



GSOE9820

Engineering Project Management





I. Staff Contact Details

Contact details and consultation times for course convenor

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Consultation concerning this course is available immediately after the classes. Face-to-face

Summary of the Course

This course will introduce to you the fundamental principles of project management in an engineering context, enabling you to become a successful project manager.

Aims of the Course

This course takes an integrated approach to managing projects, exploring both technical and managerial challenges. It emphasises not only individual project implementation, but also provides a strategic perspective of how to manage projects at the program and portfolio levels.

The course will provide you with a powerful set of tools to improve your ability to plan, implement and manage activities to accomplish specific organisational objectives in often complex and challenging work environments.

The Project Management Standards (e.g. PMBOK) are also included in the course in order to comprehensively identify the critical knowledge areas that project managers must understand if they are to become successful managers. The course is also a pathway for Project Management Institute (PMI) certification since both the contents of the course, terminologies used and exposure to several real world cases will support your preparations.

Student learning outcomes

This course is designed to address the below learning outcomes and the corresponding Engineers Australia Stage 1 Competency Standards for 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.	Know what a project is as well as understand the role and responsibilities of a project manager	PE1.1, 1.3, 1.6 PE2.4 PE3.1
2.	Be able to create project plans, schedules and budgets	PE1.1, 1.2, 1.3, 1.5 PE2.1, 2.2, 2.3, 2.4
3.	Be able to select and use the appropriate tools to aid in managing a project	PE2.1, 2.2, 2.3, 2.4
4.	Be able to select and develop appropriate management styles to successfully complete a project.	PE3.1, 3.2, 3.3, 3.4, 3.5, 3.6



General

You will be assessed by way of short web-based activities and an examination, both of which involve calculations and descriptive material.

The parts of the course contribute towards the overall grade as follows:

ASSESSMENT	WEIGHTING	LEARNING OUTCOMES ASSESSED	MARKS RETURNED
Web-based activities	40%	1, 2, 3, 4	2 weeks after due date
Quiz	10%	1, 2, 3	2 weeks after due date
Final Examination	50%	1, 2, 3	During results period
TOTAL	100%		

In order to pass the course, you must achieve an **overall mark of at least 50%**.

Web-Based activities

The purpose of the web-based activities is to provide students with the opportunity to consolidate and apply the materials covered in the lectures; therefore you are strongly advised to cover lecture/support materials regularly every week of the session.

These activities will be facilitated and assessed through individual and team discussions. Web-based participation marks will be assessed on your contributions to online discussions, exercises and other learning activities via UNSW Moodle.

Marking Criteria used for Web-based activities

1. Participation
 - a. Put your thoughts forward
 - b. Work to plan
 - c. Be early, rather than late

2. Content of Posts
 - a. Quality posts
 - b. Correct answers
 - c. Presentation
 - d. Proper English. E.g. no slang.

3. Final Report
 - a. Correct answers
 - b. Presentation
 - c. On time

4. Project Management Skills

- a. Early start
- b. Provide structured plan
- c. Follow up on deadlines
- d. Responses to posts
- e. Leadership

5. Team member skills

- a. Provide answers and discussion
- b. Provide answers and discussion
- c. Interaction. Give feedback on posts
- d. Provide quality work, not quantity

There will be several web-based groups. Each of you will be randomly assigned to one of these web-based groups by the end of Week 2. You will be notified of your web-based facilitator name and contact details through UNSW Moodle.

Submission of web-based activities

Web-based projects commence in week 2 with an introduction and are made available on Moodle during the semester.

Each project is due 1 hour before class (i.e. 5pm) on the date specified in Table 1. **Late submission of assignments will be NOT accepted.**

ACTIVITIES	Release Date (@ Midnight)	Due Date (@ 5pm)
Project 0 (Team Introductions)	9-Mar	16-Mar
Project 1	16-Mar	23-Mar
Project 2	06-Apr	13-Apr
Project 3	13-Apr	20-Apr
Project 4	20-Apr	04-May
Project 5*	04-May	

The final examination consists of both multiple choice as well as short answer questions.

You must be available for all tests and examinations. Final examinations for each course are held during the University examination periods, which are June for Semester 1 and November for Semester 2.

Provisional Examination timetables are generally published on myUNSW in May for Semester 1 and September for Semester 2

For further information on exams, please see the [Exams](#) section on the intranet.

Calculators

You will need to provide your own calculator, of a make and model approved by UNSW, for the examinations. The list of approved calculators is shown at student.unsw.edu.au/exam-

resources, attend the Learning Centre, or sometimes resubmit your work with the problem or paying someone to do your work, may be investigated under the Student Misconduct Procedures.

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) even suspension from the university. The Student Misconduct Procedures are available here:

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

Further information on School policy and procedures in the event of plagiarism is available on the [intranet](#).

9. Administrative Matters

All students are expected to read and be familiar with School guidelines and policies, available on the intranet. In particular, students should be familiar with the following:

[Attendance, Participation and Class Etiquette](#)

[UNSW Email Address](#)

[Computing Facilities](#)

[Assessment Matters](#) (including guidelines for assignments, exams and special consideration)

[Academic Honesty and Plagiarism](#)

[Student Equity and Disabilities Unit](#)

[Health and Safety](#)

[Student Support Services](#)

C. Martin
16th February 2016

Appendix A: Engineers Australia (EA) Professional Engineer Competency Standards

	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 Application Ability	PE2.1 Application of established engineering methods to complex 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
PE3: Professional and Personal Attributes	PE3.1 Ethical conduct and professional accountability
	PE3.2 Effective oral and written communication (professional and lay domains)
	PE3.3 Creative, innovative and pro-active demeanour