ITEC810
Information Technology Project
S1 Evening 2016
Dept of Computing

Contents

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Information</td>
<td>2</td>
</tr>
<tr>
<td>Learning Outcomes</td>
<td>2</td>
</tr>
<tr>
<td>Assessment Tasks</td>
<td>3</td>
</tr>
<tr>
<td>Delivery and Resources</td>
<td>26</td>
</tr>
<tr>
<td>Unit Schedule</td>
<td>28</td>
</tr>
<tr>
<td>Learning and Teaching Activities</td>
<td>30</td>
</tr>
<tr>
<td>Policies and Procedures</td>
<td>30</td>
</tr>
<tr>
<td>Graduate Capabilities</td>
<td>32</td>
</tr>
<tr>
<td>Changes from Previous Offering</td>
<td>35</td>
</tr>
<tr>
<td>Standards</td>
<td>35</td>
</tr>
</tbody>
</table>

Disclaimer
Macquarie University has taken all reasonable measures to ensure the information in this publication is accurate and up-to-date. However, the information may change or become out-dated as a result of change in University policies, procedures or rules. The University reserves the right to make changes to any information in this publication without notice. Users of this publication are advised to check the website version of this publication [or the relevant faculty or department] before acting on any information in this publication.

http://unitguides.mq.edu.au/unit_offerings/54910/unit_guide/print
**General Information**

<table>
<thead>
<tr>
<th>Unit convenor and teaching staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenor, Lecturer</td>
</tr>
<tr>
<td>Abhaya Nayak</td>
</tr>
<tr>
<td><a href="mailto:abhaya.nayak@mq.edu.au">abhaya.nayak@mq.edu.au</a></td>
</tr>
<tr>
<td>Contact via email</td>
</tr>
<tr>
<td>E6A-382</td>
</tr>
<tr>
<td>4pm - 5pm, Fridays</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admission to MInfoTech and (16cp in ITEC units at 800 level including ITEC812) and GPA of 2.75 (out of 4.0)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Corequisites</th>
</tr>
</thead>
</table>

| Co-badged status |

<table>
<thead>
<tr>
<th>Unit description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depending upon a candidate's specialist stream, interests and employment circumstances, this unit may comprise literature research, a case study, a software project development, a project sponsored by the candidate's employer, or an industry internship. Candidates are expected to demonstrate initiative and independence in researching, executing and documenting an involved information and communications technology project. As a requirement of this unit students must participate in an ethics workshop and satisfy the related assessment requirements.</td>
</tr>
</tbody>
</table>

**Important Academic Dates**

Information about important academic dates including deadlines for withdrawing from units are available at [http://students.mq.edu.au/student_admin/enrolmentguide/academicdates/](http://students.mq.edu.au/student_admin/enrolmentguide/academicdates/)

**Learning Outcomes**

1. Apply research methods in the planning, analysis, design, implementation, delivery and maintenance of software systems, considering the importance of professional ethics, and of how to recognize and address ethical issues when they arise.
2. Design and execute a project from a brief initial specification through to a complete set of agreed outcomes and demonstrate an advanced understanding for systems analysis and/or development projects in the area of IT.

3. Conduct a survey of the background literature, drawing out the key themes and issues and making comparisons between previous research studies and the research methods used for investigation and implementation of software systems.

4. Develop academic skills such as academic writing and oral presentation, note-taking and revision, locating information, and managing deadlines and heavy reading loads; and give clear, concise and coherent verbal presentations.

5. Develop better understanding of one’s own strengths and weaknesses, and ability to utilise these.

6. Present the results of work carried out in a detailed and appropriately structured report, and communicate effectively in both spoken and written forms.

**Assessment Tasks**

<table>
<thead>
<tr>
<th>Name</th>
<th>Weighting</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Progress</td>
<td>5%</td>
<td>As agreed with supervisor.</td>
</tr>
<tr>
<td>Project Description</td>
<td>5%</td>
<td>Week 2 and 3; Friday noon</td>
</tr>
<tr>
<td>Project Proposal</td>
<td>10%</td>
<td>Week 4 and 5; Friday noon</td>
</tr>
<tr>
<td>Report Outline</td>
<td>15%</td>
<td>Week 6 and 9-10; Friday noon</td>
</tr>
<tr>
<td>Ethics Assignment</td>
<td>5%</td>
<td>Week 8, Friday noon</td>
</tr>
<tr>
<td>Final Report</td>
<td>60%</td>
<td>Week 12 &amp; Week 13, Friday noon</td>
</tr>
</tbody>
</table>

**Project Progress**

Due: **As agreed with supervisor.**

Weighting: 5%

You are expected to meet your supervisor every week to discuss your project’s progress, starting in Week 1 of teaching. This may be in the form of formal reports to your supervisor by sending emails, or through informal ace-to-face meetings. At the end of the term, your supervisor will evaluate and mark your progress in the project. This process encourages you to work to a plan, and to actively replan if necessary.

This Assessment Task relates to the following Learning Outcomes:
• Apply research methods in the planning, analysis, design, implementation, delivery and maintenance of software systems, considering the importance of professional ethics, and of how to recognize and address ethical issues when they arise.

• Design and execute a project from a brief initial specification through to a complete set of agreed outcomes and demonstrate an advanced understanding for systems analysis and/or development projects in the area of IT.

• Develop academic skills such as academic writing and oral presentation, note-taking and revision, locating information, and managing deadlines and heavy reading loads; and give clear, concise and coherent verbal presentations.

• Develop better understanding of one's own strengths and weaknesses, and ability to utilise these.

• Present the results of work carried out in a detailed and appropriately structured report, and communicate effectively in both spoken and written forms.

Project Description

Due: Week 2 and 3; Friday noon
Weighting: 5%

This assignment involves two steps: Reporting (worth 3 marks) and Presentation (worth 2 marks). The aim here is to get you to collect the important information together in 500 words.

First step: a reporting is to be submitted in Week 2. This report consists of an Abstract, including the following details about your project:

• aim of the project
• research problem and/or research question
• significance and benefits
• methodology to be used
• expected outcomes

Please ensure that your document is submitted with a filename that has the following format:

• ‹FamilyName_Givenname›_Abstract.pdf

So, for example, if David Wu was submitting a report abstract, it would have the following filename:

• David_Wu_Abstract.pdf

Assessment of Project Abstract

The abstract will be assessed according to the following rubric.
The second step is a Presentation. Your Initial Project Presentation is a four-minute in-class presentation (including one minute for Q&A) that you will give in class in Week 3: its function is to ensure that you have established a project and understood what its goals are. It also gives me an idea of your ability to make presentations.

This page explains the requirements for the Initial Project Presentation that you are required to submit for ITEC810.

### Submission Requirements for the Initial Presentation

You should submit your Initial Project Presentation, in the form of a PowerPoint file consisting of no more than four slides including your title slide, via the class iLearn website. The limited time we have available means that you will be given three minutes to present your slides in class (and one minute for Q&A).

### The Aims of Initial Presentation

This assignment has the following aims.

1. It forces you to establish some key parameters regarding your project as early as possible.
2. It makes sure you get over your first taste of stage fright early in the semester.
3. It gives others an idea of your current level of ability and comfort in giving presentations.

Don't be deceived by the fact that the deliverable for this assignment is only a four-minute presentation: you are expected to put a significant amount of work into its preparation, and you will be assessed on that basis. You must ensure that you have rehearsed your presentation

---

| Comprehensiveness of Project Abstract | Incomplete, in that it does not provide a brief statement of all three: the problem, approach and outcomes; or, all three are expressed, but the description is muddled and generally unclear. | Conveys the problem, the approach, and outcomes, but a little less clearly than might be expected, or at an inappropriate level of detail. | Stands as a surrogate for the full description: a clear summary of the problem, approach and outcomes; but may require some rewording to make it accessible to a non-specialist. | An excellent summary of the work to be carried out, clearly stating the problem, the approach, and the outcomes, in a manner that is accessible to a technical but non-specialist audience. |
carefully: under no circumstances will you be able to go beyond the allocated four minutes you have for presenting your material. Within that time-frame, your aim is to communicate to the class what problem you are trying to solve, why it is important, and the approach you intend to take.

Presentation Format and Structure
Make sure your submission meets the following requirements.

1. Your presentation should be provided as a PowerPoint file or a PDF file consisting of no more than four slides.
2. Read the Hints and Tips on Giving Presentations document for a checklist of things to watch out for in preparing and presenting your slides.
3. Your first slide should be a title slide that gives the title of your project, your name, your student number and your supervisor’s name.
4. Your second slide should communicate the key problem your project aims to solve, and indicate why the problem is important; you should do this in two or three bullet points at most. Aim to be clear and concise.
5. Your third slide should indicate the approach you intend to take, in the form of a numbered list of steps. You can think of this as a high-level project plan.
6. Your fourth slide can consider potential results and summarise what you are trying to achieve.

Your goal is to communicate an understanding of your project to the audience; bear in mind that your audience is your classmates, and you cannot assume that they will be familiar with your topic area.

Please ensure that your slides are submitted with a file-name that has the following format:

- ‹FamilyName_Givenname›_abstractPres.ppt (or .pdf as required)

So, for example, if I was submitting my presentation, it would have the following file name:

- Nayak_Abhaya_abstractPres.ppt (or .pdf)

Assessment of Initial Project Presentation
The initial Presentation will be assessed according to the following rubric.
<table>
<thead>
<tr>
<th>Presentation Structure</th>
<th>Didn't follow the specified structure for the three slides.</th>
<th>Followed specified structure, but too much content on each slide.</th>
<th>Followed specified structure; appropriate amount of content on each slide.</th>
<th>An exceptionally well-structured presentation; would serve as a great example for others to follow.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication of Content</td>
<td>Aims, motivation, intended outcomes or high-level plan muddled, vague or unclear.</td>
<td>Possible to get an idea of the aims, motivation, intended outcomes and high-level plan, but could be clearer.</td>
<td>Aims, motivation, intended outcomes and high-level plan presented clearly and at an appropriate level of detail and specificity.</td>
<td>Very clear presentation of aims, motivation, intended outcomes and high-level plan; would serve as a great example for others to follow.</td>
</tr>
<tr>
<td>Visual Aspects of the Presentation</td>
<td>Slides not well-presented: inconsistencies in formatting, no slide numbers, or other lack of attention to detail.</td>
<td>Appearance of slides generally okay, with minor lapses.</td>
<td>Slides formatted neatly and consistently.</td>
<td>Exceptionally well-presented; very professional.</td>
</tr>
</tbody>
</table>

This Assessment Task relates to the following Learning Outcomes:

- Apply research methods in the planning, analysis, design, implementation, delivery and maintenance of software systems, considering the importance of professional ethics, and of how to recognize and address ethical issues when they arise.
- Design and execute a project from a brief initial specification through to a complete set of agreed outcomes and demonstrate an advanced understanding for systems analysis and/or development projects in the area of IT.
- Develop academic skills such as academic writing and oral presentation, note-taking and revision, locating information, and managing deadlines and heavy reading loads; and give clear, concise and coherent verbal presentations.
- Present the results of work carried out in a detailed and appropriately structured report, and communicate effectively in both spoken and written forms.
Project Proposal

Due: Week 4 and 5; Friday noon
Weighting: 10%

Your Project Proposal, due in Week 4, is a short document that gives you the opportunity to communicate clearly at the outset of your project the specific problem you are addressing, how you intend to solve it, and what existing resources or materials you will build on; it also requires you to establish a first cut at a detailed plan for achieving your stated outcomes. This kind of planning exercise is essential for success in any project.

This page outlines the requirements for project proposals. The aim here is to get you to collect the important information together in 5-6 pages. Note that this is a piece of work that is expected to take you around 5-6 days of effort, and is the result of you spending some time looking deeper into what is required to carry out your project. In particular, note that it requires you to plan at a more detailed level than you did for the presentation in Week 2. The expectation is that you will spend on the order of 20 hours working on your proposal, so if you are allocating the same amount of time to this unit each week, you will need to have started on this task in week 1.

Submission Requirements for Project Proposal

You should submit via the class iLearn website a 5-6 page project proposal that outlines the background to and objectives of your project, and lays out a plan for how you will achieve these objectives. This should be provided as a PDF document, and named <FamilyName_Givenname>_Proposal.pdf.

You should also provide five or six slides that you will use to give a five-minute presentation on your detailed task plan. Your presentation should begin with a title slide and then a slide that succinctly states the aim of your project; the remaining slides should provide a detailed picture of how you intend to carry out the project. This should be provided as a powerpoint (or pdf) document, and named <FamilyName_Givenname>_proposalPres.ppt (or .pdf).

The Aims of Project Proposal

This assignment has a number of aims.

1. It ensures you get a head start on your project early in the semester.
2. It forces you to learn enough about your topic to be able to develop a plan for how you will approach the problem.
3. It forces you to think about your project in terms of a plan with specific steps and deliverables, and a clearly specified outcome.
4. It provides me with a first example of what your writing is like, so I can determine particular areas of weakness that need to be addressed.

Project Proposal Format and Structure

Make sure your submission meets the following requirements.
1. Your proposal should have a cover page containing the title of your project, your name, your student ID, and your supervisor’s name.

2. The document should begin with an abstract or summary of 100-150 words in length that is able to stand alone as a concise and comprehensive description of your project.

3. Section 1 of your document should be entitled Project Description. This has two subsections:
   - a 'Background' section of no more than one page in length, which sketches the background to the project, providing a context against which the significance of your project and its aims can be assessed; and
   - an 'Aims, Significance and Expected Outcomes' section of around 1-2 pages in length, which clearly states the aims of your project, why it is important, and what the specific expected outcomes of the project are; you can use distinct sub subsections for each of these three topics if you feel this helps you structure your material.

4. Section 2 of your document should be entitled 'Methodology and Plan'. Again, this consists of two subsections:
   - an 'Approach' or 'Methodology' section of around one page in length that outlines how you intend to go about solving the problem that your project addresses; and
   - a 'Task Plan' section of around one page in length that lays out the sequence of steps involved; see below for further notes on your Task Plan.

5. You may also add a reference list or bibliography that contains full details of any materials cited in your project proposal text.

In terms of general formatting requirements:

- Don't use a point size smaller than 11 point.
- Make sure your pages and sections are numbered.
- Make sure you thoroughly spell and grammar check your document before submitting it.

**Task Plans**

In many ways the Task Plan is the heart of your proposal: it's an explicit commitment to what you intend to do and when. For that reason, it needs to be very specific in a number of ways:

1. Each task should be given a number and a short descriptive name.
2. Each element in the task plan should have a clear descriptive paragraph so it is easy to see what is involved and what is not involved.
3. Each task should have a clearly specified deliverable, so that it is easy to determine when the task is completed. This might be a document or major part of a document, or a piece of working code, for example.

4. Each task should have a clearly specified delivery deadline. These should generally be one week apart, so that you can easily and clearly report against the task plan in your weekly progress reports. You may have tasks that contain subtasks, particularly if a task corresponds to several deliverable items; the bottom line is that you should make everything structurally as explicit as possible, so the correspondences between tasks, timeline, expected effort and specific outcomes is absolutely clear. Bear in mind that each elapsed week is assumed to correspond to around 9-10 hours of work on your project.

You should factor in the project-related assessable items for the unit as project deliverables, but obviously these should not be the only deliverables. Do not include your ethics assignment in your task plan, since this has nothing to do with your project.

Your Task Plan should be described in detail in your proposal document, but it should also be the focus of the slide presentation you submit along with your proposal. In most cases task plans will consist of four or five high-level tasks, each with some subtasks; you should allocate one slide per high-level task. In the class presentations, your aim will be to convince us that you have thought through the steps involved in your project in significant detail.

**Assessment of Project Proposal**

Your project proposal is worth 7 marks for Reporting (in Week 4) and 3 marks for Presentation (in Week 5). Please see the Initial Project Presentation Assessment criteria for the assessment of Project Proposal Presentation. Reporting section of Project Proposals will be assessed by the teaching staff according to the following rubric:

<table>
<thead>
<tr>
<th>Evidence of Effort</th>
<th>No evidence that substantial thought has been put into the exercise.</th>
<th>Evidence of having thought through the problem and what is involved, but with some weaknesses and gaps.</th>
<th>Evidence of having thought hard about the problem and of having identified all the major issues that will be faced.</th>
<th>Evidence of a thorough command of what is involved and what needs to be done to achieve a high quality outcome.</th>
</tr>
</thead>
</table>

http://unitguides.mq.edu.au/unit_offerings/54910/unit_guide/print
<table>
<thead>
<tr>
<th>Exposition of Content</th>
<th>Difficult to make sense of the background and approach to be taken.</th>
<th>The presentation of the background and approach to be taken are understandable, if a little muddled.</th>
<th>Background and approach clearly presented, so that a technically-literate reader will understand why the project is important, what outcomes will be achieved, and what methods will be used.</th>
<th>High quality exposition; makes a compelling case for the problem and its proposed solution, with clearly argued logic.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality and Depth of Planning</td>
<td>No evidence that any careful thought has been put into determining the steps involved in achieving the project's goals.</td>
<td>Some evidence of having thought through what is involved, but not a very detailed level.</td>
<td>Evidence of the application of careful thought to identifying the distinct steps involved in the project and the effort they require.</td>
<td>Evidence of a high degree of ability in specifying tasks precisely and in making realistic estimates about the work involved.</td>
</tr>
<tr>
<td>Format and Presentation</td>
<td>No obvious care given to the quality of presentation of the report.</td>
<td>Technically meets the stated requirements for presentation format.</td>
<td>Meets technical requirements and is also aesthetically pleasing.</td>
<td>Exceptionally well presented.</td>
</tr>
<tr>
<td>Quality of Writing</td>
<td>Very poor; problems with coherent presentation of ideas.</td>
<td>Understandable, but with some problems in grammar, style and spelling.</td>
<td>Grammar and style of an acceptable standard; could be safely given to an external party with only minor editing.</td>
<td>High quality prose; well written; could comfortably be made available via a corporate website.</td>
</tr>
</tbody>
</table>

This Assessment Task relates to the following Learning Outcomes:

- Apply research methods in the planning, analysis, design, implementation, delivery and maintenance of software systems, considering the importance of professional ethics, and of how to recognize and address ethical issues when they arise.
• Design and execute a project from a brief initial specification through to a complete set of agreed outcomes and demonstrate an advanced understanding for systems analysis and/or development projects in the area of IT.

• Conduct a survey of the background literature, drawing out the key themes and issues and making comparisons between previous research studies and the research methods used for investigation and implementation of software systems.

• Develop academic skills such as academic writing and oral presentation, note-taking and revision, locating information, and managing deadlines and heavy reading loads; and give clear, concise and coherent verbal presentations.

• Present the results of work carried out in a detailed and appropriately structured report, and communicate effectively in both spoken and written forms.

Report Outline
Due: Week 6 and 9-10; Friday noon
Weighting: 15%

Report Outline indicates what the proposed structure and content of your final project report will be. This forces you to plan out your final report, and provides a means for obtaining feedback on your final project report before you actually write it; you can think of this as a summary of your final report. The Report Outline is due in Week 6 but Report Outline Presentations take place in Week 9 and Week 10.

Submission Requirements for Report Outline
You should submit your Report Outline in the form of a 5-10 page PDF document. You should also provide five or six slides that you will use to give a five-minute presentation on your report outline.

The Aims of Report Outline
This assignment has the following aims.

1. It forces you to plan out the structure of your final report before you begin writing it.
2. It allows you to get feedback about your plans for the final report before you commit too many words to paper.
3. It provides feedback on your writing.

Report Outline Format and Structure
Your report outline is intended to serve as a plan for your final report, so it’s important to think about what that document will contain.

Your final report is likely to contain between five and eight major sections, and so your report outline should reflect that structure. The first section of your final report will be your introduction,
and the last will be your conclusions section; what the other sections are depends very much on
the specifics of your project, and it is imperative that you discuss the possibilities here with your
supervisor.

A good strategy in writing is to tell the reader what you are going to tell them, tell it, and then tell
them what you've told them. The first of these elements is what we have also referred to in class
as a 'road map' for the document. Translated to the context of your final report, your introductory
section is where you provide a road map for the rest of the document, and the conclusions
section is where you tell the reader what you have told them in the intervening sections.

You can apply the same structure at the next level down: each major section should begin with a
subsection that outlines what the section contains, and ends with a subsection that summarizes
what the section has contained and what has been learned as a result.

Given this structure, you can think of your report outline as consisting of these initial subsections
of the final report.

Make sure your submitted report outline meets the following requirements.

1. Your outline should be provided as a PDF file of 5-10 pages in length.
2. The structure of your document should mirror the intended structure of your final report:
   for each major section you intend to have in the final report, you should have a section in
   the outline.
3. The document should have a separate title page, and begin with an abstract or summary
   of 150-200 words in length that is able to stand alone as a concise and comprehensive
   description of your project's objectives, approach and expected outcomes.
4. For each intended major section in your final report, provide a page that outlines what
   you will cover in that section. Each page should be structured as a set of paragraphs that
   correspond to the subsections that will appear within that section. As noted above, you
   should view these as first drafts of the introductory subsections of each section of the
   final report.
5. Write in coherent prose. It is not appropriate just to provide bullet points; it is important
   that you provide a coherent summary of what your final report will contain, since the
   document will be assessed by staff who have no prior exposure to your project.

Please ensure that your document is submitted with a filename that has the following format:

   • 〈FamilyName_Givenname〉_Outline.pdf.

Similarly, you will submit for presentation a document is submitted with a filename that has the
following format:

   • 〈FamilyName_Givenname〉_OutlinePres.ppt (or .pdf).
Assessment of the Report Outline

Your report outline is worth 15 marks. It includes an Abstract worth 5 marks; an Outline worth 5 marks; and and a Presentation that is worth 5 marks. The first two are due in Week 6 and the last one is due by Week 9. The outline will be assessed according to the following rubric. For the assessment of presentation, please see Initial Project Presentation section.

| Comprehensiveness of Abstract | Incomplete, in that it does not provide a brief statement of all three of the problem, approach and outcomes; or, all three are expressed, but the description is muddled and generally unclear. | Conveys the problem, the approach, and outcomes, but a little less clearly than might be expected, or at an inappropriate level of detail. | Stands as a surrogate for the full report: a clear summary of the problem, approach and outcomes; but may require some rewording to make it accessible to a non-specialist. | An excellent summary of the work carried out, clearly stating the problem, the approach taken, and the outcomes, in a manner that is accessible to a technical but non-specialist audience. |
| Logical Structure | The order of presentation of material seems jumbled or confusing. | Overall structure in terms of major sections is fine, but the ordering of content in individual sections needs some attention. | Structure and ordering both within and across sections is good; tells a coherent and convincing story. | An exceptionally well-structured summary of the content of the final report; would serve as an example of best practice. |
### Coverage

| Expected Material Covered | Most of the expected material is accounted for, but some minor omissions need to be addressed, or some superfluous material needs to be removed. | The outline suggests that all the material required to clearly demonstrate the aims, approach and outcomes will be covered. | Proposed coverage suggests an exceptional understanding of the problem, possible approaches to its solution, and significance of the outcomes; would serve as a great example for others to follow. |

### Overall Quality of Writing

| Very poor; problems with coherent presentation of ideas. | Understandable, but with some problems in grammar, style and spelling. | Grammar and style of an acceptable standard; could be safely given to an external party with only minor editing. | High quality prose; well written; could comfortably be made available via a corporate website. |

The aim of the Abstract Section of the Report Outline is to get you to summarise the most important information together regarding your final project and provide you with some feedback prior to submission of your final report. This is an abstract including the following details about your project:

- aim of the project
- research problem and/or research question
- significance and benefits
- research methodology (approach)
- expected outcomes and/or findings

The abstract should be 150-200 words in length and able to stand alone as a concise and comprehensive description of your project's objectives, approach and outcomes.

This Assessment Task relates to the following Learning Outcomes:
• Apply research methods in the planning, analysis, design, implementation, delivery and maintenance of software systems, considering the importance of professional ethics, and of how to recognize and address ethical issues when they arise.

• Design and execute a project from a brief initial specification through to a complete set of agreed outcomes and demonstrate an advanced understanding for systems analysis and/or development projects in the area of IT.

• Develop academic skills such as academic writing and oral presentation, note-taking and revision, locating information, and managing deadlines and heavy reading loads; and give clear, concise and coherent verbal presentations.

• Present the results of work carried out in a detailed and appropriately structured report, and communicate effectively in both spoken and written forms.

**Ethics Assignment**

**Due:** Week 8, Friday noon

**Weighting:** 5%

For this assignment you are required to write a short report (Ethics summary) that allows you to express yourselves about the ethical issues regarding your project. The assignment will be detailed on ilearn.

Please ensure that your Ethics summary is submitted with a filename that has the following format:

- `<FamilyName_Givenname>_Ethics.pdf`

You are expected to read the Australian Computer Society’s Code of Ethics and Code of Conduct ([https://www.acs.org.au/__data/assets/pdf_file/0004/30964/ACS_Ethics_Case_Studies_v2.1.pdf](https://www.acs.org.au/__data/assets/pdf_file/0004/30964/ACS_Ethics_Case_Studies_v2.1.pdf)).

The aim of the exercise is write a report with regard to an ethical situation in IT in the last 6 months. Note that you are not being assessed on your particular views of the situation, so the particular course of action you elect to pursue does not impact on your marks; you are being assessed on your ability to reason clearly about the situation, and on your ability to analyse and discuss the consequences of the Code of Ethics.

**Assessment of Ethics Summary**

The Ethics summary will be assessed according to the following rubric.
This Assessment Task relates to the following Learning Outcomes:

- Apply research methods in the planning, analysis, design, implementation, delivery and maintenance of software systems, considering the importance of professional ethics, and of how to recognize and address ethical issues when they arise.
- Design and execute a project from a brief initial specification through to a complete set of agreed outcomes and demonstrate an advanced understanding for systems analysis and/or development projects in the area of IT.
- Present the results of work carried out in a detailed and appropriately structured report, and communicate effectively in both spoken and written forms.

## Final Report

**Due:** **Week 12 & Week 13, Friday noon**

**Weighting:** **60%**

Your Final Report involves two steps: Final Project Presentation and Final Project Report.

Your **Final Project Presentation** is a verbal summary of the results of your project, which you present at the end of semester workshop.

The ITEC810 End-of-Semester Workshop provides an opportunity for everyone in the class to present the results of their project work carried out during the course of the semester. The workshop will take place in Week 12 from 6pm until 9pm. Because there are many students in the class, the workshop may be organised as two parallel sessions, held in two separate rooms. Each presentation will be allotted 20 minutes including time for questions; typically this will be made up of 15 minutes for the presentation and five minutes for questions.

This page outlines the requirements for your final project presentation, which you will give at the end-of-semester workshop.
Submission Requirements for Final Project Presentation

No later than the specified deadline, you should submit via the class iLearn website the slides for the end-of-semester presentation. These should provide a summary of

- (a) your initial problem specification;
- (b) relevant related work and background sources;
- (c) the approach you took to solving the problem; and
- (d) the outcomes of your work.

The slides should be provided as a PowerPoint or pdf document.

The Aims of Final Project Presentation

This assignment has the following aims.

1. It allows you to demonstrate your ability to give a coherent 15-minute presentation that communicates the key aspects of your project.
2. It provides a sense of closure for your work in the unit.

Final Project Presentation Format and Structure

Your presentation at the end of semester workshop will be assessed. Presentations will be 15 minutes long, with a further 5 minutes allocated for questions and changeover between presenters. It is essential that you carefully prepare and rehearse your talk to ensure that it can be delivered within the allotted time. Session chairs have strict instructions to stop you when 15 minutes have elapsed.

Ensure your presentation is submitted with a filename that has the following format:

- <FamilyName_Givenname>_finalPres.ppt (or pdf)

Remember to revisit the Hints and Tips on Giving Presentations document for a checklist of things to watch out for in preparing and presenting your contribution.

Assessment of Final Project Presentation

Your final presentation is worth 10 marks, and will be assessed according to the following rubric:
<table>
<thead>
<tr>
<th><strong>Presentation Structure</strong></th>
<th>Muddled and dis-organised: the structure of the presentation was not made clear via either signposting on the slides or explicit indications in the verbal presentation.</th>
<th>It was possible to determine that the presentation had a structure, but this was not made explicit on either the slides or in the verbal presentation.</th>
<th>The structure of the presentation was made clear via both the slides and verbal cues.</th>
<th>An exceptionally well-structured presentation; would serve as a great example for others to follow.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication of Content</strong></td>
<td>Unclear what was achieved in the project.</td>
<td>The presentation indicated the outcomes of the work, if a little un-clearly.</td>
<td>The presentation clearly indicated the outcomes of the work carried out.</td>
<td>The presentation clearly described the outcomes of the work, indicating how these related to the originally stated outcomes, and realistically appraised the scope for future work.</td>
</tr>
<tr>
<td><strong>Visual Aspects of the Presentation</strong></td>
<td>Slides not well-presented: some combination of inappropriate content, inappropriate level of detail, and inconsistencies in formatting.</td>
<td>Slides contained the right level of detail, with perhaps a few lapses in quality.</td>
<td>Slides contained the right level of detail throughout, and were formatted neatly and consistently.</td>
<td>Exceptionally well-presented; very professional.</td>
</tr>
</tbody>
</table>
### Speaking Skills

<table>
<thead>
<tr>
<th>Some combination of:</th>
<th>Read off the slides some of the time, but the presentation was coherent and audible, and overall the verbal presentation added something to the material on the slides.</th>
<th>Obviously well-rehearsed. The verbal presentation was clear and precise, and complemented the slides rather than repeating their content.</th>
<th>Exceptionally professional and polished presentation; lively manner that made the content entertaining and interesting.</th>
</tr>
</thead>
<tbody>
<tr>
<td>not adequately rehearsed; incoherent presentation; inaudible; almost entirely read off the slides; ran out of time.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Audience Interaction

| Didn't look at the audience; spent most of the time looking at the screen or elsewhere. | Looked at the audience throughout the presentation. | Scanned the audience throughout the presentation, watching for signs of misunderstanding or boredom; responded appropriately. | Actively interacted with the audience (via questions, a poll, a good joke, or some other means); made eye contact with most people in the audience. |

---

Your **Final Project Report** to be submitted in Week13 is a document of considerable length where you tell the whole story, providing all the details of what you’ve done and what the outcomes were. This is the major assessable piece of work for the unit.

This page outlines the requirements for your final project report, which is the final written assignment in the unit.

**Submission Requirements Final Project Report**

The expected length of your report depends on whether you are doing an analysis or a development project: see the table further below.

This document should report in detail on (a) your initial problem specification; (b) relevant related work and background sources; (c) the approach you took to solving the problem; and (d) the outcomes of your work. The report should be provided as a PDF document.

**The Aims of Final Project Report**

This assignment has the following aims.
1. It allows you to demonstrate your ability to write an extended report of a significant piece of project work.
2. It provides an achievable presentation of all the details of your project for those who might want to take your work further or build upon it some way.
3. It provides you with a document that you can provide to others to demonstrate what you are capable of.

Final Project Report Format and Structure

Make sure your submission meets the following requirements.

1. Use formatting guidelines described on iLearn.
2. The length of your report depends on whether you are doing a management (i.e. analysis) or a IS/Networking/Security/Web Engineering (i.e. development) project. The table below suggests typical lengths for each situation, but note that these should be treated as indicative only: Your report needs to be long enough to describe in detail the work that you have done, but not so long that it discourages someone from reading it.

<table>
<thead>
<tr>
<th>Management Projects</th>
<th>@40+ pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS/Networking/Security/Web Engineering Projects</td>
<td>@30 pages</td>
</tr>
</tbody>
</table>

The shorter report length requirement for the latter projects is a consequence of the requirement for these projects also to deliver a working piece of software, which is to be demonstrated to the supervisor's satisfaction at the conclusion of the project.

3. The document should have a separate title page, and begin with an abstract or summary of 150-200 words in length that is able to stand alone as a concise and comprehensive description of your project's objectives, approach and outcomes. This may be the revised version of the Abstract you submitted previously.

4. The body of the document should consist of a series of numbered sections and subsections; the exact nature and content of these will depend on the specifics of your project, as will the proportion of the available space accorded to each. Typically you would have an introductory section that outlines the problem you are aiming to solve, and provides a road-map of the remainder of the document; this would then be followed by a background section that describes related work; then a number of sections which describe the work you have carried out, followed by a conclusions section which summarises what has been achieved, and what future work might be pursued. Most reports will have five or six sections in total.
5. Finally, you should have a consistently formatted reference list or bibliography that contains full details of all materials cited in your paper. Ensure that you follow appropriate conventions here.

Please ensure that your final report is submitted with a file-name that has the following format:

- `<FamilyName_Givenname>_FinalReport.pdf`

**Assessment of Final Project Report**

Your final report is worth 50 marks. These marks represent not only the written content of your report, but also the project work that underlies it.

Note that for management projects, the report should be more than a literature review, and should provide some real analytical content.

For IS/network/security/web engineering projects, a working demonstration of the constructed software will be a component of the marking. Please take note of the following requirements:

- A listing of your code should be provided as an appendix to your final report. If there is some reason why this is not feasible or practicable, you should discuss this with the unit convener no later than one week before the final report is due.
- You should arrange a time to demonstrate the software you have developed to your supervisor, so that he or she can take account of this when marking your work. This demonstration should preferably happen during the last week of semester, or in extreme cases during the week following the last week in semester, when the reports are being marked.

It is not necessary to demonstrate your software during your final presentation, although you may do so if you wish. Note that your supervisor will include an assessment of your software under the assessment attribute of 'Quality of Work Carried Out' in the rubric below, but your second marker will not be able to take your software into account, and so will be relying on the description in your final report to convey the quality of your work.

The final report will be assessed by your supervisor according to the following rubric:
<p>| Comprehensiveness of Abstract | Incomplete, in that it does not provide a brief statement of all three of the problem, approach and outcomes; or, all three are expressed, but the description is muddled and generally unclear. | Conveys the problem, the approach, and outcomes, but a little less clearly than might be expected, or at an inappropriate level of detail. | Stands as a surrogate for the full report: a clear summary of the problem, approach and outcomes; but may require some rewording to make it accessible to a non-specialist. | An excellent summary of the work carried out, clearly stating the problem, the approach taken, and the outcomes, in a manner that is accessible to a technical but non-specialist audience. |
| Clarity of Problem Statement | The introduction to the report does not clearly state the problem the project set out to solve. | The introduction does state the problem to be solved, but it takes a little effort to disentangle. | The introduction states the problem clearly, and its significance is clear. | The introduction provides an exceptionally clear and well-motivated problem statement, presented in a way that makes the reader eager to learn about the details of how the problem was solved. |</p>
<table>
<thead>
<tr>
<th>Review of Related Work</th>
<th>Patchy or badly organised review of related work; unclear exactly why the work cited is relevant to the problem addressed.</th>
<th>The material covered seems comprehensive and relevant, and some attempt has been made at clustering the materials reviewed in a thematic manner.</th>
<th>Thoughtful analysis of the material that goes beyond the themes identified explicitly by the sources, concisely drawing out the key points to set the stage for the work that follows; leaves no doubt about what's been done already and what hasn't.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of Work Carried Out</td>
<td>Hard to work out what was done; the description of the work carried out seems disorganised or incomplete.</td>
<td>The report indicates what work was carried out in reasonable detail.</td>
<td>The report clearly describes the work carried out, at an appropriate level of detail for a report of this length, and delivers a sense of maturity in the way in which the work was carried out.</td>
</tr>
<tr>
<td>Quality of Work Carried Out</td>
<td>A weak or incomplete effort; significant doubt that the work reported represents 100-120 person-hours of effort.</td>
<td>A competent piece of work, perhaps with some loose ends and gaps.</td>
<td>A very high quality piece of work that would have a very good chance of being accepted for presentation at a professional conference in the field.</td>
</tr>
</tbody>
</table>
### Clarity of Outcomes

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unclear</td>
<td>Unclear what was achieved in the project.</td>
</tr>
<tr>
<td>Clearly indicates</td>
<td>The report clearly indicates the outcomes of the work, if a little unclearly.</td>
</tr>
<tr>
<td>Clearly describes</td>
<td>The report clearly describes the outcomes of the work, indicates how these relate to the originally stated outcomes, and realistically appraises the scope for future work.</td>
</tr>
</tbody>
</table>

### Overall Quality of Writing

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very poor</td>
<td>Problems with coherent presentation of ideas.</td>
</tr>
<tr>
<td>Understandable</td>
<td>Understandable, but with some problems in grammar, style and spelling.</td>
</tr>
<tr>
<td>Grammar and style of an acceptable standard</td>
<td>Grammar and style of an acceptable standard; could be safely given to an external party with only minor editing.</td>
</tr>
<tr>
<td>High quality prose</td>
<td>High quality prose; well written; could comfortably be made available via a corporate website.</td>
</tr>
</tbody>
</table>

### Appropriate Use of Referencing Conventions

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The information in the bibliography is incomplete, or there is a lack of consistency in formatting.</td>
<td>The information in the bibliography is inconsistent, but with a few missing details.</td>
</tr>
<tr>
<td>All references are complete and consistently formatted.</td>
<td>---</td>
</tr>
</tbody>
</table>

This Assessment Task relates to the following Learning Outcomes:

- Apply research methods in the planning, analysis, design, implementation, delivery and maintenance of software systems, considering the importance of professional ethics, and of how to recognize and address ethical issues when they arise.
- Design and execute a project from a brief initial specification through to a complete set of agreed outcomes and demonstrate an advanced understanding for systems analysis and/or development projects in the area of IT.
Conduct a survey of the background literature, drawing out the key themes and issues and making comparisons between previous research studies and the research methods used for investigation and implementation of software systems.

- Develop academic skills such as academic writing and oral presentation, note-taking and revision, locating information, and managing deadlines and heavy reading loads; and give clear, concise and coherent verbal presentations.
- Present the results of work carried out in a detailed and appropriately structured report, and communicate effectively in both spoken and written forms.

**Delivery and Resources**

ITEC810 is taught via seminars and presentations. The feedback that you receive from your supervisor plays also a crucial role in your learning.

Make sure you are completely familiar with the content of the official Unit Outline. You are expected to regularly meet your supervisor by making an appointment. You should also attend all the lectures and presentations.

1. Note that we will be using iLearn as the central web-based communication point for this unit. If you are enrolled in the unit, it is essential that you check the iLearn site once a day, since important information will always be posted there in the News Forum. You should be able to login to iLearn using your MQ student ID and password; if you experience any problems, contact the Faculty of Science IT Help Desk. The IT help desk website is located at http://web.science.mq.edu.au/it/doc/helpdesk/.

2. The core of this unit is a project. Some recent projects are listed here. Note that you are expected to have **identified your project by the end of the first week of semester** (and ideally before this time!).

3. Classes will be held in E5A-140 on Friday evenings from 6pm to 9pm; note that for this unit you are also expected to be working on your project during the recess, so there are really 15 weeks that are relevant for scheduling purposes. Make sure you are familiar with the class schedule.

4. Check out how the assessment for the unit works.

5. The unit culminates in an end-of-semester workshop where everyone gives a presentation on their project.

**Other Resources**

A significant proportion of the class time in this unit focuses on communication skills, but we don't have the time or space to go into some matters in as much detail as some people would like. If you would like to improve your skills in academic writing, you should check out the Postgraduate Academic Literacy Workshops.
You have many opportunities to seek for and to receive feedback. During seminars, you are encouraged to ask the lecturer questions to clarify anything you might not be sure of. Each week, you will be given assignments to complete. This will at times involved contributing to a group of students and presenting solutions to the class. The comments and the solutions provided will help you to understand the objectives of the unit, prepare you for the work in assignments. It is important that you keep up with these assignments every week.

**Websites** The web page for this unit can be found at [http://www.comp.mq.edu.au/units/itec810](http://www.comp.mq.edu.au/units/itec810).

**Discussion Boards** The unit makes use of discussion boards hosted within iLearn. Please post questions of general interest there (for example, about assessment tasks), they are monitored by the staff on the unit.

**Student Support Services** Macquarie University provides a range of Academic Student Support Services. Details of these services can accessed at [http://www.student.mq.edu.au](http://www.student.mq.edu.au).

If you have exhausted all other avenues, then you should consult Director of Postgraduate Program or the Head of Department. You are entitled to have your concerns raised, discussed and resolved.

**Technology Used and Required**

The written reports and presentations are expected to make use of MS Word, MS Excel and MS Powerpoint (or equivalent). Programming languages and technologies to be used depend on the requirements of the project. You may consult your project supervisor regarding these.

**Submission Methods**

All assessment task are expected to be submitted on ilearn.

**Extensions**

Extensions for the assessments are allowed only in exceptional circumstances. You must discuss this with the unit convenor prior to the submission deadline.

**Penalties**

Penalties are applied for late submissions. 10% of the total marks for each assignment will deducted for every 24 hours after the submission deadline.

**Resubmission**

Resubmission of assessment tasks may be allowed in exceptional circumstances. You must discuss this with the unit convenor after the submission deadline.

**What to submit**

1. There are altogether five "reports" and four presentations.
2. In general each submission (except for the ethics submission) is followed by an associated presentation in a subsequent week.
3. The reports and associated presentation slides will need to be submitted by appropriate deadline. All submissions must be in the pdf format, and appropriately named.
4. All submissions (reports as well as presentations) must be submitted via iLearn.

**Unit Schedule**

Classes are scheduled for Fridays from 6pm to 9pm, but we will generally meet every second week. (There are consecutive meetings in weeks 9 and 10). The first scheduled class is in Week 1, and the current schedule for all weeks is shown below. **Note that this schedule is still provisional, and the particular Fridays we use may change at short notice, depending upon circumstances: so you should be prepared for attendance every Friday during semester.**

All classes are held in E5A-140.

On each occasion that we meet, around half of the class time will be in the form of a lecture and discussion session on material that is relevant to an upcoming assessable activity; the other half of the class will be occupied by class members giving short presentations on progress on their projects.

<table>
<thead>
<tr>
<th>WEEK 1</th>
<th>Date</th>
<th>Class Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday 4th March</td>
<td>Class Logistics; Assessment and Expectations; Writing Up Your Project Proposal;</td>
<td></td>
</tr>
<tr>
<td>WEEK 2</td>
<td>Date</td>
<td>Class Topics</td>
</tr>
<tr>
<td>Friday 11th March</td>
<td>Ethics generally and in IT (assignment due week 8)</td>
<td></td>
</tr>
<tr>
<td>WEEK 3</td>
<td>Date</td>
<td>Class Topics</td>
</tr>
<tr>
<td>Friday 18th March</td>
<td>Initial Presentation</td>
<td></td>
</tr>
<tr>
<td>WEEK 4</td>
<td>Date</td>
<td>Class Topics</td>
</tr>
<tr>
<td>Friday 25th March</td>
<td>NO CLASS THIS WEEK! (Long Weekend)</td>
<td></td>
</tr>
<tr>
<td>WEEK 5</td>
<td>Date</td>
<td>Class Topics</td>
</tr>
<tr>
<td>Friday 1st April</td>
<td>Presentation of Project proposals</td>
<td></td>
</tr>
</tbody>
</table>

http://unitguides.mq.edu.au/unit_offerings/54910/unit_guide/print
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Event</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEEK 6</td>
<td>Friday 8th April</td>
<td>NO CLASS THIS WEEK</td>
<td>Report Outline</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>MID-SEMESTER BREAK</strong></td>
<td></td>
</tr>
<tr>
<td>WEEK 7</td>
<td>Friday 29th April</td>
<td>Help session - for those who want to come and ask questions!</td>
<td></td>
</tr>
<tr>
<td>WEEK 8</td>
<td>Friday 6th May</td>
<td>NO CLASS THIS WEEK!</td>
<td>Ethics Assignment</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>WEEK 9</strong></td>
<td></td>
</tr>
<tr>
<td>Week</td>
<td>Date</td>
<td>Event</td>
<td>Notes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Writing Your Final Report; Report Outline Presentations I</td>
<td></td>
</tr>
<tr>
<td>WEEK 10</td>
<td>Friday 20th May</td>
<td>Writing Your Final Report; Report Outline Presentations II</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>WEEK 11</strong></td>
<td></td>
</tr>
<tr>
<td>Week</td>
<td>Date</td>
<td>Event</td>
<td>Notes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NO CLASS THIS WEEK!</td>
<td>Abstract for Final report</td>
</tr>
<tr>
<td>WEEK 12</td>
<td>Friday 3rd June</td>
<td>End of Semester Presentations</td>
<td>Final Presentation</td>
</tr>
<tr>
<td>Week</td>
<td>Date</td>
<td>Event</td>
<td>Notes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NO CLASS THIS WEEK!</td>
<td>Final Project Report due</td>
</tr>
<tr>
<td>WEEK 13</td>
<td>Friday 10th June</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Learning and Teaching Activities

Lectures
Lectures given by unit staff

Presentations
Verbal and visual presentations given by students

Assignments
Reports, abstracts, and report outlines

Progress Reports
Students' reflective reports on their progress on the project

Assignment feedback
Academic evaluation of assignments

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central. Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy http://mq.edu.au/policy/docs/academic_honesty/policy.html


Disruption to Studies Policy http://www.mq.edu.au/policy/docs/disruption_studies/policy.html The Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.

In addition, a number of other policies can be found in the Learning and Teaching Category of Policy Central.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/support/student_conduct/
Results

Results shown in *iLearn*, or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit ask.mq.edu.au.

Penalty for late assignments:

No extensions for assignments will be granted. Late assignments will be accepted up to 72 hours after the submission deadline. There will be a deduction of 10% of the total available marks made from the total awarded mark for each 24 hour period or part thereof that the submission is late (for example, 25 hours late in submission – 20% penalty).

If you are unable to submit an assignment on time due to unavoidable disruption (such as illness) then you should (1) notify the convenor immediately by email (2) submit what you have achieved by the deadline and (3) formally lodge a notification of disruption.

Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- Academic Integrity Module for Students
- Ask a Learning Adviser

Student Enquiry Service

For all student enquiries, visit Student Connect at ask.mq.edu.au

Equity Support

Students with a disability are encouraged to contact the Disability Service who can provide appropriate help with any issues that arise during their studies.

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the Acceptable Use of IT Resources Policy. The policy applies to all who connect to the MQ network including students.
Graduate Capabilities

PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

**Learning outcomes**

- Apply research methods in the planning, analysis, design, implementation, delivery and maintenance of software systems, considering the importance of professional ethics, and of how to recognize and address ethical issues when they arise.
- Design and execute a project from a brief initial specification through to a complete set of agreed outcomes and demonstrate an advanced understanding for systems analysis and/or development projects in the area of IT.
- Present the results of work carried out in a detailed and appropriately structured report, and communicate effectively in both spoken and written forms.

**Assessment tasks**

- Project Progress
- Project Description
- Project Proposal
- Report Outline
- Ethics Assignment
- Final Report

PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

**Learning outcomes**

- Conduct a survey of the background literature, drawing out the key themes and issues and making comparisons between previous research studies and the research methods used for investigation and implementation of software systems.
• Present the results of work carried out in a detailed and appropriately structured report, and communicate effectively in both spoken and written forms.

Assessment tasks

• Project Progress
• Project Description
• Project Proposal
• Report Outline
• Final Report

PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

Learning outcomes

• Design and execute a project from a brief initial specification through to a complete set of agreed outcomes and demonstrate an advanced understanding for systems analysis and/or development projects in the area of IT.
• Develop academic skills such as academic writing and oral presentation, note-taking and revision, locating information, and managing deadlines and heavy reading loads; and give clear, concise and coherent verbal presentations.
• Develop better understanding of one's own strengths and weaknesses, and ability to utilise these.

Assessment tasks

• Project Progress
• Project Proposal
• Report Outline
• Final Report

PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:
Learning outcome

• Present the results of work carried out in a detailed and appropriately structured report, and communicate effectively in both spoken and written forms.

Assessment tasks

• Project Progress
• Project Description
• Project Proposal
• Report Outline
• Ethics Assignment
• Final Report

PG - Engaged and Responsible, Active and Ethical Citizens

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues.

This graduate capability is supported by:

Learning outcome

• Apply research methods in the planning, analysis, design, implementation, delivery and maintenance of software systems, considering the importance of professional ethics, and of how to recognize and address ethical issues when they arise.

Assessment tasks

• Project Progress
• Ethics Assignment

PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:
Learning outcomes

• Develop academic skills such as academic writing and oral presentation, note-taking and revision, locating information, and managing deadlines and heavy reading loads; and give clear, concise and coherent verbal presentations.
• Develop better understanding of one's own strengths and weaknesses, and ability to utilise these.

Assessment tasks

• Project Progress
• Project Proposal
• Report Outline
• Final Report

Changes from Previous Offering

No significant change from the last offering (2015 S2). Final Report and Presentation count toward 60% of the unit as in 2015 S2. Classes will be held in E5A-140 instead of the EMC building.

Standards

We will use standards based assessment to reflect the level of performance students achieve in this unit. Five standard levels for the assessment tasks during the semester (excluding the final exam) are: unsatisfactory, developing, functional, proficient and advanced. These standard levels summarize different levels of achievement in relation to learning outcomes and are defined below.

<table>
<thead>
<tr>
<th>Learning Outcome #1</th>
<th>Unsatisfactory</th>
<th>Developing</th>
<th>Functional</th>
<th>Proficient</th>
<th>Advanced</th>
</tr>
</thead>
</table>
Use research methods in the planning, analysis, design, implementation, delivery and maintenance of software systems, considering the importance of professional ethics, and of how to recognize and address ethical issues when they arise.

<table>
<thead>
<tr>
<th>Learning Outcome #2</th>
<th>Unsatisfactory</th>
<th>Developing</th>
<th>Functional</th>
<th>Proficient</th>
<th>Advanced</th>
</tr>
</thead>
</table>

http://unitguides.mq.edu.au/unit_offerings/54910/unit_guide/print
**Learning Outcome #3**

<table>
<thead>
<tr>
<th>Unsatisfactory</th>
<th>Developing</th>
<th>Functional</th>
<th>Proficient</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan and execute a project from a brief initial specification through to a complete set of agreed outcomes and demonstrate an advanced understanding for systems analysis and/or development projects in the area of IT.</td>
<td>Unsatisfactory implementation of IT project or the analysis work as assessed in Progress Report, Project Description, Project Proposal, Ethics Assignment, Report Outline, and Final Report. Significantly more work is needed to achieve final grade of Pass.</td>
<td>Developing ability to implement IT applications or systems analysis as assessed in Progress Report, Project Description, Project Proposal, Ethics Assignment, Report Outline, and Final Report. Improvement is needed to achieve final grade of Pass.</td>
<td>Satisfactory implementation of IT project or systems analysis as assessed in Progress Report, Project Description, Project Proposal, Ethics Assignment, Report Outline, and Final Report.</td>
<td>Good to very good quality IT project as assessed in Progress Report, Project Description, Project Proposal, Ethics Assignment, Report Outline, and Final Report.</td>
</tr>
<tr>
<td>Learning Outcome #4</td>
<td>Unsatisfactory survey in the IT project as assessed in Project Proposal and Final Report. Significantly more work is needed to achieve final grade of Pass.</td>
<td>Developing ability in surveys for IT applications as assessed in Project Proposal and Final Report. Improvement is needed to achieve final grade of Pass.</td>
<td>Satisfactory surveys for IT applications as assessed in Project Proposal and Final Report.</td>
<td>Good to very good quality IT surveys as assessed in Project Proposal and Final Report.</td>
</tr>
</tbody>
</table>

Write a survey as a collection of literature or background information, drawing out the key themes and issues and draw comparisons between previous research studies and the research methods used for investigation and implementation of software systems.
Develop academic skills such as academic writing and oral presentation, note-taking and revision, locating information, and managing deadlines and heavy reading loads; as well as an ability to give clear, concise and coherent verbal presentations.

<table>
<thead>
<tr>
<th>Learning Outcome #5</th>
<th>Unsatisfactory</th>
<th>Developing</th>
<th>Functional</th>
<th>Proficient</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop better understanding of their own strengths and weaknesses, and ability to utilise these.</td>
<td>Unsatisfactory reporting skills in the IT project as assessed in Progress Reports. Significantly more work is needed to achieve final grade of Pass.</td>
<td>Developing reporting skills in the IT project as assessed in Progress Reports. Improvement is needed to achieve final grade of Pass.</td>
<td>Satisfactory reporting skills in the IT project as assessed in Progress Reports.</td>
<td>Good to very good quality reporting skills in the IT project as assessed in Progress Reports.</td>
<td>Superior quality reporting skills in the IT project with the addition of originality and/or creativity as assessed in Progress Reports.</td>
</tr>
</tbody>
</table>
Each assessment task submitted will be given a numerical mark, and an indication of the standard level reached (according to the above table).

**Final Grades**

At the end of the semester, you will receive a final grade that reflects your overall achievement in the unit. The different possible final grades are defined in general terms below.

- **Fail (F)**: does not provide evidence of attainment of all learning outcomes. There is missing or partial or superficial or faulty understanding and application of the fundamental concepts in the field of study; and incomplete, confusing or lacking communication of ideas in ways that give little attention to the conventions of the discipline. That is, overall work is unsatisfactory or still developing according to the standards defined above.

- **Pass (P)**: provides sufficient evidence of the achievement of learning outcomes. There is demonstration of understanding and application of fundamental concepts of the field of study; and communication of information and ideas adequately in terms of the conventions of the discipline. The learning attainment is considered satisfactory or adequate or competent or capable or functional in relation to the specified outcomes.

- **Credit (Cr)**: provides evidence of learning that goes beyond replication of content knowledge or skills relevant to the learning outcomes. There is demonstration of substantial understanding of fundamental concepts in the field of study and the ability to
apply these concepts in a variety of contexts; plus communication of ideas fluently and clearly in terms of the conventions of the discipline. The overall learning attainment is proficient.

• **Distinction (D):** provides evidence of integration and evaluation of critical ideas, principles and theories, distinctive insight and ability in applying relevant skills and concepts in relation to learning outcomes. There is demonstration of frequent originality in defining and analysing issues or problems and providing solutions; and the use of means of communication appropriate to the discipline and the audience. The overall learning attainment is advanced.

• **High Distinction (HD):** provides consistent evidence of deep and critical understanding in relation to the learning outcomes. There is substantial originality and insight in identifying, generating and communicating competing arguments, perspectives or problem solving approaches; critical evaluation of problems, their solutions and their implications; creativity in application. The overall learning attainment is outstanding.

Your final grade depends on your performance in each part of the assessment. For each task, you receive a mark that reflects your standard of performance regarding each learning outcome assessed by this task. Then the different component marks are added up (with appropriate weightings applied) to determine your total mark out of 100. Your grade then depends on this total mark and your overall standards of performance. Concretely, **in order to pass the unit**, you must demonstrate satisfactory understanding of development or analysis methods in IT applications, have a basic understanding of the lecture material, successfully implement or conduct IT project and demonstrate satisfactory level of achievement in the final report. In order to obtain a grade higher than a Pass, you have to fulfill additional conditions. See below the grade standards made specific for this unit:

**High Distinction:** Outstanding quality IT projects with the addition of originality and/or creativity achieved by an outstanding understanding of concepts. Students are expected to go beyond the limits of lecture material.

**Distinction:** Superior quality IT projects achieved by superior understanding of concepts. Students are expected to master the lecture material. They are expected to successfully achieve all the goals defined in the IT project.

**Credit:** Good understanding of concepts and good quality IT projects. Students are expected to have good understanding of the lecture material. They are expected to successfully achieve most of the goals listed in IT project.