



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: Engineering Practice 1

Subject	Cat-nbr	Class	Term	Mode	Units	Campus
ENG	1901	86979	1, 2009	ONC	0.00	Springfield

Academic group:	FOENS
Academic org:	FOENSV
Student contribution band:	2
ASCED code:	039999

STAFFING

Examiner: Ahmad Sharifian
Moderator: Peter Penfold

SYNOPSIS

This course is the first of a series of Practice courses that are intended to enable students to acquire engineering and professional practice skills. Engineering practice skills, such as the ability to perform practical and project work, innovation, problem identification and solution, and engineering judgement, will be developed as students progress through their programmes of study through activities such as laboratory and field work, engineering problem solving and design and project work. Students will generally work in teams to assist with the building of group interaction skills such as negotiation and interactive thinking. The development of other professional practice skills, such as written and oral communication, is also encouraged in the engineering practice courses. In this introductory course, external students will attend a residential school and undertake practical work primarily in the areas of instrumentation and measurement, or engineering materials and manufacturing. They will be required to prepare a comprehensive report and to present a seminar on one aspect of this work. Students will be introduced to the library and computing facilities of the University and are expected to utilise these resources in the compilation of their reports and seminars. A series of keynote addresses will be staged to assist students with their task. On campus students will also undertake practical work in the areas of instrumentation and measurement, or engineering materials and manufacturing, and will be required to prepare a comprehensive report and to present a seminar. For these students, the practical work will be performed throughout the semester. All students will be introduced to the Workplace Health and Safety Act and will undertake a preliminary workplace health and safety exercise. ENG1901 Engineering Practice 1 is intended primarily to cater for the needs of recent school leavers and people with limited working experience in engineering industry. If you have a trade certificate and have been employed in industry for some time, you will probably be able to claim exemption from the course.

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 will be able to:

1. demonstrate practical skills in selected technical fields; (Project Report; Seminar; Performance Record)
2. contribute as part of a team to complete a specific project in a specified time; (Participation Record; Performance Record)
3. prepare material for technical reports that demonstrates use of library and computing facilities; (Project Report; Seminar)
4. analyse scientific data and evaluate the experimental results obtained; (Project Report; Seminar)
5. contribute to the preparation of a report and the presentation of a seminar; (Project Report; Seminar; Performance Record) and
6. apply basic health and safety principles in a workplace setting. (Workplace Health & Safety Report)

TOPICS

	Description	Weighting (%)
1.	Measurement and instrumentation or engineering materials and manufacturing	60.00
2.	Analysis of data	15.00
3.	Library resources	10.00
4.	Computing	15.00

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).

ENG1901 Engineering practice 1: external study package, University of Southern Queensland, Toowoomba.

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.

MEC1201 Engineering materials: external study package, University of Southern Queensland, Toowoomba.

ENG1001 Principles of professional engineering and surveying: external study package, University of Southern Queensland, Toowoomba.

ENG1101 Engineering problem solving 1: external study package, University of Southern Queensland, Toowoomba.

STUDENT WORKLOAD REQUIREMENTS

ACTIVITY	HOURS
Laboratory or Practical Classes	24.00
Lectures	1.00
Private Study	11.00
Report Writing	12.00
Seminars	2.00

ASSESSMENT DETAILS

Description	Marks out of	Wtg (%)	Due date
WORKPLACE HEALTH & SFTY RPT	1.00	20.00	27 Mar 2009
PARTICIPATION RECORD	1.00	20.00	12 Jun 2009
PROJECT REPORT	1.00	20.00	12 Jun 2009
SEMINAR	1.00	20.00	12 Jun 2009
PERFORMANCE RECORD	1.00	20.00	12 Jun 2009

IMPORTANT ASSESSMENT INFORMATION

- 1 Attendance requirements:
It is the students' responsibility to attend and participate appropriately in all activities (such as lectures, tutorials, laboratories and practical work) scheduled for them, and 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:
(i) To satisfactorily complete an individual assessment item a student must achieve at least 50% of the marks or a grade of at least C. (ii) To complete the practical component satisfactorily, students must complete at least 80% of the practical work in this course to the standard described in the assessment scheme.
- 3 Penalties for late submission of required work:
Practical reports submitted more than five days after the due date will not be assessed.
- 4 Requirements for student to be awarded a passing grade in the course:
To be assured of receiving a passing grade students must satisfactorily complete (as defined in Statement 2) at least 50% of the practical and other activities.
- 5 Method used to combine assessment results to attain final grade:
As P is the only passing grade available for this course, all students who are qualified for a passing grade, under the requirements in 4 above, will be given a grade of P. Other students will be given either a Failing grade or an Incomplete grade.
- 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 The due date for an assignment is the date by which a student must despatch the assignment to the USQ. The onus is on the student to provide proof of the despatch date, if requested by the Examiner.
- 2 Students must retain a copy of each item submitted for assessment. This must be despatched to USQ within 24 hours if required by the Examiner.
- 3 In accordance with University's Assignment Extension Policy (Regulation 5.6.1), the examiner of a course may grant an extension of the due date of an assignment in extenuating circumstances.
- 4 The Faculty will normally only accept assessments that have been written, typed or printed on paper-based media.
- 5 The Faculty will NOT accept submission of assignments by facsimile.
- 6 Students who do not have regular access to postal services or who are otherwise disadvantaged by these regulations may be given special consideration. They should contact the examiner of the course to negotiate such special arrangements.
- 7 In the event that a due date for an assignment falls on a local public holiday in their area, such as a Show holiday, the due date for the assignment will be the next day. Students are to note on the assignment cover the date of the public holiday for the Examiner's convenience.
- 8 Students who have undertaken all of the required assessments in a course but who have failed to meet some of the specified objectives of a course within the normally prescribed time may be awarded the temporary grade: IM (Incomplete - Make up). An IM grade will only be awarded when, in the opinion of the examiner, a student will be able to achieve the remaining objectives of the course after a period of non-directed personal study.
- 9 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. One of the following temporary grades may be awarded IDS (Incomplete - Deferred Examination); IDM (Incomplete Deferred Make-up); IDB (Incomplete - Both Deferred Examination and Deferred Make-up).
- 10 To be assured of receiving a passing grade students must be judged to have made a genuine effort to contribute to the work of the team, by other team members.

OTHER REQUIREMENTS

- 1 Students will be assigned to a team at the start of the course. Each team will select a project based on the work performed at one or more practical sessions. One project report will be submitted per team; the team will present one seminar. Details of the project report and the seminar are provided in the Practice Book for the course. As part of the report,

team members are required to certify whether or not each member made an appropriate contribution to the work of the group.
