



UNSW Course Outline

CVEN4050 Thesis A - 2024

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General Course Information

Course Code : CVEN4050

Year : 2024

Term : Term 1

Teaching Period : T1

Is a multi-term course? : No

Faculty : Faculty of Engineering

Academic Unit : School of Civil and Environmental Engineering

Delivery Mode : In Person

Delivery Format : Standard

Delivery Location : Kensington

Campus : Sydney

Study Level : Undergraduate

Units of Credit : 6

Useful Links

[Handbook Class Timetable](#)

Course Details & Outcomes

Course Description

This course is the first of two parts and is undertaken before CVEN4051 Thesis B, which should be taken in the following term. 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 A involves the formulation of a project plan, project brief and documents and involves review of various literature.

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

Course Learning Outcomes
CLO1 : Assemble comprehensive and reliable data as part of a research project
CLO2 : Appraise and critique an aspect of an infrastructure system via a literature review or through use of accepted industry design processes
CLO3 : Demonstrate critical thinking and research skills and critique industry practices in formulating responses to problems relating to the role of civil and environmental engineers
CLO4 : Apply engineering principles, such as risk management, decision making and design in developing solutions to real-world problems that are ethically sound
CLO5 : Demonstrate professional level written communication skills

Course Learning Outcomes	Assessment Item
CLO1 : Assemble comprehensive and reliable data as part of a research project	<ul style="list-style-type: none">• Thesis Preparation• Thesis Document
CLO2 : Appraise and critique an aspect of an infrastructure system via a literature review or through use of accepted industry design processes	<ul style="list-style-type: none">• Thesis Preparation• Thesis Document
CLO3 : Demonstrate critical thinking and research skills and critique industry practices in formulating responses to problems relating to the role of civil and environmental engineers	<ul style="list-style-type: none">• Thesis Preparation• Thesis Document
CLO4 : Apply engineering principles, such as risk management, decision making and design in developing solutions to real-world problems that are ethically sound	<ul style="list-style-type: none">• Thesis Preparation• Thesis Document
CLO5 : Demonstrate professional level written communication skills	<ul style="list-style-type: none">• Thesis Preparation• Thesis Document

Learning and Teaching Technologies

Moodle - Learning Management System | Blackboard Collaborate | Echo 360

Additional Course Information

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Thesis Preparation Assessment Format: Individual	50%	Start Date: Not Applicable Due Date: 03/03/2024 05:00 PM
Thesis Document Assessment Format: Individual	50%	Start Date: Not Applicable Due Date: 21/04/2024 05:00 PM

Assessment Details

Thesis Preparation

Assessment Overview

Topic nomination, thesis plan, literature review and presentation. These assessments include project development and writing workshops. How to write a tender, how to respond to a tender, how to read engineering drawings, management of a project.

Course Learning Outcomes

- CLO1 : Assemble comprehensive and reliable data as part of a research project
- CLO2 : Appraise and critique an aspect of an infrastructure system via a literature review or through use of accepted industry design processes
- CLO3 : Demonstrate critical thinking and research skills and critique industry practices in formulating responses to problems relating to the role of civil and environmental engineers
- CLO4 : Apply engineering principles, such as risk management, decision making and design in developing solutions to real-world problems that are ethically sound
- CLO5 : Demonstrate professional level written communication skills

Assessment Length

Nominally 10 pages

Submission notes

Submissions are to align with each assessment task brief. Please note Assessment deadlines are hard deadlines with no extensions given. If you miss an Assessment Task submission deadline, then it is to be expected that you will fail the course.

Assessment information

Within the course Moodle site, each course Assessment Task Outline provides the due date and the submission requirements for that task. Unless otherwise notified, Assessment Task submissions will be marked by your Workshop Demonstrator and separately by another marker. This is to maintain quality standards across the course and within each workshop. Students who perform poorly in any of the Assessment Tasks are recommended to discuss their progress firstly with their Assigned Demonstrator or with the Lecturer at the first available opportunity (within a week) during the term on receipt of that poor performance.

Assignment submission Turnitin type

Not Applicable

Hurdle rules

For each Assessment Task a student is required to achieve at least half of the marks allocated for the Assessment Task.

Thesis Document

Assessment Overview

Preparation of individual project brief to address key aspects of the scope of works required for project completion. Individual deliverable by each student is the preparation of a detailed scope of works.

Course Learning Outcomes

- CLO1 : Assemble comprehensive and reliable data as part of a research project
- CLO2 : Appraise and critique an aspect of an infrastructure system via a literature review or through use of accepted industry design processes
- CLO3 : Demonstrate critical thinking and research skills and critique industry practices in formulating responses to problems relating to the role of civil and environmental engineers
- CLO4 : Apply engineering principles, such as risk management, decision making and design in developing solutions to real-world problems that are ethically sound
- CLO5 : Demonstrate professional level written communication skills

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Assignment submission Turnitin type

Not Applicable

Hurdle rules

For each Assessment Task, a student is required to achieve at least half of the marks allocated for that Assessment Task.

General Assessment Information

Grading Basis

Standard

Requirements to pass course

Students must get at least 50% in each assessment task to be able to pass this course.

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 0 : 5 February - 11 February	Other	No Class
Week 1 : 12 February - 18 February	Lecture	Course Introduction Theme Project Introduction
Week 2 : 19 February - 25 February	Lecture	Software
Week 3 : 26 February - 3 March	Lecture	Standards
Week 4 : 4 March - 10 March	Lecture	Sustainability
Week 5 : 11 March - 17 March	Lecture	Sustainability Topics
Week 6 : 18 March - 24 March	Lecture	No Class
Week 7 : 25 March - 31 March	Lecture	Presentation
Week 8 : 1 April - 7 April	Lecture	Easter Monday - No class - A Make up session for Q&A will be provided later in the week.
Week 9 : 8 April - 14 April	Lecture	Transferable Skills
Week 10 : 15 April - 21 April	Lecture	Transferable Skills / Course Wrap up

Attendance Requirements

For undergraduate courses with Workshops and/or Labs, attendance for those classes is a necessary part of the course. You must attend at least 80% of the workshop/lab in which you are enrolled for the duration of the sessions.

Course Resources

Prescribed Resources

There are no prescribed texts for this course. Specific resources will be provided on the Moodle.

Recommended Resources

Students are expected to search for information resources in their Thesis studies

Course Evaluation and Development

The theme for Thesis A changes annually. Students will be provided a formal feedback process by way of myExperience reporting. The lecturer has provided students with the opportunity of regular contact throughout the term and this will form the basis of gathering informal feedback that can be used in appraising the course format.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Khalegh Barati		CE209		email or office contact by phone or in person	No	Yes

Other Useful Information

Academic Information

I. Special consideration and supplementary assessment

If you have experienced an illness or misadventure beyond your control that will interfere with your assessment performance, you are eligible to apply for Special Consideration prior to, or within 3 working days of, submitting an assessment or sitting an exam.

Please note that UNSW has a Fit to Sit rule, which means that if you sit an exam, you are

declaring yourself fit enough to do so and cannot later apply for Special Consideration.

For details of applying for Special Consideration and conditions for the award of supplementary assessment, please see the information on UNSW's [Special Consideration page](#).

II. Administrative matters and links

All students are expected to read and be familiar with UNSW guidelines and polices. In particular, students should be familiar with the following:

- [Attendance](#)
- [UNSW Email Address](#)
- [Special Consideration](#)
- [Exams](#)
- [Approved Calculators](#)
- [Academic Honesty and Plagiarism](#)
- [Equitable Learning Services](#)

III. Equity and diversity

Those students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course convener prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the Equitable Learning Services. Issues to be discussed may include access to materials, signers or note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made.

IV. Professional Outcomes and Program Design

Students are able to review the relevant professional outcomes and program designs for their streams by going to the following link: <https://www.unsw.edu.au/engineering/student-life/student-resources/program-design>.

Note: This course outline sets out the 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 or your primary learning management system (LMS) 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/Moodle/LMS, the description in the Course Outline/Moodle/LMS applies.

Academic Honesty and Plagiarism

UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW students have a responsibility to adhere to this principle of academic integrity. Plagiarism undermines academic integrity and is not tolerated at UNSW. *Plagiarism at UNSW is defined as using the words or ideas of others and passing them off as your own.*

Plagiarism is a type of intellectual theft. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement. UNSW has produced a website with a wealth of resources to support students to understand and avoid plagiarism, visit: student.unsw.edu.au/plagiarism. The Learning Centre assists students with understanding academic integrity and how not to plagiarise. They also hold workshops and can help students one-on-one.

You are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting and the proper referencing of sources in preparing all assessment tasks.

Repeated plagiarism (even in first year), plagiarism after first year, or serious instances, may also be investigated under the Student Misconduct Procedures. The penalties under the procedures can include a reduction in marks, failing a course or for the most serious matters (like plagiarism in an honours thesis or contract cheating) even suspension from the university. The Student Misconduct Procedures are available here:

www.gs.unsw.edu.au/policy/documents/studentmisconductprocedures.pdf

Submission of Assessment Tasks

Work submitted late without an approved extension by the course coordinator or delegated authority is subject to a late penalty of five percent (5%) of the maximum mark possible for that assessment item, per calendar day.

The late penalty is applied per calendar day (including weekends and public holidays) that the assessment is overdue. There is no pro-rata of the late penalty for submissions made part way through a day. This is for all assessments where a penalty applies.

Work submitted after five days (120 hours) will not be accepted and a mark of zero will be

awarded for that assessment item.

For some assessment items, a late penalty may not be appropriate. These will be clearly indicated in the course outline, and such assessments will receive a mark of zero if not completed by the specified date. Examples include:

- Weekly online tests or laboratory work worth a small proportion of the subject mark;
- Exams, peer feedback and team evaluation surveys;
- Online quizzes where answers are released to students on completion;
- Professional assessment tasks, where the intention is to create an authentic assessment that has an absolute submission date; and,
- Pass/Fail assessment tasks.

Faculty-specific 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)

School-specific Information

Final Examinations

Final Exams in T1 2024 will be held on campus between the 26th April and 9th May, and Supplementary Exams between the 20th - 24th May 2024. You are required to be available on

these dates. Please do not make any personal or travel arrangements during this period.

School Contact Information

For assistance with enrolment, class registration, progression checks and other administrative matters, please see [the Nucleus: Student Hub](#). They are located inside the Library – first right as you enter the main library entrance. You can also contact them via <http://unsw.to/webforms> or reserve a place in the face-to-face queue using the UniVerse app.

For course administration matters, please contact the Course Coordinator.

Questions about this course should normally be asked during the scheduled class so that everyone can benefit from the answer and discussion.