



Course Outline

GSOE9810

**PRODUCT DEVELOPMENT QUALITY I
ENGINEERING**

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1. Staff Contact Details

Contact details and consultation times for course convenor

Dr Erik van Voorthuysen
Electrical Building G17, Room 414
Tel: (02) 9385 4147
Email: erikv@unsw.edu.au

Consultation concerning this course is available immediately after the classes. Direct consultation requires prior booking via email.

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

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2. 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 contact.

The UNSW website states “The normal workload expectations of a student are approximately 25 hours per semester for each UoC, including class contact hours, other learning activities, preparation and time spent on all assessable work. Thus, for a full-time enrolled student, the normal workload, averaged across the 16 weeks of teaching, study and examination periods, is about 37.5 hours per week.”

This means that you should aim to spend about 9 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.

There is no parallel teaching in this course.

Contact Hours

lectures

Summary of the Course

Voice of the customer and the market	25/8/15	CLB6	Quality function deployment and benchmarking	Proto Labs QFD exercise	Chapter 5 and 6 of the prescribed
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5. Assessment

Assessment task	Length	Weight	Learning outcomes assessed	Assessment criteria	Due date, time, and submission requirements
Group assignment 1	Approx. 3500 words	25%	1, 2 and 4	Issue analysis, fact based data analysis and report writing skills	Midnight, Friday 11 th September via Moodle
Group assignment 2	Approx. 3500 words	25%	1, 2 and 3	Issue analysis, fact based data analysis and report writing skills	Midnight, Friday 30 th October via Moodle
Final exam	2 hours	50%	1, 2, 3 and 4	All course content from weeks 1-13	Exam period, date TBC

In order to achieve a PASS (PS) in this course, you need to achieve a composite mark of at least 50. Note that a 'double-pass' is not required for this course.

The details for the assignments will be communicated to you in class and provided on Moodle as the course progresses. You will be given approximately 5 weeks to complete each assignment.

Assignments

Group forming

By Friday of Week 2, at 5pm, you will need to self-enroll into a group on Moodle. Each group is set to consist of four to six members. Instruction to the self-enroll system can be found on Moodle by Week 1. Please note that any students who are not enrolled in a group by Friday of Week 2, at 5pm, they will be automatically assigned to a new group.

Presentation

All submissions should have a standard School cover sheet which is available from this subject's Moodle page.

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

Submission

Late submissions will be penalised 5 marks per calendar day (including weekends). An extension may only be granted in exceptional circumstances. Where an assessment task is worth less than 20% of the total course mark and you have a compelling reason for being unable to submit your work on time, you must seek approval for an extension from the course convenor **before the due date**. Special consideration for assessment tasks of 20% or greater must be processed through <https://student.unsw.edu.au/special-consideration>.

It is always worth submitting late assessment tasks when possible. Completion of the work, even late, may be taken into account in cases of special consideration.

Assessment Criteria

The following criteria will be used to grade assignments:

- Analysis and evaluation of assignments by integrating knowledge gathered in lectures, demonstrations and textbook.
- Sentences in clear and plain English—this includes correct grammar, spelling and punctuation.
- Correct referencing in accordance with the prescribed citation and style guide.
- Appropriateness of analytical techniques used.
- Accuracy of numerical answers.
- All working shown.
- Use of diagrams, where appropriate, to support or illustrate the calculations.
- Use of graphs, where appropriate, to support or illustrate the calculations.
- Use of tables, where appropriate, to support or shorten the calculations.
- Neatness.

Examinations

There will be a two-hour final examination at the end of the session. The final examination will cover all material covered for the whole session.

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 [Administrative Matters](#).

7. Course evaluation and development

Feedback on the course is gathered periodically using various means, including the Course and Teaching Evaluation and Improvement (CATEI) 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 changes in the length, submission procedures and presentation of the major assignments. Demonstration session hours have been extended to assist students with reinforcing their knowledge with exercises.

8. 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: [https://student.unsw.edu.au/9872\(w\)15.7947\(d\)1.31968\(\) t06\(in\)12.1957\(t\)-4.77698.3333w 8](https://student.unsw.edu.au/9872(w)15.7947(d)1.31968() t06(in)12.1957(t)-4.77698.3333w 8)

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

	Program Intended Learning Outcomes
PE1. Knowledge and 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