HANDBOOK DESCRIPTION

This course is the first of two parts and is undertaken before CVEN4051 Thesis B, usually in the proceeding 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.

https://www.handbook.unsw.edu.au/undergraduate/courses/2022/CVEN4050/

OBJECTIVES

List the objectives of the course.

Link the objectives with the program outcome attributes and the assessment strategies for this course. In other words, how do the assessment strategies assist in achieving these objectives, and how do the objectives contribute to achievement of program outcome attributes?

List of programme attributes:

EXPECTED LEARNING OUTCOMES

This course is designed to address the learning outcomes below and the corresponding Engineers Australia Stage 1 Competency Standards fo r Professional Engineers as shown. The full list of Stage 1 Competency Standards may be found in Appendix A.

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

Learning Outcome		EA Stage 1 Competencies
1.	Apply the concepts in the analysis and construction methods used in the placement of a different building Façades.	PE1.1, PE1.2, PE1.3, PE1.5, PE2.2, PE2.3
2.	Apply the concepts used in nominating and selecting materials for the construction for the control of fire in buildings and engineering structures.	PE1.1, PE1.2, PE1.3, PE1.5, PE2.2, PE2.3
3.	Be able to pass critique on existing structures concerning façade and fire related matters.	PE2.1, PE3.1, PE3.2, PE3.5,

Date	Topic and Lecture Content	Demonstration Content
14/02/2022 (Week 1)	Course Introduction Introduction to building facades Outline of Thesis A requirements Your employment – preparing your Resume	Workshop finalisation Commence Assessment Task 1
21/02/2022 (Week 2)	Weatherproofing structures and cladding systems Construction overview 21	Continue with Assessment Task 1

PENALTIES

ASSESSMENT OVERVIEW

Item	Length	Weighting	Learning outcomes assessed	Assessment Criteria	Due date and submission requirements	Deadline for absolute fail	Marks returned
1. Façade Engineering a. Site Inspection Report b. Site Inspection Report	 Appendix submission Appendix submission	 1% 9%	1, 2, 3 & 4	Separate submissions for each of: 1a & 1b. These submissions will be appendices within Thesis A.	Before 1700h 10 March 2022 Upload to Moodle Before 1700h 17 March 2022 Upload to Moodle	There are no extensions on any of these elements, so the posted due dates are final.	Week 4 Week 6
2. Fire Engineering Site Inspection Report	Appendix submission	20% + 10% of 4.*	1, 2, 3 & 4	Single submission for Item 2. This submission will be an appendix within Thesis A.	Before 1700h 24 March 2022 Upload to Moodle		Week 8
3. Design Report Façade & Fire (including wind design)	Appendix calculations	20% + 10% of 4.		Single submission for Item 3. This submission will be an appendix within Thesis A.	Before 1700h 07April 2022 Upload to Moodle		Week 10
4. Thesis Submission Documents Final Thesis A Document	 Item 2 Item 3 8 pages, plus Appendix provisions	50% total: 10%* 10% 30%	1, 2, 3 & 4	 Marked when Item 2 is submitted Marked when Item 3 is submitted The Thesis A document is to be presented as an Engineering Report and will be marked accordingly: Executive Summary: 10% Presentation/ content: 10% Writing/ reference quality: 10%	 10 March 2022 24 March 2022 Before 17:00h 21 April 2022 Upload to Moodle		 Week 8 Week 10 Post course

RELEVANT RESOURCES

There are no prescribed texts for Thesis A

The lecturer will provide you with prescribed readings for each lecture topic and:

- You are required to conduct your own Literature research in completing CVEN4050 Thesis A. This should be discussed with the UNSW library staff as to how you can undertake independent research and find your resources.
- Independent seek new material by reviewing suggested additional readings and availability (in bookshop, UNSW Library, Open Reserve).
- Additional materials provided on Moodle.
- Recommended Internet sites.

DATES TO NOTE

Refer to MyUNSW

PRAGIARISM

Beware! An assignment that includes plagia Tm [(R)ised material will receive a 0% Fail, and students who plagiarise R ail he

Plagia Tm [(R)ism is he use of

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Appendix A: Engineers Australia (EA) Competencies

Stage 1 Competencies for Professional Engineers

	Program Intended Learning Outcomes
PE1: Knowledge and Skill Base	PE1.1 Comprehensive, theory-based understanding of underpinning fundamentals
	PE1.2 Conceptual understanding of underpinning maths, analysis, statistics, computing
	PE1.3 In-depth understanding of specialist bodies of knowledge
	PE1.4 Discernment of knowledge development and research directions
	PE1.5 Knowledge of engineering design practice
	PE1.6 Understanding of scope, principles, norms, accountabilities of sustainable engineering practice
PE2: Engineering	