

School of Civil and Environmental Engineering UNSW Engineering

CVEN9731

Project Management Framework

Term 3, 2022



Course Overview

Staff Contact Details

Convenors

Name	Email	Availability	Location	Phone
Ali Kashani	ali.kashani@unsw.edu.au	Appointments via email		

School Contact Information

<u>Engineering Student Support Services</u> – 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)

<u>UNSW Exchange</u> – 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 provides an overview and introduction to project management and project selection. The role of a project manager in different phases of a project life cycle is discussed. Practical skills and tools for hands-on project management and project selection are provided. See link to virtual handbook: https://www.handbook.unsw.edu.au/postgraduate/courses/2022/CVEN9731

Course Aims

List of programme attributes:

- Understand project management and life cycle of a project
- Understand the decision-making methodology for project selection
- · Gain insight into practical project management skills
- An in-depth engagement with the relevant disciplinary knowledge in its interdisciplinary context
- · Capacity for analytical and critical thinking and for creative problem solving
- · Ability to engage independent and reflective learning
- Skills for collaborative, multi-disciplinary work, and effective communication
- Respect for ethical practice and social responsibility

Lea	rning Outcome	EA Stage 1 Competencies
1.	Be familiar with the scope of project management, project	
	characteristics, project life cycle and different types of project	
		PE1.1, PE1.3, PE1.4, PE1.5,
		PE1.6
2.	Be familiar with the project selection process and able to apply project	PE1.3, PE1.5, PE1.6, P.E2.1,
	selection methods	PE2.2,
		PE2.3, PE2.4, PE3.2, PE3.4,
		PE3.6
3.	Be familiar with factors affecting project success and failure as well as	PE1.1,
	strategies to maximise the likelihood of project success	
		PE2.2, PE3.6
4.	Be familiar with activities performed by a project manager in project	PE1.3, PE1.5, PE1.6, P.E2.1,
	planning, project execution and project termination phases	PE2.2,
		PE2.3, PE2.4, PE3.2, PE3.4,
		PE3.6

Teaching Strategies

Private Study:

- Review lecture material and textbook
- Do set problems and assignments
- Join Moodle discussions of problems
- · Reflect on class problems and assignments

- Download materials from Moodle
- Keep up with notices and find out marks via Moodle

Lectures:

- Find out what you must learn
- See methods that are not in the textbook
- Follow worked examples
- Hear announcements on course changes

Workshops:

- Be guided by Demonstrators
- Practice solving set problems
- Ask questions

Assessments:

- Demonstrate your knowledge and skills
- Demonstrate higher understanding and problem solving

Assessment

- Hurdle requirement: to pass the course you need to get a minimum of 40% score for both Assignment 1 and 2 and Final Exam.
- Both Final Exam and Assignment 1 and 2 will be checked for plagiarism. A similarity of equal or above 30% to other submitted works based on the Turnitin report will result in failing the course and the 2nd submissions are not allowed.
- You will not get any scores for any questions of the assessments if a major similarity is detected based on the Turnitin report even if the similarity of the whole assessment is below 30%.

Note: The lecturer reserves the right to adjust the final scores by scaling if agreed by the Head of School.

Assessment task	Weight	Due Date	Course Learning Outcomes Assessed
1. Quiz	10%	Week 4	
2. Assignment 1	25%	Week 6	
3. Assignment 2	25%	Week 10	
4. Final Exam	40%	Not Applicable	

Assessment 1: Quiz

Assessment length: 10 multiple-choice and True/False questions **Due date:** Week 4

Multiple choice and True/False quiz based on Learning outcome of 1 and 4.

Assessment criteria

The quiz covers the lecture contents of Week 1, 2 and 3 (LO1, LO4).

Assessment 2: Assignment 1

Assessment length: 5-10 pages Due date: Week 6

Assignment based on Learning outcomes of 1 and 4.

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

Assessment criteria

The assignment covers the contents Weeks 1-5.

Hurdle requirement

A mark of at least 40% in Assignment 1 is required before the class work is included in the final mark.

Assessment 3: Assignment 2

Assessment length: 5-10 pages **Due date:** Week 10

Assignment based on all learning outcomes.

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

Assessment criteria

The assignment covers the contents Weeks 1-9.

Hurdle requirement

A mark of at least 40% in Assignment 2 is required before the class work is included in the final mark.

Assessment 4: Final Exam

Assessment length: 5 -10 analytical questions

Final exam asseeement of all learning outcomes.

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

Assessment criteria

The exam covers the entire contents of the course.

Hurdle requirement

A mark of at least 40% in the final examination is required before the class work is included in the final mark.

Attendance Requirements

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

Course Schedule

CVEN9731		Project Management Fra	amework
LEC	A	3927	Mon 13-15# (w1-3,5,7-10, AinswthG03)
WKS	T14A	3929	Tue 14-16 (w2-5,7-10, Ainswth201)
WKS	W12A	3930	Wed 12-14 (w2-5,7-10, Ainswth201)
WKS	W14A	3931	Wed 14-16 (w2-5,7-10, Online)
WKS	W14B	10430	Wed 14-16 (w2-5,7-10, Online)

View class timetable

Timetable

Date	Туре	Content	
O-Week: 5 September - 9 September	Reading	- Download and read releavnt resources outlined below.	
		- Familarise yourself with Moodle Page of CVEN9731	
Week 1: 12 September - 16 September	Lecture	- Definition and features of 'project' and 'project management'	
		- Stages of 'project management lifecycle'	
		- Factors affecting the success of a project	
Week 2: 19 September - 23 September	Lecture	- Project Charter	
		- Project Stakeholders	
		- Project goal, scope strategy, and SMART objective	
		- Project requirement, risks, and assumptions	
Week 3: 26 September - 30 September	Lecture	- Analyse and manage the risks	
		- Work Breakdown Structure (WBS)	
		- Resource Management Plan	
Week 4: 3 October - 7	Lecture	- Project Budget and Procurement Plan	

October		- Project Schedule
		- Quality Management and Resource Management Plan
	Assessment	Quiz
Week 5: 10 October - 14 October	Lecture	- Effective communication and leadership skills for project management
		- Organising meeting and manage team dynamics
		- 'Agile' project management and understand its differences compared to traditional 'Waterfall' method
Week 6: 17 October - 21 October	Assessment	Assignment 1
Week 7: 24 October - 28 October	Lecture	- Monitoring and controlling project
26 October		 Project earned value versus actual and projected costs and schedule
		- Project Control processes
Week 8: 31 October - 4 November	Lecture	- Procedure for closing a project
		- Project failure
		- Project Selection tools
		- SWOT analysis for Project Selection
		- Total Cost of Ownership
Week 9: 7 November - 11 November	Lecture	- Net Saving (NS)
		- Savings to Investment Ratio (SIR)
		- Discounted Cash Flow (DCF)
		- Net Present Value (NPV)
		- Internal Return Rate (IRR)
		- Weighted Average Cost of Capital (WACC)
		- Discounted Payback Period (DPP)
Week 10: 14 November - 18 November	Lecture	- Project Appraisal for Feasibility Report
		- Scoring Models for comparison of projects

1		based on established criteria
		- Decision Matrix for Project Selection
	Assessment	Assignment 2

Resources

Prescribed Resources

There is no prescribed textbook for this course. Recommended textbook:

Recommended Resources

J. R. Meredith and S. J. Mantel, "Project Management", Wiley (eight edition). Other references:

H. Kerzner, "Project Management", Van Nostrand Reinhold, any edition.

D. Lock, "Project Management", Gower, any edition.

Suggested collateral reading might include the journals:

Journal of Project and Construction Management

Engineering Management Journal

Journal of Construction Engineering and Management

Journal of Engineering, Construction and Architectural Management

Project Management Journal

Journal of Management in Engineering

PM Network

Also:

The Project Management Institute (PMI) Project Management Body of Knowledge (PMBOK) is available on the internet: http://www.pmi.org

ISO10006, Quality Management - Guidelines to Quality in Project Management, which is based on PMBOK.

CCTA, PRINCE2, Project Management for Business, The Stationery Office, 1996.

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 T3 2022 will be held online between 25th November - 8th December 2022 inclusive, and supplementary exams between 9th - 13th January 2023 inclusive. You are required to be available on these dates. Please do not to make any personal or travel arrangements during this period.

ACADEMIC ADVICE

- Key Staff to Contact for Academic Advice (log in with your zID and password): <u>https://intranet.civeng.unsw.edu.au/key-staff-to-contact-during-your-studies-at-unsw</u>
- <u>Key UNSW Dates</u> 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): <u>https://intranet.civeng.unsw.edu.au/student-intranet</u>
- Student Life at CVEN, including Student Societies: <u>https://www.unsw.edu.au/engineering/civil-and-environmental-engineering/student-life</u>
- Special Consideration: https://student.unsw.edu.au/special-consideration
- General and Program-Specific Questions: <u>The Nucleus: Student Hub</u>
- Book an Academic Advising session: <u>https://app.acuityscheduling.com/schedule.php?owner=19024765</u>

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.