

COMP188

Enrichment Topics in Computing

FY1 Day 2014

Computing

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General Information

Unit convenor and teaching staff

Unit Convenor

Michael Johnson

michael.johnson@mq.edu.au

Contact via michael.johnson@mq.edu.au

Credit points

3

Prerequisites

Admission to BAdvSc

Corequisites

Co-badged status

Unit description

In this unit students participate in a year-long or semester-long program under the guidance of a mentor from the Department of Computing. The program includes an introduction to a number of computing research areas. Student attend a series of lectures and presentations associated with the various research groups within the department. Students have the opportunity to select areas of interest and work for one to three months with a particular researcher to gain greater insight into the chosen research interests. Readings are provided in each area to assist the student to gain an understanding of key concepts and some appreciation of the major challenges in these areas.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

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

Students in comp188 will have individual experience in scoping a research project (in collaboration with a staff member). This is an important skill.

Students will develop research management skills which will be dependent upon the particular research area chosen, but students will manage a small research project and see it through to completion

The comp188 deliverables will be negotiated with each student, but will typically include

a project report, and students will develop research writing skills

Depending upon the research project, there will be individual content skills developed by
each student

Assessment Tasks

| Name | Weighting | Due |
|--------------|-----------|-------------------------|
| Deliverables | 34% | Negotiated individually |
| Deliverables | 33% | As negotiated |
| Deliverables | 33% | As negotiated |

Deliverables

Due: Negotiated individually

Weighting: 34%

In comp188 students have individual programmes of study which are developed in collaboration between the student, the supervisor, and the unit convenor. In addition, the same group negotiates an appropriate assessment regime, depending upon the nature of the work undertaken.

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 comp188 activities and due at the end of the study period. The other deliverables are more varied in nature depending upon students' individual projects.

On successful completion you will be able to:

- Students in comp188 will have individual experience in scoping a research project (in collaboration with a staff member). This is an important skill.
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Deliverables

Due: **As negotiated** Weighting: **33**%

The deliverables have been artificially separated into three to satisfy the Units system. In fact they will be treated as below:

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Delivery and Resources

The resources used in comp188 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 comp188 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 comp188.

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

Assessment Policy http://mq.edu.au/policy/docs/assessment/policy.html

Grading Policy http://mq.edu.au/policy/docs/grading/policy.html

Grade Appeal Policy http://mq.edu.au/policy/docs/gradeappeal/policy.html

Grievance Management Policy http://mq.edu.au/policy/docs/grievance_management/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 <u>Learning and Teaching Category</u> 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/

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 Services and Support

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

Student Enquiries

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

IT Help

For help with University computer systems and technology, visit http://informatics.mq.edu.au/hel
p/.

When using the University's IT, you must adhere to the <u>Acceptable Use Policy</u>. The policy applies to all who connect to the MQ network including students.

Graduate Capabilities

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:

Learning outcomes

- Students will develop research management skills which will be dependent upon the particular research area chosen, but students will manage a small research project and see it through to completion
- The comp188 deliverables will be negotiated with each student, but will typically include a project report, and students will develop research writing skills

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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- Depending upon the research project, there will be individual content skills developed by each student

Assessment tasks

- Deliverables
- Deliverables
- Deliverables

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:

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Assessment tasks

- Deliverables
- Deliverables
- Deliverables

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

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Assessment tasks

- Deliverables
- Deliverables
- Deliverables

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

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- Students will develop research management skills which will be dependent upon the particular research area chosen, but students will manage a small research project and see it through to completion
- Depending upon the research project, there will be individual content skills developed by each student

Assessment tasks

- Deliverables
- Deliverables
- Deliverables

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 comp188 will have individual experience in scoping a research project (in collaboration with a staff member). This is an important skill.
- Students will develop research management skills which will be dependent upon the particular research area chosen, but students will manage a small research project and see it through to completion
- The comp188 deliverables will be negotiated with each student, but will typically include a project report, and students will develop research writing skills

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 outcome

 The comp188 deliverables will be negotiated with each student, but will typically include a project report, and students will develop research writing skills

Assessment tasks

- Deliverables
- Deliverables
- Deliverables

Engaged and Ethical Local and Global citizens

As local citizens our graduates will be aware of indigenous perspectives and of the nation's historical context. They will be engaged with the challenges of contemporary society and with knowledge and ideas. We want our graduates to have respect for diversity, to be open-minded, sensitive to others and inclusive, and to be open to other cultures and perspectives: they should have a level of cultural literacy. Our graduates should be aware of disadvantage and social justice, and be willing to participate to help create a wiser and better society.

This graduate capability is supported by:

Learning outcome

• Students will develop research management skills which will be dependent upon the particular research area chosen, but students will manage a small research project and

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see it through to completion