

**FACULTY OF SCIENCE, TECHNOLOGY AND ENGINEERING
QUALITY ASSURANCE OF UNITS**

Report by Unit Co-ordinator

Unit code: ELE1EDP	Year: 2008	Campus: BUNDOORA
Unit coordinator: GEOFFREY TOBIN		
Teaching staff: GEORGE ALEXANDER JIM ROYSTON GEOFFREY TOBIN		

SECTION A: NUMERICAL INFORMATION

Number enrolled: 46

Number completing the QAU questionnaire: 28

Grade distribution : A: 24 B: 7 C: 2 D: 0 E: 0 N: 7 NS: 3

Other (Please list): SAH-E: 3

SECTION B: STUDENT RESPONSES TO THE QUESTIONNAIRE

(a) Please complete the following table (with previous year's results if available)

Core Questions	2008 Mean	2007 Mean
a. Teamwork	3.8	3.7
b. Analytic Skills	3.6	3.4
c. Problem-Solving Skills.	3.5	3.1
d. Written Communication.	3.8	3.9
e. Confidence in Tackling Unfamiliar Problems.	3.6	3.5
f. Planning.	3.6	3.6
g. Oral Communication.	3.5	3.9
1. Aims Clear at Start.	3.8	3.5
2. Staff Often Commented on Student's Work.	3.4	3.6
3. Time to Understand.	3.5	3.4
4. Staff Were Understanding.	3.5	3.5
5. Assessment Appropriate.	3.6	3.9
6. Feedback Helpful.	3.6	3.4
7. Explanations Extremely Good.	3.6	3.4
8. Manageable Workload.	3.8	4.4
9. Unit Interesting.	3.9	3.8
10. Learning Resources Accessible.	4.1	4.0
11. Staff Motivated Student to do Best Work.	3.8	3.7
12. Satisfaction with Quality of Unit.	3.6	3.3

(b) Summary of student comments on best aspects

Helped me to understand the relationship between electronics and programming.

George's lectures.

Some of the guest speakers as well as George's experience in a real company.

Learning about skills in the industry and talks from various people from the field.

Learning about future job opportunities.

Formal report. [2 students.]

Using different and new programs.

The labs. [5 students.]

Duration of labs was about right.

A lot of useful stuff to do in the lab.

The lab classes were very good.

The classes were enjoyable.

Helped with written and oral communication.

The projects.

Project management.

Practising soldering.

"All of it."

(c) Summary of student comments on needed improvements

No improvements required. [3 students.]

More explanation about topics and assignments.

The structure is slightly odd.

The student to teacher ratio. [3 students.]

Lecture room. [Required improvement not specified.]

Lab instruction. [No details given.]

Communications. [Not elaborated.]

Less lectures.

The last lab about the Fire alarm: it needs clearer instructions.

Cover and review more of the C programming language.

SECTION C: UNIT COORDINATOR'S COMMENTS

(d) Last year's suggested improvements

- 1) *More lectures on Java design, and more laboratory examples of Java code.*
- 2) *Refinement of laboratory notes.*

(e) Unit coordinator's comments on the unit this year

In 2008, Java was replaced in the labs by C, and new project boards were designed and constructed to enable that change.

The Matlab notes were greatly extended.

Enrolments increased from 30 to 46. The survey was brought forward to ensure that more students were present to be surveyed. (Last year the survey was made when a number of students had already completed the project.)

The number of high scoring students greatly increased: 24 As, 7 Bs in 2008; versus 9 As, 12 Bs in 2007. On the downside, 2008 had 7 Ns, but 2007 had only 2 Ns.

The PCB lectures were not examined in 2008. This should have led to a decrease in the number of Ns. However, the examination papers indicated that many students had not taken the time to prepare. Although past papers and solutions are available online, and the students often reminded of them in classes, it's clear by the mistakes made that the students who failed did not avail themselves of this opportunity, nor did they revise their notes, or take note of the statements made about what material would be examined.

(f) Unit coordinator's suggestions for improvements next year

*The last lab about the Fire alarm: it needs clearer instructions.
Cover and review more of the C programming language.*

I intend to address the particular student weaknesses revealed in the examination by setting assignments targeted to those particular topics. This will then be followed up by prompt and precise feedback to individual students according to their need.

The Fire Alarm labs, which last year changed implementation yet again, require expanded notes.

More lecture material will be provided on the C language, especially those aspects of most use in the laboratory.

The ever shrinking resource budget, especially for casual demonstrators, severely limits our ability to improve the staff-student ratio in this laboratory intensive subject. Other laboratories (including those with which I'm involved) have severe and increasing issues due to failures of vital equipment that is aging. It would be much appreciated if the university, faculty and school would take these facts into serious consideration when (re)distributing funds.

SECTION D: COMMENTS BY HEAD OF SCHOOL OR NOMINEE

Substantially revised content. Will run better next year.

Signed

(Head of School)

Date: 6 March 2009