310206

Engineering Foundations Principles and Communications 100

Dr Euan Lindsay (Unit Coordinator)

Engineering Foundation Year
Curtin Engineering

UNIT OUTLINE

Semester 1 2010

Curtin University of Technology

CRICOS (Perth - 00301J) (Sydney - 02637B)

Table of Contents

INTRODUCTION

Welcome to Curtin Engineering. The School of Engineering at Curtin aspires to be nationally and internationally recognised as a leader in Engineering education and research. We are dedicated to the enhancement of teaching and research and the pursuit of excellence and innovative applications of engineering technology as a contribution to the advancement of scientific knowledge, understanding and community relevance.

ESSENTIAL ADMINISTRATIVE INFORMATION

Unit Title	Engineering Foundations Principles and Communications 100
Unit Study Package Number	310206
Unit Coordinator	Dr Euan Lindsay (Unit Coordinator)
Teaching Area	Engineering Foundation Year
Credit Value	25
Mode(s) of study	Supplemental
Pre-requisites	None.
Co-Requisites	None.
Anti-requisites	None.
Additional requirements	None.
Core Unit	Bachelor of Engineering (Pre-Major)
Core Unit status	If you are taking this unit as a required (core) unit in your course of study, you may be terminated from your course of study if you fail this unit twice.
Result Type	This is a grade/mark unit.
Ancillary Fees and Charges	All fee information can be obtained through the Fees Centre. Visit http://www.fees.curtin.edu.au/index.cfm for details.
Unit Website	http://lms.curtin.edu.au
Faculty or School Website	http://engineering.curtin.edu.au/

Tuition Pattern	**Lecture:** - Briefing (1.5 hours weekly) **Tutorials:** - Skills Development Workshop (1 hour weekly) - Production Meetings (1.5 hours weekly) **Site Visits:** - 2 Industry site visits **Drawing Workshop:** - 1 Drawing Workshop

TEACHING STAFF

The lecturer or tutor for this unit and their contact details are below:

Unit Coordinator:	Dr Euan Lindsay (Unit Coordinator)
Email:	e.lindsay@curtin.edu.au
Phone:	9266 7577
Building:	204
Room:	527
Contact Hours:	All general enquiries can be directed to Karen Sullivan.

Your lecturer or tutor:	Ms Helen Rogers (Communications Coordinator)
Email:	h.rogers@curtin.edu.au
Phone:	9266 2545
Building:	209
Room:	426
Contact Hours:	All general enquiries can be directed to Karen Sullivan.

Your lecturer or tutor:	Dr Chua Han Bing (Miri Coordinator)
Email:	chua.han.bing@curtin.edu.my
Phone:	8544 3939
Building:	GP401
Room:	208B
Contact Hours:	All general enquiries can be directed to Karen Sullivan.

Your lecturer or tutor:	Ms Karen Sullivan (Unit Support Officer)
Email:	k.sullivan@curtin.edu.au
Phone:	9266 1359
Building:	204
Room:	316
Contact Hours:	All general enquiries can be directed to Karen Sullivan.

The teaching staff will assist you with your learning and any problems or difficulties you may be experiencing while undertaking this unit. They will also mark your assignments and provide feedback in relation to your progress in this unit.

UNIT COORDINATOR

Every unit also has a person who is responsible for the overall administration of that unit. This person is the Unit Coordinator. If you cannot contact the person who is teaching you (named above) or if you have further queries about this unit, you may wish to contact the Unit Coordinator for this unit. Their contact details are below:

Unit Coordinator:	Dr Euan Lindsay (Unit Coordinator)
Email:	e.lindsay@curtin.edu.au
Phone:	9266 7577
Building:	204
Room:	527
Contact Hours:	All general enquiries can be directed to Karen Sullivan.

UNIT SYLLABUS

- Structure of the engineering industry.
- How engineering works.
- Working as an engineer.
- Engineers' responsibilities and duties.
- The engineer and the environment.
- Working in a team.
- Academic writing and ethical scholarship.
- Report writing within engineering academic and professional contexts.
- Developing reflective learning and oral communication skills.

LEARNING OUTCOMES

On successful completion of this unit you will be able to:

1. Demonstrate critical, logical and reflective skills appropriate to university study.
2. Demonstrate improvement in communication skills, written and oral, with a particular focus on using clear, concise language appropriate to engineering.
3. Demonstrate and articulate an understanding of professional engineering, its structure, workings and relationships with society.
4. Identify, define and provide solutions to engineering problems.
5. Apply scientific and technical theory to engineering problems. Understanding of the principles of sustainable design and development. Systematic approach to design.
6. Research and produce formal engineering style reports demonstrating control of appropriate conventions and incorporating the appropriate referencing system.
7. Work collaboratively with others and articulate practices that lead to successful teamwork especially in a multicultural context.

LEARNING ACTIVITIES

Lecture:

- Briefing (1.5 hours weekly)

Tutorials:

- Skills Development Workshop (1 hour weekly)

- Production Meetings (1.5 hours weekly)

Site Visits:

- 2 Industry site visits

Drawing Workshop:

- 1 Drawing Workshop

STUDENT FEEDBACK

For Semester 1 and Semester 2 ***e*VALUate** is open for student feedback:

17 May - 27 June Semester 1
18 October - 28 November in Semester 2

For other study periods see
http://evaluate.curtin.edu.au/info/dates_2010.cfm

We welcome your feedback as one way to keep improving this unit. Later this semester, you will be encouraged to give unit feedback through ***e*VALUate**, Curtin's online student feedback system (see http://evaluate.curtin.edu.au).

SCIENTIFIC CALCULATORS

All students enrolled in EFY units that require exam assessments will be issued with a HP10s Scientific Calculator. This is the only approved calculator that is to be used in exams for these units.

The calculator can be collected from the Assignments and Enquiries Office located on Level 2 from Week 1. You will need to present your ID card for collection.

Please note only one calculator will be issued per student and any replacement calculators are the responsibility of the student.

LEARNING RESOURCES

FLECS - Blackboard is the primary learning and information resource. You MUST check Blackboard reguarly for up to date information. Links to other learning resources will be available here if needed.

TEXT BOOK

You will need to purchase the following textbook in order to complete this unit:

- The following textbook is required for the communications component of both Engineering Foundations Design and Processes 100 and Engineering Foundations Principles and Communications 100.
- Grellier, J & Goerke, V 2006, Communication Skills Toolkit: Unlocking the Secrets of Tertiary Success, Thomson Social Science Press, South Melbourne.

Recommended Texts:

You do not have to purchase the following textbooks but you may like to refer to them.

- None.

ASSESSMENT DETAILS

Assessment Summary

The assessment for this unit consists of the following items.

Assessment Tasks	Week Due	Worth
Stage 1 (100 marks) - Wks 1, 2, 3	4	20
Stage 2 (100 marks) - Wks 4, 5, 6	6, 7, 8	30
Stage 3 (100 marks) - Wks 7, 8, 9	9, 10	30
Stage 4 (100 marks) - Wks 10, 11, 12	10, 11, 12	20
TOTAL		**100%**

Assessment Task Details

The EFPC 100 unit consists of the following assessments:

- **Stage 1 Design and Drawing - 100 marks**
  - Drawing and Design (70 marks)
  - Stage 1 Weekly Team Performance (5 marks)
  - Stage 1 Company Log Review (25 marks)

- **Stage 2 Tendering Process - 100 marks**
  - Contractors' Tenders (30 marks)
  - Designers' Review and Recommendations (30 marks)
  - Stage 2 Weekly Team Performance (15 marks)
  - Stage 2 Company Log Review (25 marks)

- **Stage 3 Production - 100 marks**
  - Handover Process (20 marks)
  - Stage 3 Weekly Team Performance (10 marks)
  - Stage 3 Company Log Review (25 marks)
  - Site Visit Report 1 (15 marks)
  - Site Visit Report 2 (30 marks)

- **Stage 4 Commissioning - 100 marks**
  - Performance Testing (50 marks)
  - Oral Presentations - Individual (20 marks)
  - Oral Presentations - Group (30 marks)

Supplementary and Deferred Assessments

Students granted a Supplementary or Deferred assessment will be notified via OCC. Supplementary and Deferred assessments will be held on Wednesday 17th, Thursday 18th and Friday 19th February 2010. Please also note that the failure to attend the examination/assessment on the day and time set will result in a fail for the unit. Under no circumstances will alternative arrangements be made to suit individuals.

Referencing Style

Curtin Engineering advises students that Curtin University supports the "Chicago Referencing Style" for written work and oral presentations. For a guide to this style please see

http://library.curtin.edu.au/referencing/index.html

However, students are permitted to use other recognised styles that appear in the Engineering literature. Note also that individual lecturers can stipulate that a particular style is used when it best matches the type of work in the assessment of the particular unit.

Awarding of Grades

To pass this unit you must:

- Achieve a grade/mark greater than or equal to 5/50.
- Must have attempted and satisfactorily completed all assessment tasks.

STUDENTS' RIGHTS AND RESPONSIBILITIES

It is the responsibility of every student to be aware of all relevant legislation, policies and procedures relating to their rights and responsibilities as a student. These include:

- the Student Charter,
- the University's Guiding Ethical Principles,
- the University's policy and statements on plagiarism and academic integrity,
- copyright principles and responsibilities,
- the University's policies on appropriate use of software and computer facilities,
- students' responsibility to check enrolment,
- deadlines, appeals, and grievance resolution,
- student feedback,
- other policies and procedures
- electronic communication with students

See www.students.curtin.edu.au/administration/responsibilities.cfm for comprehensive information on all of the above.

ADDITIONAL INFORMATION

Telephone Contacts:

If you have a query relating to administrative matters such as:-

- requests for deferment of study
- difficulties with accessing online study materials
- obtaining assessment results

please contact your Unit Coordinator:

Unit Coordinator:	Dr Euan Lindsay (Unit Coordinator)
Email:	e.lindsay@curtin.edu.au
Phone:	9266 7577
Building:	204
Room:	527
Contact Hours:	All general enquiries can be directed to Karen Sullivan.

UNIT STUDY CALENDAR

If you have a printed copy of this document, you may like to tear off this final page and keep the Study Calendar handy as you work through the unit.

Semester 1 2010

WK	BRIEFING	PRODUCTION MEETING	SKILLS DEVELOPMENT WORKSHOP	SITE VISITS	WORKSHOPS	ASSESSMENT DUE
1.	Motivation for the Unit Final Destination Unit Overview Project Overview Stage 1 Preview Activity Tracking	Company Registration Stage 1 Details Activity Tracking Introduction	Introduction Company Profiles & websites Company Log Files Team roles		Drawing Workshop	
2.	Course Calendar Company Presentations Stage 1 Overview Activity Tracking	Client's Brief Design Problems/Solutions Weekly Team Performance	Company Log File Company Profiles Professional Communication			Stage 1 Weekly Team Performance
3.	Course Calendar Company Presentations Legal Issues Stage 2 Preview	Client's Brief Design Problems/Solutions Weekly Team Performance	Site Visit brainstorming Site Visit observations Site Visit Report requirements Discuss Company Log File for first submission.	Site Visit 1		Stage 1 Weekly Team Performance
4.	Course Calendar Company Presentations Stage 1 Clarifications Stage 2 Overview Teamwork	Client's Brief Design Problems/Solutions Weekly Team Performance	Report Writing Report Structure Appropriate Sources Academic Research	Site Visit 1		Stage 1 Project Submission Stage 1 Company Log Review
Tuition Free Week						
Tuition Free Week						
5.	Course Calendar Company Presentations Stage 1 Feedback Stage 2 Clarifications	Client's Brief Design Problems/Solutions Weekly Team Performance	Site Visit Report - Structure, format, contents, in-text referencing, recommendations etc.	Site Visit 1		Stage 2 Weekly Team Performance
6.	Course Calendar Company Presentations Stage 2 Clarifications Stage 3 Preview	Client's Brief Design Problems/Solutions Weekly Team Performance	Report Writing - workshop Integrating graphics, conclusions and recommendations Discuss Company Log File for second submission	Site Visit 2		Stage 2 Contractors' Submission Stage 2 Weekly Team Performance
7.	Course Calendar Company Presentations Senior Managers Panel Stage 3 Overview	Design Problems/Solutions Weekly Team Performance	Reflective Writing	Site Visit 2		Stage 2 Designer's Review Stage 2 Company Log Review Site Visit Report 1 Stage 3 Weekly Team Performance

WK	BRIEFING	PRODUCTION MEETING	SKILLS DEVELOPMENT WORKSHOP	SITE VISITS	WORKSHOPS	ASSESSMENT DUE
8.	Course Calendar Company Presentations Graduates Panel Stage 3 Clarifications	Design Problems/Solutions Weekly Team Performance	Feedback on Company Log File submission Presentation skills	Site Visit 2		Stage 3 Weekly Team Performance
9.	Course Calendar Company Presentations Graduates Panel Stage 3 Clarifications Stage 4 Overview Stage 2 Feedback	Design Problems/Solutions Weekly Team Performance	Feedback Session on Site Visit Reports			Stage 3 Weekly Team Performance
10.		Design Problems/Solutions Weekly Team Performance	Developing Oral Communication and Presentation Skills			Stage 3 Company Log Review Testing Session 1 Testing Session 2
11.	Stage 4 Testing Session 3 Stage 4 Testing Session 4	Oral Presentations Rehearsals	Oral Presentations Rehearsals			Site Visit 2 Report Testing Session 3 Testing Session 4 Oral Presentations Peer Assessment
12.	Project Award Presentations	Oral Presentations (including Industry Representatives)	Oral Presentations (including Industry Representatives)			Oral Presentations (including Industry Reps)
Study Week						
Examinations						
Examinations						

END OF UNIT OUTLINE