



The University of Southern Queensland

## Course specification

The current and official versions of the course specifications are available on the web at <http://www.usq.edu.au/coursespecification/current>.  
Please consult the web for updates that may occur during the year.

### Description: Project and Dissertation

Subject	Cat-nbr	Class	Term	Mode	Units	Campus
ENG	8002	90380	2, 2009	EXT	4.00	Toowoomba

<b>Academic group:</b>	FOENS
<b>Academic org:</b>	FOENSV
<b>Student contribution band:</b>	2
<b>ASCED code:</b>	039999

### STAFFING

Examiner: Tony Ahfock  
Moderator: Nigel Hancock

### REQUISITES

Pre-requisite: ENG8001

### OTHER REQUISITES

Students must have a minimum GPA of 5.0.

### RATIONALE

It is essential that graduates of Masters degree programmes in engineering should not only possess a comprehensive knowledge of their subject areas but should also be able to apply that knowledge to the solution of problems. The Project and Dissertation course builds on the work undertaken in "ENG8001 Engineering and Surveying Research Methodology" and develops further the students' skills in research and the development of a solution to an engineering problem. At this level, students are expected to be able to plan effectively, to adhere to prescribed timelines and to display initiative.

### SYNOPSIS

This course provides a vehicle for students to apply their formal knowledge to the solution of an engineering problem. With appropriate supervision, students will define and analyse the problem, and then develop and evaluate possible solutions. Where possible, the solution to the problem will be trialed using appropriate hardware. Students are expected to produce an accurate and detailed written account of their work.

### OBJECTIVES

The course objectives define the student learning outcomes for a course. The assessment item(s) that may be used to assess student achievement of an objective are shown in parenthesis. On completion of this course, students should be able to:

1. define and investigate engineering problems; (Dissertation & Demonstrations, Seminar)
2. develop and evaluate possible solutions to engineering problems; (Dissertation & Demonstrations, Seminar)
3. identify and plan the activities necessary to implement a solution to an engineering problem; (Dissertation & Demonstrations, Seminar)
4. undertake a complex task over a period of time with minimal guidance and supervision; (Dissertation & Demonstrations, Seminar)
5. present a seminar that summarises an extensive and complicated body of work; (Seminar)
6. present an accurate, written account of an extensive and complicated body of work. (Dissertation & Demonstrations)

## TOPICS

Description	Weighting (%)
1. Students will undertake an individual, generally open ended project which will encompass a range of engineering skills appropriate to the student's major of study. Activities may include: planning and management; investigation; feasibility assessment; experimental work and trialing; fieldwork, data analysis; design; prototype construction and testing; simulation and modelling; financial analysis.	70.00
2. The work will be undertaken with the guidance of a supervisor or supervisors, normally appointed from the academic staff of the Faculty. Sponsors and supervisors external to the Faculty may also be involved.	5.00
3. On conclusion of the project, students will be required to present a dissertation.	20.00
4. Preparation and delivery of a technical seminar.	5.00

## TEXT and MATERIALS required to be PURCHASED or ACCESSED

ALL textbooks and materials are available for purchase from USQ BOOKSHOP (unless otherwise stated). Orders may be placed via secure internet, free fax 1800642453, phone 07 46312742 (within Australia), or mail. Overseas students should fax +61 7 46311743, or phone +61 7 46312742. For costs, further details, and internet ordering, use the 'Textbook Search' facility at <http://bookshop.usq.edu.au> click 'Semester', then enter your 'Course Code' (no spaces).

## REFERENCE MATERIALS

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.

The project will require full use of the resources of the Library eg literature searches, research papers, journals and trade literature files.

## STUDENT WORKLOAD REQUIREMENTS

ACTIVITY	HOURS
Project Work	430.00
Report Writing	150.00
Seminars	10.00
Supervisor Consultation	30.00

## ASSESSMENT DETAILS

Description	Marks out of	Wtg (%)	Due date
PROJECT SPECIFICATION	1.00	0.00	07 Aug 2009
SEMINAR	1.00	0.00	28 Oct 2009 (see note 1)
DISSERTATION & DEMONSTRATIONS	100.00	100.00	30 Oct 2009 (see note 2)
PROGRESS REPORT	1.00	0.00	30 Oct 2009

### NOTES

1. Refer to Assessment Note 5 in the Assessment Notes of this Course Specification.
2. Refer to Assessment Notes 1, 2, 3 and 4 in the Assessment Notes of this Course Specification.

## IMPORTANT ASSESSMENT INFORMATION

- 1 Attendance requirements:  
There are no attendance requirements for this course, but students are expected to regularly discuss progress with their supervisor(s) through electronic communications.
- 2 Requirements for students to complete each assessment item satisfactorily:  
Students must (i) meet the requirements as set out in the Faculty of Engineering and Surveying Dissertation Handbook; (ii) provide satisfactory demonstration/s (as appropriate to the individual project topic) and (iii) give a satisfactory seminar.
- 3 Penalties for late submission of required work:  
If students submit assignments after the due date without extenuating circumstances then a penalty of 5% of the assigned mark may apply for each working day late up to a maximum of ten working days at which time a mark of zero can be recorded for that assignment.
- 4 Requirements for student to be awarded a passing grade in the course:  
To be assured of receiving a passing grade in a course a student must obtain at least 50% of the total weighted marks for the course.
- 5 Method used to combine assessment results to attain final grade:  
Grades for students will be assigned on the basis of the weighted aggregate project dissertation, demonstrations and seminar.
- 6 Examination information:  
There is no examination in this course.
- 7 Examination period when Deferred/Supplementary examinations will be held:

Not applicable.

- 8 University Regulations:  
Students should read USQ Regulations 5.1 Definitions, 5.6. Assessment, and 5.10 Academic Misconduct for further information and to avoid actions which might contravene University Regulations. These regulations can be found at the URL <http://www.usq.edu.au/corporateservices/calendar/part5.htm> or in the current USQ Handbook.

## ASSESSMENT NOTES

- 1 DEADLINES (a) Students who have not completed their dissertation by the Due Date must submit a Statement of Progress which, if judged satisfactory, will result in the award of the temporary grade of IDM. (The Statement of Progress is a two-page document that outlines the progress to-date and the future work that needs to be completed. The anticipated times at which each element of this work will be completed should also be included in the Statement of Progress.) (b) Students graded IDM must complete their projects within twelve (12) months of the Due Date. (c) Project work not completed within twelve (12) months of the Due Date will normally be graded F (Fail).
- 2 INITIAL SUBMISSION (a) Students will submit a single copy of their dissertation for assessment purposes. This copy must be bound to at least comb, spiral or equivalent standard. (b) Amendments required by the examiners must be made to the satisfaction of the supervisor before final (electronic) copies of the dissertation are submitted. (c) A dissertation that is not in the required format as specified in the Faculty of Engineering and Surveying Dissertation Handbook will not be assessed.
- 3 ASSESSMENT (a) Assessment of the project and dissertation shall be with respect to the final version of the individual project specification and will take into account the degree of difficulty of the work. (b) Project assessment may also involve demonstration of hardware constructed, software written and/or inspection of fieldwork as appropriate. (c) At least two members of academic staff shall perform the assessment, one of whom will normally be the supervisor. In the case of any dispute that cannot be resolved by the assistant examiners or examiner, the Dean's decision shall be final. (d) The recommended grade will not be confirmed until the Final Submission (item 4 below) is received and judged satisfactory.
- 4 FINAL SUBMISSION (a) Final submission must normally be within a period of three (3) calendar months from the date of return of the assessed initial submission. (b) Final dissertation submission shall be in both electronic form PLUS a printed copy of ALL pages on which amendments have been made. (c) The electronic form for the complete dissertation will normally be a single file in PDF (Adobe Portable Document Format) on a read-only compact disk (CD-R) and TWO (2) identical CDs are required. CDs which do not meet the obligatory requirements of this format as detailed in the ENG8002 course materials will not normally be accepted.
- 5 SEMINARS (a) The student shall present a seminar which must be of a satisfactory standard. (b) A student whose seminar is not of a satisfactory standard shall present further seminar/s until a satisfactory standard is achieved. (c) The seminar may be either on campus as negotiated with the course Examiners; or off campus at an event or venue to the satisfaction of the Examiner. (d) Where the seminar presentation is off campus the student will provide both a video tape or CD recording of the presentation during its delivery to the audience at the agreed event or venue; AND a copy of audio visual aids used during the presentation. (e) The seminar must normally be presented within twelve (12) months of the Due Date.

## **OTHER REQUIREMENTS**

- 1 **TOPICS AND SUPERVISORS** (a) Both project topics and supervisors will be allocated by the examiner on the advice of one of the assistant examiners depending on the student's major study, staff availability for supervision and, where practicable, student preferences. (b) The student shall communicate with the supervisor at regular intervals, normally weekly, or as indicated by the supervisor and keep whatever records of progress the supervisor may require (eg a log book).
  - 2 **PROJECT SPECIFICATION** (a) An individual project specification will be developed and written by the candidate in consultation with the supervisor for each project endorsed by the student and lodged with the examiner. Normally this specification will be based on the proposal developed in "ENG8001 Research in Engineering". (b) A revised project specification may be written during the course of the project if the work diverges significantly from the original project conception. (c) The project specification will be used for management and assessment purposes throughout the duration of the project.
  - 3 **LIMITATIONS OF USE OF PROJECT WORK** (a) The Council of the University of Southern Queensland, its Faculty of Engineering and Surveying, and the staff of the University of Southern Queensland, do not accept any responsibility for the truth, accuracy or completeness of material contained within or associated with this dissertation. (b) Persons using all or any part of this material do so at their own risk, and not at the risk of the Council of the University of Southern Queensland, its Faculty of Engineering and Surveying or the staff of the University of Southern Queensland. (c) This dissertation reports an educational exercise and has no purpose or validity beyond this exercise. The sole purpose of the course pair entitled "Research Project" is to contribute to the overall education within the student's chosen degree program. This document, the associated hardware, software, drawings, and other material set out in the associated appendices should not be used for any other purpose: if they are so used, it is entirely at the risk of the user.
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