



Mechanical and Manufacturing Engineering

Course Outline

Term 2 2019

GSOE9820

PROJECT MANAGEMENT

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1. Staff contact details

Contact details and consultation times for course convenor

Name: Mr Corey Martin

Office: Ainsworth Building (J17), Room 507

Email: corey.martin@unsw.edu.au

Moodle: <https://moodle.telt.unsw.edu.au/login/index.php>

Consultation concerning this course is available by appointment only.

Contact details and consultation times for additional lecturers/demonstrators/lab staff

Name: Mr Greg Wilson

Email: gregory.wilson@unsw.edu.au

Name: Ms Caroline Gao

Email: jingying.gao@unsw.edu.au

Please see the course [Moodle](#).

2. Important links

- [Moodle](#)
- [Lab Access](#)
- [Computing Facilities](#)
- [Student Resources](#)
- [Course Outlines](#)
- [Engineering Student Support Services Centre](#)
- [Makerspace](#)
- [UNSW Timetable](#)
- [UNSW Handbook](#)
- [UNSW Mechanical and Manufacturing Engineering](#)

3. Course details

Credit points

This is a 6 unit-of-credit (UoC) course, and involves 3 hours per week (h/w) of face-to face and online contact.

The normal workload expectations of a student are approximately 25 hours per term for each UOC, including class contact hours, other learning activities, preparation and time spent on all assessable work.

You should aim to spend about 10 h/w on this course. The additional time should be spent in making sure that you understand the lecture material, completing the set assignments, further reading, and revising for any examinations.

Contact hours

	Day	Time	Location
Lectures	Wednesday (Week 1 and 10)	6pm – 9pm	Ainsworth G03 (K-J17-G03)
Demonstrations	Wednesday (Weeks 2-9)	7pm – 9pm	Ainsworth G03 (K-J17-G03)

Summary and Aims 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 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 learning outcomes below 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

4. Teaching strategies

The course will cover the terminology and core concepts and theories in Project Management to help you develop a range of skills, such as managing project teams, project schedules, budgets as well as being aware of strategic topics, different environments, cultures and ethics of projects and community issues. The lectures and assessment tasks have been developed to build on the lecture topics using examples taken directly from industry to show how the theory is applied in practice and the details of when, where and how it should be applied.

5. Course schedule

Week	Date	Topics	Suggested Readings
1	5-Jun-19	Introduction to Project Management	Larson, Ch 1, 10 & 11
2	12-Jun-19	Projects in Organisations	Larson, Ch 2, 3 & 16
3	19-Jun-19	Project Selection	Larson, Ch 2
4	26-Jun-19	Defining the scope of works	Larson, Ch 4
5	3-Jul-19	Activity planning and budgets	Larson, Ch 5
6	10-Jul-19	Defining the schedule	Larson, Ch 6
7	17-Jul-19	Risk Management	Larson, Ch 7
8	24-Jul-19	Resource Planning	Larson, Ch 8 & 9
9	31-Jul-19	Project monitoring and control	Larson, Ch 13
10	7-Aug-19	Project closure	Larson, Ch 14

6. Assessment

Assessment overview

	Assessment	Group Project? (# Students per group)	Length	Weight	Learning outcomes assessed	Assessment criteria	Due date and submission requirements	Deadline for absolute fail	Marks returned
1	Individual assignment #1	No	1 week	10%	2 and 3	Refer to assessment task	6pm 3-Jul-19	6pm 5-Jul-19	Two weeks after submission
	Individual assignment #2	No	1 week	10%	2 and 3	Refer to assessment task	6pm 7-Aug-19	6pm 9-Aug-19	Two weeks after submission
2	Group assignment	Yes (Max. 9)	5000 words	30%	1, 2, 3 and 4	Refer to assessment task	6pm 9-Aug-19	6pm 11-Aug-19	Two weeks after submission
3	Pre-lecture quizzes	No	10-25 mins	10%	1 and 2	Weekly suggested readings	Wednesday 6pm Weeks 2-10	N/A	One week after submission
	Final Exam	No	2 hours	40%	1, 2, 3 and 4	All course content from weeks 1-10 inclusive.	During Examination Period	N/A	Upon release of final results

Assignments

The assessments are designed to reinforce your understanding of the material being presented and focus on the key learning points.

Individual Assignments

Details of the individual assignments will be made available on the Moodle course page. It is expected that students work on and submit these assignments as individuals.

Group Assignment

Each student will be randomly assigned to a project team/group by the end of Week 2. You are not permitted to change groups; however, the course coordinator or head demonstrator may request that you change groups to ensure a balanced distribution of group members.

Details of the group assignment will be made available on the Moodle course page.

Presentation

All submissions are expected to be neat and clearly set out. Your results are the pinnacle of all your hard work and should be treated with due respect. Presenting results clearly gives the marker the best chance of understanding your method; even if the numerical results are incorrect.

Submission

Work submitted late without an approved extension by the course coordinator or delegated authority is subject to a late penalty of 20 percent (20%) 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.

Work submitted after the 'deadline for absolute fail' is not 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 are clearly indicated in the course outline, and such assessments receive a mark of zero if not completed by the specified date. Examples include:

- a. Weekly online tests or laboratory work worth a small proportion of the subject mark,
or
- b. Online quizzes where answers are released to students on completion, or
- c. Professional assessment tasks, where the intention is to create an authentic assessment that has an absolute submission date, or
- d. Pass/Fail assessment tasks.

Marking

Marking guidelines for assignment submissions will be provided at the same time as assignment details to assist with meeting assessable requirements. Submissions will be marked according to the marking guidelines provided.

Examinations

You must be available for all tests and examinations. Final examinations for each course are held during the University examination periods: February for Summer Term, May for T1, August for T2, and November/December for T3.

Please visit myUNSW for Provisional Examination timetable publish dates.

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

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 available at student.unsw.edu.au/exam-approved-calculators-and-computers

It is your responsibility to ensure that your calculator is of an approved make and model, and to obtain an “Approved” sticker for it from the [Engineering Student Support Services Centre](#) prior to the examination. Calculators not bearing an “Approved” sticker will not be allowed into the examination room.

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 submitting an assessment or sitting an exam.

Please note that UNSW now has a [Fit to Sit / Submit rule](#), which means that if you sit an exam or submit a piece of assessment, 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](#).

7. Expected resources for students

Textbook (Required)

Gray C.F. and Larson E.W. Project Management, 7th edition, McGraw Hill International edition, 2017. ISBN: 9781259666094

Recommended Internet sites

There are many websites giving lectures, papers and data on project management in general. A useful reference site is <http://www.pmi.org>

Other Resources

UNSW Library website: <https://www.library.unsw.edu.au/>

Moodle: <https://moodle.telt.unsw.edu.au/login/index.php>

8. Course evaluation and development

Feedback on the course is gathered periodically using various means, including the UNSW myExperience process, informal discussion in the final class for the course, and the School's Student/Staff meetings. Your feedback is taken seriously, and continual improvements are made to the course based, in part, on such feedback.

In this course, recent improvements resulting from student feedback include the migration to online lectures.

9. 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.

If plagiarism is found in your work when you are in first year, your lecturer will offer you assistance to improve your academic skills. They may ask you to look at some online resources, attend the Learning Centre, or sometimes resubmit your work with the problem fixed. However more serious instances in first year, such as stealing another student's work 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

10. Administrative matters and links

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

- [Attendance](#)
- [UNSW Email Address](#)
- [Computing Facilities](#)
- [Special Consideration](#)
- [Exams](#)
- [Approved Calculators](#)
- [Academic Honesty and Plagiarism](#)
- [Student Equity and Disabilities Unit](#)
- [Health and Safety](#)
- [Lab Access](#)

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 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
	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