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Unit guide COMP388 Advanced Topics in Computing and Information Systems

General Information

Unit convenor and teaching staff
Convenor.
Annabelle McIver
annabelle.mciver@mq.edu.au
Contact via Email.

Credit points
3

Prerequisites
(39cp at 100 level or above) including COMP188(D) and admission to BAdvSc

Corequisites

Co-badged status

Unit description
This unit is an advanced unit that prepares students to pursue a research career in computing or information systems under the supervision of a member of staff.

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/

Learning Outcomes

1. Students in comp388 will have individual experience in scoping a significant research project (in collaboration with a staff member).
2. Development of management skills, including managing time, choosing appropriate methods and determining aims and objectives.
3. Development of technical skills applied in an unfamiliar situation. The precise skills will depend on the nature of the project.
4. Technical writing and communication skills will be developed to explain how the technical deliverable contributes to the overall project aims and objectives.
General Assessment Information

• Typically, we refer to the assessment items as "deliverables" to emphasise that they can take many forms. In fact, the majority of them are reports of some kind, but some projects include software deliverables, design deliverables, essays, draft papers, etc.

The number, nature, timing and weighting of the deliverables, will be negotiated with each student individually, but typically it will include a major piece of writing reporting summatively on the whole comp388 activities and due at the end of the study period. The other deliverables are more varied in nature depending upon students’ individual projects.

• The assessment tasks above are intentionally broad, but the project should be designed so that the individual assessment tasks can be identified.

Assessment Tasks

<table>
<thead>
<tr>
<th>Name</th>
<th>Weighting</th>
<th>Hurdle</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project specification</td>
<td>10%</td>
<td>Negotiated.</td>
<td></td>
</tr>
<tr>
<td>Technical deliverable</td>
<td>50%</td>
<td>Negotiated</td>
<td></td>
</tr>
<tr>
<td>Report</td>
<td>40%</td>
<td>Negotiated</td>
<td></td>
</tr>
</tbody>
</table>

Project specification

Due: Negotiated.
Weighting: 10%

This task requires a short description of the project, its major aims and methods.

This Assessment Task relates to the following Learning Outcomes:
• Students in comp388 will have individual experience in scoping a significant research project (in collaboration with a staff member).
• Development of management skills, including managing time, choosing appropriate methods and determining aims and objectives.
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• Technical writing and communication skills will be developed to explain how the technical deliverable contributes to the overall project aims and objectives.

Technical deliverable

Due: Negotiated
Weighting: 50%

The precise deliverable depends on the project and could be a design document, an implementation, or a detailed analysis.

This Assessment Task relates to the following Learning Outcomes:
• Students in comp388 will have individual experience in scoping a significant research project (in collaboration with a staff member).
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Report

Due: Negotiated
Weighting: 40%

This could be a description of the technical deliverable plus a reflection on what was achieved. Together with the report, a short presentation can also be part of the report section as negotiated by the supervisor.

This Assessment Task relates to the following Learning Outcomes:
• Students in comp388 will have individual experience in scoping a significant research project (in collaboration with a staff member).
• Development of management skills, including managing time, choosing appropriate methods and determining aims and objectives.
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Delivery and Resources

The resources used in comp388 will vary depending upon particular student projects and their corresponding deliverables.

In general students have access to departmental resources, computing time, knowledge bases, and individual advice negotiated as the project proceeds.

Unit Schedule

This unit is based on individual work by a student in collaboration with the supervising staff member and the unit convenor.

Appropriate schedules of activities will be negotiated individually.

In general students should plan on meeting with their supervising staff members at least weekly, at a time convenient to them both. The bulk of the work for comp388 will happen outside of these meetings, usually with students working individually on learning, skill development, and research, so it is important for students to plan significant concentrated time in their weekly schedule for comp388.

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


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 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
Discipline Specific Knowledge and Skills
Our graduates will take with them the intellectual development, depth and breadth of knowledge, scholarly understanding, and specific subject content in their chosen fields to make them competent and confident in their subject or profession. They will be able to demonstrate, where relevant, professional technical competence and meet professional standards. They will be able to articulate the structure of knowledge of their discipline, be able to adapt discipline-specific knowledge to novel situations, and be able to contribute from their discipline to inter-disciplinary solutions to problems.

This graduate capability is supported by:
Learning outcomes

• Students in comp388 will have individual experience in scoping a significant research project (in collaboration with a staff member).
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Assessment tasks

• Project specification
• Technical deliverable
• Report

Problem Solving and Research Capability

Our graduates should be capable of researching; of analysing, and interpreting and assessing data and information in various forms; of drawing connections across fields of knowledge; and they should be able to relate their knowledge to complex situations at work or in the world, in order to diagnose and solve problems. We want them to have the confidence to take the initiative in doing so, within an awareness of their own limitations.

This graduate capability is supported by:

Learning outcomes

• Students in comp388 will have individual experience in scoping a significant research project (in collaboration with a staff member).
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Creative and Innovative

Our graduates will also be capable of creative thinking and of creating knowledge. They will be imaginative and open to experience and capable of innovation at work and in the community. We want them to be engaged in applying their critical, creative thinking.

This graduate capability is supported by:

**Learning outcomes**

- Students in comp388 will have individual experience in scoping a significant research project (in collaboration with a staff member).
- Development of management skills, including managing time, choosing appropriate methods and determining aims and objectives.
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**Assessment tasks**

- Project specification
- Technical deliverable

Effective Communication

We want to develop in our students the ability to communicate and convey their views in forms effective with different audiences. We want our graduates to take with them the capability to read, listen, question, gather and evaluate information resources in a variety of formats, assess, write clearly, speak effectively, and to use visual communication and communication technologies as appropriate.

This graduate capability is supported by:

**Learning outcomes**

- Students in comp388 will have individual experience in scoping a significant research project (in collaboration with a staff member).
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Capable of Professional and Personal Judgement and Initiative

We want our graduates to have emotional intelligence and sound interpersonal skills and to demonstrate discernment and common sense in their professional and personal judgement. They will exercise initiative as needed. They will be capable of risk assessment, and be able to handle ambiguity and complexity, enabling them to be adaptable in diverse and changing environments.

This graduate capability is supported by:

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- Students in comp388 will have individual experience in scoping a significant research project (in collaboration with a staff member).
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Critical, Analytical and Integrative Thinking

We want our graduates to be capable of reasoning, questioning and analysing, and to integrate and synthesise learning and knowledge from a range of sources and environments; to be able to critique constraints, assumptions and limitations; to be able to think independently and systemically in relation to scholarly activity, in the workplace, and in the world. We want them to have a level of scientific and information technology literacy.

This graduate capability is supported by:

Learning outcomes

- Students in comp388 will have individual experience in scoping a significant research project (in collaboration with a staff member).
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Commitment to Continuous Learning

Our graduates will have enquiring minds and a literate curiosity which will lead them to pursue
knowledge for its own sake. They will continue to pursue learning in their careers and as they
participate in the world. They will be capable of reflecting on their experiences and relationships
with others and the environment, learning from them, and growing - personally, professionally
and socially.

This graduate capability is supported by:

Learning outcomes

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