



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: Research Project Part 2

Subject	Cat-nbr	Class	Term	Mode	Units	Campus
ENG	4112	90322	2, 2009	EXT	1.00	Toowoomba

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

### STAFFING

Examiner: Armando Apan  
Moderator: Nigel Hancock

### REQUISITES

Pre-requisite: ENG4111

### OTHER REQUISITES

Recommended prior study: ENG3902 Recommended concurrent study: ENG4903

### RATIONALE

Project work undertaken by individuals is a central part of engineering and spatial science practice. At the professional engineer/spatial scientist level project work routinely involves research in the sense that there are non-standard requirements to be met and non-standard problems to be overcome. This course requires the student to complete the project commenced in ENG4111 Research Project Part 1, and to report the complete work (ENG4111 Research Project Part 1 and ENG4112 Research Project Part 2 together) in the form of an academic research dissertation.

### SYNOPSIS

Following satisfactory progress in ENG4111 Research Project Part 1 in the preceding semester of offer, and with the continuing guidance of supervisor/s, the student will further develop skills spanning both the technical and non-technical dimensions of engineering and spatial science at the professional level. The student will study and replicate the rationale, style and format of the academic dissertation and present the total project work (comprising ENG4111 Research Project Part 1 and ENG4112 Research Project Part 2) as a dissertation.

### 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 successful completion of this course, students should be able to:

1. take responsibility for a major individual technical task and execute it to an appropriate point of completion (assessment item 2);
2. establish, manage and maintain appropriate interaction and reporting with the designated supervisor during all phases of a major technical task (assessment item 1);
3. interact appropriately with other colleagues, eg technical and administrative staff, as necessary in support of the project; (assessment item 1)
4. cope with resource and time constraints, both foreseeable and unexpected (assessment item 2);
5. critically review research findings, define their significance and develop optimal solution/s (assessment item 2);
6. demonstrate the ability to apply intellectual rigour whilst completing a major technical task (assessment item 2);
7. prepare an academic dissertation written in a clear, logical, concise and accurate professional style using standard referencing and citation conventions (assessment item 2);
8. submit a dissertation within a designated timeframe (assessment item 2).

## TOPICS

Description	Weighting (%)
1. Project work in which students will continue and complete the individual project commenced in ENG411 Research Project Part 1. These will include some (and often many) of the following: further literature research and evaluation; further analysis of consequences; further planning and management; feasibility assessment; experimental work and trialling; fieldwork; data analysis; design; prototype construction and testing; simulation and modelling; financial analysis.	60.00
2. The work will be undertaken with the guidance of a supervisor or supervisors (appointed from the academic staff of the Faculty). Sponsors and technical advisers external to the Faculty may also be involved.	10.00
3. Dissertation guidance and preparation.	30.00

## 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 and via the Internet, including literature searches, research papers, journals and trade literature files.

## STUDENT WORKLOAD REQUIREMENTS

ACTIVITY	HOURS
Private Study	10.00
Project Work	80.00
Report Writing	50.00
Supervisor Consultation	15.00

## ASSESSMENT DETAILS

Description	Marks out of	Wtg (%)	Due date
PARTIAL DRAFT DISSERTATION	1.00	0.00	18 Sep 2009 (see note 1)
PROJECT PERFORMANCE	100.00	100.00	29 Oct 2009 (see note 2)

### NOTES

1. Refer to Assessment Note 3 in the Assessment Notes of the Course Specification.
2. Refer to Assessment Notes 4, 5 and 6 in the Assessment Notes of the Course Specification.

## IMPORTANT ASSESSMENT INFORMATION

- 1 Attendance requirements:  
Students must attend the introductory session/s during the Residential School. Students must maintain regular contact with their project supervisor/s.
- 2 Requirements for students to complete each assessment item satisfactorily:  
To complete each of the assessment items satisfactorily students must meet the requirements of the item as set out in the ENG4111/2 Project Reference Book.
- 3 Penalties for late submission of required work:  
(i) Students who do not submit the assessment "Partial Draft Dissertation" by the Due Date will receive limited or zero supervisor feedback. (ii) Students who do not submit EITHER a completed project dissertation OR a brief statement of progress by the "Project Performance" Due Date will normally be graded F (Fail) in both of the courses ENG4112 and ENG4111.
- 4 Requirements for student to be awarded a passing grade in the course:  
To be awarded a passing grade in this course, together with course ENG4111 Research Project Part 1, a student must demonstrate satisfactory performance as set out in the ENG4111/2 Project Reference Book. The grade awarded will then be the same for both ENG4111 and ENG4112.

- 5 Method used to combine assessment results to attain final grade:  
The final grade will be determined on the basis of the ENG4112 dissertation which will encompass the entire ENG4111 plus ENG4112 Research Project.
- 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 Students who, for medical, family/personal, or employment-related reasons, are unable to complete an assignment or to sit for an examination at the scheduled time may apply to defer an assessment in a course. Such a request must be accompanied by appropriate supporting documentation. The following temporary grade will then be awarded IDM (Incomplete Deferred Make-up).
- 2 (i) This is a communication benchmark course and a major component of the assessment of this course will be associated with the demonstration of communication skills. (ii) The required standard of communication skills must be demonstrated in order for a passing grade to be achieved. Substandard communication (in the dissertation) will result in an automatic IM (Incomplete - Make Up) grade irrespective of the quality of the technical work of the project.
- 3 PARTIAL DRAFT DISSERTATION. (i) Students are advised to submit a substantial portion of their draft dissertations direct to their supervisor/s for feedback by the date indicated (Assessment No. 1). This is a formative assessment and no result is recorded. (ii) Students submitting a substantial portion of his/her draft dissertation to his/her supervisor/s AFTER the date indicated may receive only limited or zero feedback at the discretion of the supervisor/s.
- 4 DEADLINES. (i) The deadline for receipt of the dissertation ("Project Performance") is 4.00pm on the THURSDAY as indicated in the assessment details above. (ii) The Examiner may grant an extension of this deadline in exceptional circumstances, such as prolonged illness. To ensure equity between students only the Examiner may grant an extension. Application for such an extension must be made in writing to the Examiner and fully justified. The decision will be made with the advice of the supervisor/s. (iii) Students unable to submit, but can prove substantial progress, by this deadline ("Project Performance") must also state briefly in a letter to the Examiner why they should not be graded F (Fail) at this time. If the reasons given are considered satisfactory, and with the advice of the principal supervisor, then a grade of IM (Incomplete-Make Up) will be awarded. (iv) Projects graded IM for any reason will normally be eligible for a C grade only. (v) The FINAL DEADLINE for project submission is 4 January in the following year. Projects not submitted by this final deadline will be automatically graded F (Fail).
- 5 DISSERTATION SUBMISSION. (i) Dissertation submission shall be in both electronic and printed form with the physical format for each as follows (and with contents as detailed in the ENG4111/4112 Project Reference Book). A dissertation which does not meet the obligatory requirements of this format will not normally be accepted. (ii) 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. (iii) The printed form for the complete dissertation will be at least comb- or spiral-bound and be identical in content to the PDF file.

- 6 **PROJECT ASSESSMENT.** (i) Assessment of the complete project , ENG4111 together with ENG4112, and project dissertation shall be with respect to the final version of the individual Project Specification (course ENG4111 Research Project Part 1) and will take into account the degree of difficulty of the work. (ii) Students will not be penalised for unforeseeable events, constraints and other limitations which occur during the execution of the project. (iii) Project assessment may also involve demonstration of hardware constructed, software written and/or inspection of fieldwork as appropriate. (iv) At least two (2) members of academic staff shall perform a detailed assessment in accordance with the protocol set out in the ENG4111/4112 Project Reference Book, one of whom will normally be the principal supervisor. (v) The grade recommended by the assessors will remain confidential until various moderation procedures have been conducted by the Examiner. (vi) When a passing grade is awarded that grade will also be recorded for ENG4111 Research Project Part 1. (vii) If an F (Fail) grade is awarded then the student must re-enrol in ENG4112. If such a student does not re-enrol and achieve a passing grade within a period of (normally) twelve (12) months from the first F grade then an F grade will be awarded for BOTH courses ENG4111 Research Project Part 1 and ENG4112 Research Project Part 2 (second enrolment).

## **OTHER REQUIREMENTS**

- 1 **ENROLMENT.** (i) A student will not be permitted to undertake ENG4112 Research Project Part 2 unless he/she has a current grade of IIP (Incomplete in Progress) in ENG4111 Research Project Part 1. (ii) Students will normally undertake ENG4112 Research Project Part 2 in the semester immediately following their completion of ENG4111 Research Project Part 1. (iii) Simultaneous enrolment in ENG4903 Professional Practice 2 (which encompasses project presentation, including seminars) is expected UNLESS course ENG4112 is being undertaken as part of a postgraduate program.
- 2 **REGULATIONS.** The notes and requirements set out in this course specification, together with those of ENG4111 Research Project Part 1 Course Specification, constitute the regulations for undergraduate project work within the Faculty of Engineering and Surveying.
- 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.