyse data	
4	Complete analysis of results	Complete remaining thesis research with Supervisor(s) guidance Analyse data Work on thesis with Supervisor(s) guidance	
5		Work on thesis with Supervisor(s) guidance	
6	Prepare draft of Seminar Abstract	Work on thesis with Supervisor(s) guidance	
7	Receive supervisor feedback on Seminar Abstract	Work on thesis with Supervisor(s) guidance	Abstract Due – submit by 4.00 pm on Friday. Course coordinator to advise on submission requirements.
8	Receive supervisor feedback on thesis	Work on thesis with Supervisor(s) guidance Prepare seminar/video with Supervisor(s) guidance	
9	Receive supervisor feedback on thesis	Work on thesis with Supervisor(s) guidance Prepare seminar/video with Supervisor(s) guidance	
10	Receive supervisor feedback on thesis	Work on thesis with Supervisor(s) guidance Prepare seminar/video with Supervisor(s) guidance	Presentations Due (Course Coordinator to provide further details throughout the term)
11	Complete thesis		Thesis due – Submit on-line by 4.00 pm on Friday.

# Appendix A: Engineers Australia (EA) Competencies Stage 1 Competencies for Professional Engineers

**Program Intended Learning Outcomes** 

PE1.1

PE1: Knowledge and Skill Base