**Description: Project and Dissertation**

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<th>Subject</th>
<th>Cat-Nbr</th>
<th>Class</th>
<th>Term</th>
<th>Mode</th>
<th>Units</th>
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<tr>
<td>ENG</td>
<td>8002</td>
<td>10702</td>
<td>1, 2002</td>
<td>EXT</td>
<td>4.00</td>
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**Academic Group:** FOENS

**Academic Org:** FOENSV

**HECS Band:** 2

**ASCED Code:** 039999

**STAFFING**

Examiner: John Billingsley

Moderator: Nigel Hancock

**PRE-REQUISITES**

Pre-requisite: ENG 8001

**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**

On successful completion of this course students will be able to:

- define and investigate engineering problems;
- develop and evaluate possible solutions to engineering problems;
• identify and plan the activities necessary to implement a solution to an engineering problem;
• undertake a complex task over a period of time with minimal guidance and supervision;
• present an accurate, written account of an extensive and complicated body of work.

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 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. 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. On conclusion of the project, students will be required to present a dissertation on their work.

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
Others 20
Project Work 450
Report Writing 150

ASSESSMENT DETAILS

<table>
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<tr>
<th>Description</th>
<th>Marks Out of</th>
<th>Wtg(%)</th>
<th>Required</th>
<th>Due Date</th>
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<tr>
<td>DISSERTATION &amp; DEMONSTRATIONS</td>
<td>999.00</td>
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<td>04 Mar 2002 (see note 1)</td>
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NOTES:
1. Further details about the due dates are detailed in the assessment section of the Course Specifications.
2. Further details about the due dates are detailed in the assessment section of the Course Specifications.

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 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.

4 DEADLINES (a) The deadline for receipt of the dissertation is indicated in the Assessment Details section of the specification. (b) Credit will be given for projects completed significantly in advance of this deadline. (c) For certain projects an alternative deadline may be set. This will be stated and justified on the project specification. (d) Extension of a deadline may be granted by the examiner of the course. Application for such an extension must be made in writing to the examiner and be endorsed by the project supervisor.

5 SUBMISSION (a) At least three copies of the dissertation shall be submitted in a format stipulated by the examiner of the course. This is currently outlined in the document "Course 70714 and 70715 Project Format for Project Reports" which will be available from the assistant examiners or examiner of the course. A dissertation that is not in the required format will not be accepted.

6 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.

7 LIMITATIONS ON 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 material associated with or contained in this project. (b) Persons using all or any part of the project 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. The sole purpose of the course entitled "Project and Dissertation" is to contribute to the overall education process which may assist the graduate enter the workforce at a level appropriate to the award. (c) The dissertation is the end of an educational exercise and the body of the report, associated hardware, drawings, and other appendices or parts of the project should not be used for any other purpose and, if used, are used at the risk of the user.