



## 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 1

Subject	Cat-nbr	Class	Term	Mode	Units	Campus
ENG	4111	86329	1, 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

#### 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 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, combined with ENG4112 Research Project Part 2, prepares the student for professional-level technical project work. With the guidance of supervisor/s, the student will augment, integrate and demonstrate skills spanning both the technical and non-technical dimensions of engineering and spatial science at the professional level. The project (ENG4111 Research Project Part 1 immediately followed by ENG4112 Research Project Part 2) will develop and test the ability to define and analyse the problem, to develop solutions to the problem, to make the necessary decisions, convert ideas into useful outcomes and to cope with the unexpected problems encountered in testing and evaluation. All of this must be accomplished in a tight timeframe, within resource limitations and with due regard for safety, social and ethical considerations.

#### SYNOPSIS

The project (comprising ENG4111 Research Project Part 1 immediately followed by ENG4112 Research Project Part 2) is intended to integrate and augment the student's total formal knowledge by means of its application to a real problem at the appropriate professional level. This course (being the first half of the project) will comprise firstly the selection, negotiation and approval of a project topic appropriate to the student's major study. Following this the student will (i) research the background, context and literature, (ii) develop an appropriate methodology, (iii) demonstrate a sound appreciation of the overall task and its constraints by formal reporting, and (iv) make substantial progress in the execution of the 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 successful completion of this course, students should be able to:

1. commence and make appropriate progress in a major technical task (assessment item 1 and 2);
2. find and critically review the quality and value of information from published literature and other contextual sources (assessment item 3);
3. identify sustainability, safety and ethical issues associated with a major technical task (assessment item 3);
4. define the goals, determine an appropriate methodology, a realistic schedule, and the resource requirements for the execution of a major technical task involving research (assessment item 3);
5. provide an appropriately structured project appreciation report (assessment item 3);
6. establish, manage and maintain appropriate interaction and reporting with the designated supervisor during all phases of a major technical task (assessment item 4).

## TOPICS

Description	Weighting (%)
1. Project work in which students will plan, commence and make substantial progress in an individual, generally open-ended task which will encompass a range of technical skills appropriate to the student's major study. These will include ALL of the following: literature research and evaluation; determination of consequences; and planning and self management.	30.00
2. Project work tasks will also include some (and often many) of the following: planning and management; feasibility assessment; experimental work and trialing; fieldwork; data analysis; design; prototype construction and testing; simulation and modelling; financial analysis.	40.00
3. Project work will be undertaken with the guidance of a supervisor/s appointed from the academic staff of the Faculty. Sponsors and technical advisors external to the Faculty may also be involved.	10.00
4. Report writing.	20.00

## 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	20.00
Project Work	90.00
Report Writing	30.00
Supervisor Consultation	15.00

## ASSESSMENT DETAILS

Description	Marks out of	Wtg (%)	Due date
ASSIGN 1 TOPIC ALLOCATION	1.00	1.00	11 Mar 2009 (see note 1)
ASSIGN 2 PROJECT SPECIFICATION	1.00	1.00	24 Mar 2009 (see note 2)
ASSIGN 3 PROJECT APPRECIATION	1.00	1.00	25 May 2009 (see note 3)
ASSIGN 4 PROGRESS ASSESSMENT	100.00	100.00	18 Jun 2009 (see note 4)

### NOTES

1. Refer to Assessment Note 2 in the Assessment Notes of the Course Specification.
2. Refer to Assessment Note 3 in the Assessment Notes of the Course Specification.
3. Refer to Assessment Note 4 in the Assessment Notes of the Course Specification.
4. Refer to Assessment Note 5 in the Assessment Notes of the Course Specification. This is a supervising staff assessment of the student's progress.

## IMPORTANT ASSESSMENT INFORMATION

- 1 Attendance requirements:  
There are no attendance requirements for this course. However, it is the students' responsibility to study all material provided to them or required to be accessed by them to maximise their chance of meeting the objectives of the course and to be informed of course-related activities and administration.
- 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:

- If a student submits Assignment 1 after the due date without prior approval then that student will normally be dropped from the course.
- 4 Requirements for student to be awarded a passing grade in the course:  
To be assured of a passing grade a student must **FIRSTLY** complete each of the four (4) assessment items satisfactorily (which will result in the temporary grade of IIP (Incomplete In Progress) being awarded for this course); and **SECONDLY**, in the semester immediately following, satisfactorily complete the course ENG4112 Research Project Part 2. The passing grade awarded will then be the same for both ENG4111 and ENG4112. Students who do not complete course ENG4112 in the semester immediately following (as above) will be regraded FNC (Fail - Did Not Complete) in course ENG4111.
  - 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 TOPICS AND SUPERVISORS. (i) Students who have not indicated topic preferences or made an acceptable topic proposal (as set out in the ENG4111/2 Project Reference Book) by the date indicated above will normally be dropped from the course. (ii) Both project topics and supervisors will be allocated by the examiner on the advice of one of the assistant examiners and will depend on the student's major study, staff availability for supervision and, as far as practicable, student preferences. (iii) It is the responsibility of students to maintain regular communication with the supervisors, normally weekly or as required by the supervisor/s, and to keep whatever records of progress the supervisor/s may require (eg a log book).
- 3 PROJECT SPECIFICATION (Assessment No. 2). (i) An individual project specification will be developed by the student and supervisor for each project (spanning ENG4111 Research Project Part 1 and ENG4112 Research Project Part 2), endorsed by the student, the supervisor and the assistant examiner/examiner, and lodged with the FOES Project Administrator. (ii) A revised project specification will be written during the program of the project if the work diverges significantly from the original project conception and endorsed by the student, the supervisor and assistant examiner/examiner. (iii) The project specification will be used for management and assessment purposes throughout the duration of the project, ie including course ENG4112 Research Project Part 2.

- 4 PROJECT APPRECIATION (Assessment No. 3). (i) The Project Appreciation shall be submitted in accordance with the guidelines and requirements set out in the ENG4111/4112 Project Reference Book. (ii) An Appreciation which is unsatisfactory, in part or as a whole, must be reworked and resubmitted until satisfactory, as directed by the Examiner. (iii) Students whose Project Appreciation is not satisfactory by the Progress Assessment Due Date will be graded IDM (Incomplete Deferred Make-up) or F (Fail)
- 5 PROGRESS ASSESSMENT (Assessment No. 4). (i) A progress assessment will be conducted by the supervisor/s and may comprise an interview and/or a demonstration and/or a written report at the discretion of the supervisor. The result of the assessment will be lodged with the FOES Project Administrator. (ii) Where the Project Specification (Assessment No. 2) has not been lodged and/or the Project Appreciation (Assessment No. 3) has not been completed to a satisfactory standard by the progress assessment date, then the progress assessment will automatically be recorded as "unsatisfactory". (iii) Students who have participated but have not made satisfactory progress in their project work will be given the temporary grade of IDM (Incomplete Deferred Makeup). (iv) Students who have not participated to the satisfaction of the Examiner will be graded F (Fail). (v) Students graded IDM will be re-assessed early in Semester 2 with regard to their eligibility to undertake their project work in ENG4112 Research Project Part 2. Students judged to have made satisfactory progress by the make-up deadline will be regraded IIP. Students judged to have still not made satisfactory progress will be regraded F and will not be permitted to undertake course ENG4112 Research Project Part 2. (vi) Where unsatisfactory progress is the result of factors beyond the control of the student this shall be recorded.

## **OTHER REQUIREMENTS**

- 1 ENROLMENT. Students will normally undertake the project courses (ENG4111 Research Project Part 1 followed by ENG4112 Research Project Part 2) in the same calendar year; and this is normally expected to be their final year of enrolment in their degree program.
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