

# CVEN4051

Thesis B

Term 2, 2023



## Course Overview

### Staff Contact Details

#### Convenors

Name	Email	Availability	Location	Phone
Dr. Khalegh Barati	<a href="mailto:Khalegh.barati@unsw.edu.au">Khalegh.barati@unsw.edu.au</a>	anytime	CE209 School of Civil and Environment al Engineering	Call via Microsoft Teams only.

### School Contact Information

[Engineering Student Support Services](#) – The Nucleus - enrolment, progression checks, clash requests, course issues or program-related queries

[Engineering Industrial Training](#) – Industrial training questions

[UNSW Study Abroad](#) – study abroad student enquiries (for inbound students)

[UNSW Exchange](#) – student exchange enquiries (for inbound students)

[UNSW Future Students](#) – potential student enquiries e.g. admissions, fees, programs, credit transfer

#### Phone

(+61 2) 9385 8500 – Nucleus Student Hub

(+61 2) 9385 7661 – Engineering Industrial Training

(+61 2) 9385 3179 – UNSW Study Abroad and UNSW Exchange (for inbound students)

## Course Details

### Units of Credit 6

### Summary of the Course

This course is the second of two parts and is undertaken after the completion of CVEN4050 Thesis A. The Thesis involves formulating the designs for and solution to open-ended civil and/or environmental engineering problems. The problems will be drawn from industry and will be multi-disciplinary involving application of material learnt throughout the undergraduate program and will require creative thought. The course will include the preparation of relevant professional documents. Part B involves the satisfactory preparation and submission of an individual thesis addressing the project plan defined in Thesis A.

### Course Aims

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 relates to the review of literature, which promotes independent and reflective learning as well as increases students' capacity to develop information literacy. The thesis is expected to reinforce the student's ability and confidence in the written communication of technical information.

### Course Learning Outcomes

After successfully completing this course, you should be able to:

Learning Outcome	EA Stage 1 Competencies
1. Execute a research project within an assigned theme	PE1.1, PE1.4, PE1.6, PE2.1, PE2.4, PE3.3
2. Conduct a literature review to determine the range of acceptable solutions and/or limitations of those acceptable solutions for a research project	PE1.3, PE1.6, PE2.1, PE3.4
3. Demonstrate critical thinking and research skills and critique industry practices in formulating responses to problems relating to the role of civil and environmental engineers	PE1.1, PE1.4, PE1.6, PE2.1, PE2.2
4. Apply engineering principles, such as risk management, decision making and design in developing solutions to real-world problems that are ethically sound	PE1.1, PE1.2, PE1.3, PE2.2, PE3.1, PE3.5
5. Demonstrate professional level written communication skills and presentation skills	PE3.2, PE3.3, PE3.5

### Teaching Strategies

The Honours Thesis is an individual thesis in which each student works under the guidance of academic staff with input from industry specialists. Topics are related to industry projects selected from contemporary practice. The work involves investigations and design applications.

## Assessment

Assessment task	Weight	Due Date	Course Learning Outcomes Assessed
1. Assignments	50%	Different deadlines during the term	1, 2, 3, 4, 5
2. Thesis Report	50%	06/08/2023 05:00 PM	1, 2, 3, 4, 5

### Assessment 1: Assignments

**Assessment length:** To be discussed in the Assignments Preparation Instruction

**Due date:** Different deadlines during the term

**Deadline for absolute fail:** 5 days after submission deadlines

**Marks returned:** Two weeks after submission deadlines.

Assignments include nominating a thesis topic, conducting a literature review on the selected thesis topic, preparing a presentation, and writing an abstract about the research undertaken.

### Assessment 2: Thesis Report

**Assessment length:** To be discussed in the Thesis Report Preparation Instruction

**Due date:** 06/08/2023 05:00 PM

**Deadline for absolute fail:** 5 days after submission deadline

**Marks returned:** 2 weeks after submission deadline

Students need to prepare a thesis report on their selected topic by the end of the term. This includes identifying the research problem based on the conducted literature review, developing a research methodology, and presenting achieved results.

This assignment is submitted through Turnitin and students do not see Turnitin similarity reports.

## Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

## Course Schedule

The Lecture is on Monday 11am-1pm.

The workshop sessions are in different time slots of on Mon 9-11am and Mon 1-3pm. Students need to attend only one workshop session per week.

[View class timetable](#)

## Timetable

Date	Type	Content
Week 1: 29 May - 2 June	Lecture	Course Introduction
	Workshop	Course Introduction
Week 2: 5 June - 9 June	Lecture	Topic Nomination
	Workshop	Topic Nomination
Week 3: 12 June - 16 June	Assessment	Assignment 1 - Topic Nomination Submission
Week 4: 19 June - 23 June	Lecture	Literature Review
	Workshop	Literature Review
Week 5: 26 June - 30 June	Lecture	Presentation Preparation
	Workshop	Presentation Preparation
	Assessment	Assignment 2 - Literature Review File Submission
Week 6: 3 July - 7 July	Assessment	Assignment 3 - Presentation File Submission
Week 7: 10 July - 14 July	Lecture	Abstract and Proposal Preparation
	Workshop	Abstract and Proposal Preparation
Week 8: 17 July - 21 July	Lecture	Proposal Preparation
	Workshop	Proposal Preparation
Week 9: 24 July - 28 July	Lecture	Review on Referencing Systems
	Workshop	Review on Referencing Systems
Week 10: 31 July - 4 August	Lecture	CV Preparation and Getting Ready for Job Interview

	Workshop	CV Preparation and Getting Ready for Job Interview
	Assessment	Thesis Report Submission

## **Resources**

### **Prescribed Resources**

No specific resource is prescribed.

### **Recommended Resources**

Having access to high speed internet, a reliable PC or laptop, and a headset.

## **Course Evaluation and Development**

The feedback from students will be gathered throughout the term and the end of the term survey. The comments will be reviewed by the course convener and will be taken into consideration to improve the next course offering.

## **Laboratory Workshop Information**

Workshop sessions are arranged for students throughout the term, and students are strongly recommended to attend the workshops and get involved in the workshop discussions. This course does not have any laboratory.

## Submission of Assessment Tasks

Please refer to the Moodle page of the course for further guidance on assessment submission.

**UNSW has a standard late submission penalty of:**

- 5% per day, for all assessments where a penalty applies, capped at five days (120 hours), after which a student cannot submit an assessment, and no permitted variation.



## Academic Honesty and Plagiarism

Beware! An assignment 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 Information

### Final Examinations:

Final Exams in T2 2023 will be held on campus between Friday 11th and Thursday 24th August (inclusive), and Supplementary Exams between Monday 4th and Friday 8th September (inclusive). You are required to be available on these dates. Please do not to make any personal or travel arrangements during this period.

For students enrolled in the distance offering of a postgraduate course, and who reside further than 100km from UNSW Kensington campus, will be contacted regarding sitting an external exam. The school's External Exam Policy can be found on the Intranet.

### ACADEMIC ADVICE

- Key Staff to Contact for Academic Advice (log in with your zID and password): <https://intranet.civeng.unsw.edu.au/key-staff-to-contact-during-your-studies-at-unsw>
- [Key UNSW Dates](#) - eg. Census Date, exam dates, last day to drop a course without academic/financial liability etc.
- CVEN Student Intranet (log in with your zID and password): <https://intranet.civeng.unsw.edu.au/student-intranet>
- Student Life at CVEN, including Student Societies: <https://www.unsw.edu.au/engineering/civil-and-environmental-engineering/student-life>
- Special Consideration: <https://student.unsw.edu.au/special-consideration>
- General and Program-Specific Questions: [The Nucleus: Student Hub](#)
- Book an Academic Advising session: <https://unswengacademicadvising.as.me/schedule.php>

## Disclaimer

*This course outline sets out description of classes at the date the Course Outline is published. The nature of classes may change during the Term after the Course Outline is published. Moodle should be consulted for the up to date class descriptions. If there is any inconsistency in the description of activities between the University timetable and the Course Outline (as updated in Moodle), the description in the Course Outline/Moodle applies.*

## Image Credit

Mike Gal.

## CRICOS

CRICOS Provider Code: 00098G

## Acknowledgement of Country

We acknowledge the Bedegal people who are the traditional custodians of the lands on which UNSW Kensington campus is located.

## Appendix: Engineers Australia (EA) Professional Engineer Competency Standard

Program Intended Learning Outcomes	
Knowledge and skill base	
PE1.1 Comprehensive, theory based understanding of the underpinning natural and physical sciences and the engineering fundamentals applicable to the engineering discipline	✓
PE1.2 Conceptual understanding of the mathematics, numerical analysis, statistics, and computer and information sciences which underpin the engineering discipline	✓
PE1.3 In-depth understanding of specialist bodies of knowledge within the engineering discipline	✓
PE1.4 Discernment of knowledge development and research directions within the engineering discipline	✓
PE1.5 Knowledge of engineering design practice and contextual factors impacting the engineering discipline	
PE1.6 Understanding of the scope, principles, norms, accountabilities and bounds of sustainable engineering practice in the specific discipline	✓
Engineering application ability	
PE2.1 Application of established engineering methods to complex engineering problem solving	✓
PE2.2 Fluent application of engineering techniques, tools and resources	✓
PE2.3 Application of systematic engineering synthesis and design processes	
PE2.4 Application of systematic approaches to the conduct and management of engineering projects	✓
Professional and personal attributes	
PE3.1 Ethical conduct and professional accountability	✓
PE3.2 Effective oral and written communication in professional and lay domains	✓
PE3.3 Creative, innovative and pro-active demeanour	✓
PE3.4 Professional use and management of information	✓
PE3.5 Orderly management of self, and professional conduct	✓
PE3.6 Effective team membership and team leadership	