SUBJECT OUTLINE

32933 Research Project

Course area  UTS: Engineering and Information Technology
Delivery    Spring 2012; City
Credit points  6cp
Requisite(s)  32144 Technology Research Preparation
               There are also course requisites for this subject. See access conditions.
Result type  Grade and marks

Other requisites: FEIT

Subject coordinator
Dr. Haiyan (Helen) Lu

room: 10.04.552
phone: 9514 1758
fax: 9514 4535
e-mail: haiyan.lu@it.uts.edu.au

Subject description
Students undertake research that involves a substantial investigation under the supervision of a member of academic staff. Students apply the research methods and approaches, including a literature review and a formal research project. The subject is examined on the quality of a written report, oral presentation and management of the project work.

Subject objectives
This subject is intended to give participants the experience of working independently on a research project. The project should be industrially linked and will build upon the core and elective subjects already undertaken by the participant. The project must be consistent with the participant's professional career goals.

On successful completion of this subject participants will be able to:
1. demonstrate competency in conceptualising, designing, planning and implementing research studies in their field of study and practice;
2. apply at least one research method;
3. write a research report in appropriate format and style, including the research background, design, implementation, results and conclusions; and
4. give an oral presentation on the research background, design, implementation, results and conclusions to an audience of peers and staff.

Contribution to course aims and graduate attributes
This subject will provide participants with a means of implementing and enhancing previous studies by providing the opportunity to apply knowledge already learned to a practical application area. This must be complemented by a professional approach to research in the chosen application area.

Teaching and learning strategies
The subject is independent and self-motivated work by the participant, assisted by the participant's individual project supervisor and the subject co-ordinator.

There are no formal classes in this subject except for the introduction session in the first week (check the timetable for the time and venue).

Content
The participant will undertake a project consisting of a significant research component in a selected ICT disciplinary
area. The project will be:
- of direct interest to the participant;
- of value to the participant’s professional development and
- consistent with the participant’s professional career goals.

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<tr>
<th>Program</th>
<th>Week/Session</th>
<th>Dates</th>
<th>Description</th>
<th>Notes:</th>
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<td>1</td>
<td>30 Jul</td>
<td>• Introduction to Subject</td>
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<td>• Requirements for the proposal</td>
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<td>• Proposal assessment criteria</td>
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<td>• Set regular meeting schedule with UTS principal supervisor. It is recommended to have a meeting fortnightly at least.</td>
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<td>• update logbook</td>
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<td>6 Aug</td>
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<td>• Regular meeting with the supervisor</td>
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<td>• Update the logbook</td>
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<td><strong>Proposal assessment form due</strong></td>
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<td>Enrollment confirmation: We strongly recommend the people whose proposals are not passed to withdraw from the subject because without a workable proposal by this time, there is a very high chance to fail the subject.</td>
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| 10 Sept | **Notes:**
|         | • Regular meeting with the supervisor      |
|         | • Update logbook                           |
| 17 Sept | Faculty Tutorial Week                      |
|         | **Notes:**
|         | • Regular meeting with the supervisor      |
|         | • Update logbook                           |
| 24 Sept | Vice-Chancellor's Week                     |
|         | **Notes:**
|         | • Regular meeting with the supervisor      |
|         | • Update logbook                           |
| 1 Oct   | **Notes:**
|         | • Regular meeting with the supervisor      |
|         | • Update logbook                           |
| 8 Oct   | **Notes:**
|         | • Regular meeting with the supervisor      |
|         | • Update logbook                           |
| 15 Oct  | **Notes:**
|         | • Regular meeting with the supervisor      |
|         | • Update the logbook                       |
| 22 Oct  | **Notes:**
|         | Draft report due                           |
|         | Presentation preparation                   |
| 29 Oct  | **Notes:**
|         | Presentation week                          |
| 5 Nov   | **Notes:**
|         | Final report and research logbook are due. |
**Additional information**
A participant needs to register the project using the Project Registration Form.

A participant needs to send the proposal assessment form to the supervisor for approval and send the approved form to the subject coordinator.

It is recommended that a participant get the proposal assessment form signed by the UTS principal supervisor by Wednesday in Week 3 because a participant still can enrol into other subjects if he or she withdraws from the subject. If a participant has not sent the approved proposal assessment form to the subject coordinator by the end of Week 3, he or she is strongly recommended to withdraw from the subject because he or she will have a very high risk to fail the subject.

**Assessment**

**Assessment item 1: Research Report**

**Intent:** This item is for assessing a participant's competence in the following aspects:

- Demonstrated sound understanding of the current developments in a selected ICT and/or professional practice.
- Demonstrated good knowledge of research principles and methods applicable to a selected ICT disciplinary area.
- Skills to reflect critically on theory and professional practice in a selected ICT area.
- Skills to investigate, analyse and synthesise complex information, problems, concepts and theories or techniques.
- Skills to apply technical knowledge, IT research methodology, and appropriate tools and resources to meet specified research objectives.
- Skills to design, implement and evaluate components, systems or processes, and to analyse the results.
- Ability to apply established theories and/or technology to solve technically challenging ICT problems
- Ability to use of core body of specialised, in-depth, knowledge for the research topic in a selected ICT disciplinary area.
- Ability to present the development of his or her project, including background, problem formulation, assumptions, modelling, experiments and results with discussions, in a succinct and cogent form to specialist and non-specialist audience.
- Professional judgement and/or decision making at a level that would be reasonably expected from a near ICT postgraduate.
- Demonstrated awareness of legislation, statutory requirements standards and codes of practice relevant to your research project, if applicable.
- Demonstrated ability to comprehend, analyse and quantify the nature of risk, both of an IT technical kind and in relation to clients, users, the community and the environment and devise strategies for managing this risk, if applicable.

**Objective(s):** 1-3

**Weighting:** 50%

**Due:**
- Wednesday, 24th Oct. 2012, submit the draft report to the supervisor(s) as per their requirements, and
- Wednesday, 7th Nov. 2012, submit the final report to the supervisor(s), as per their requirements.
Task: A research report should be a written report which outlines the motivation behind the topic choice, a literature review and a detailed description of the research undertaken, the methodology used, the results and conclusions, and an outline of future research in the area.

The work will be graded on its quality as a piece of independent research, and on the quality of the written report.

It should be clear that the intellectual effort expended on Research Project (6cp) is no less than that normally required to pass course work of the same number of credit points.

A project can be done in a group of up to three people. One group produce one report with individual participant's reflection and contribution statements. The report will be marked as a whole, but the individual mark will depend on the individual contribution, which will be assessed by the group members. As a result, the members in the same group may end up having different marks.

All group members should participate in the presentation. The presentation will be marked as a goup and every participant will get the same mark.

The logbook will be assessed individually.

The draft report should be submitted to the supervisor(s) on 24 Oct. 2012 for commenting.

The final report should be submitted to your supervisor and UTSONline Turnitin Assignment.

**Statement about late submission penalties** Late assignments will be deducted two marks per day late; more than seven days late the assignment will receive zero.

### Assessment item 2: Oral Presentation

**Intent:** This item is for assessing a participant's oral communication skills and ability of presenting arguments clearly and concisely to specialist and non-specialist audience.

**Objective(s):** Objective 4 -- "Participants should be able to give an oral presentation on the research background, design, implementation, results and conclusions to an audience of peers and staff."

**Weighting:** 40%

### Assessment item 3: Research Logbook/Diary

**Intent:** This item is for assessing a participant's ability to manage his or hers own time and processes effectively, prioritising competing demands to achieve the required goals and objectives.

**Objective(s):** 1

**Weighting:** 10%

### Minimum requirements

In order to pass the subject, a participant must achieve a final weighted mark of at least 50 percent.

### References

As relevant to the proposed area of study (specialisation).

In terms of writing and communication in information technology (including disseminating research results), the following book is recommended: Justin Zobel, (2004) *Writing for Computer Science* (*Springer-Verlag*, Singapore). This book provides an excellent resource for those needing to write papers, reports, these and other professional documents in the field of Information Technology together with other material at [www.justinzobel.com](http://www.justinzobel.com). In addition, the texts and readings given for the prerequisite Technology Research Preparation subject will be useful for various aspects of this subject.
Other resources
Student Guide

Academic liaison officer
Academic Liaison Officers (ALOs) are academic staff in each faculty who assist three groups of students:

- students with disabilities and ongoing illnesses
- students who have difficulties in their studies because of their family commitments (e.g. being a primary carer for small children or a family member with a disability)
- students who gained entry through inpUTS Educational Access Scheme or Special Admissions.

ALOs are responsible for determining alternative assessment arrangements for students with disabilities. Students who are requesting adjustments to assessment arrangements because of their disability or illness are requested to see a disability services officer in the Special Needs Service before they see their ALO.

The ALO for IT students is:

Dr Julia Prior
telephone: +61 2 9514 4480
email: Julia.Prior@uts.edu.au

Support
Students should email the Subject Coordinator as soon as possible (and prior to the assessment deadline) to make them aware of the impact on them meeting assessment component/requirements, and that they are seeking assistance through UTS Special Needs as detailed in Section 5.1.3 of Procedures.

Improve your academic and English language skills: HELP (Higher Education Language and Presentation Support) Service provides assistance with English language proficiency and academic language. Students who need to develop their written and/or spoken English should make use of the free services offered by HELPS, including academic language workshops, vacation intensive courses, drop-in consultations, individual appointments and Conversations@UTS (www.ssu.uts.edu.au/helps). HELPS is located in Student Services, on level 3 building 1 at City campus and via the Student Services area at Kuring-gai campus. Phone 9514-2327 or 9514-2361.

The Faculty of Engineering and IT intranet (MyFEIT: http://my.feit.uts.edu.au/myfeit) and the Faculty Student Guide (http://my.feit.uts.edu.au/modules/myfeit/downloads/StudentGuide_Online.pdf) provide extensive information about the services and support available to students within the Faculty.

Disclaimer
This outline serves as a supplement to the Faculty of Engineering and Information Technology Student Guide. On all matters not specifically covered in this outline, the requirements specified in the Student Guide apply.