

COMP188

Enrichment Topics in Computing

S1 Day 2018

Dept of Computing

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General Information

Unit convenor and teaching staff

Convenor.

Annabelle McIver

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Contact via Email.

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. 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 significant research project (in collaboration with a staff member).

Development of management skills, including managing time, choosing appropriate methods and determining aims and objectives.

Development of technical skills applied in an unfamiliar situation. The precise skills will depend on the nature of the project.

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

Name	Weighting	Hurdle	Due
Project specification	10%	No	Negotiated.
Technical deliverable	50%	No	Negotiated
Report	40%	No	Negotiated

Project specification

Due: **Negotiated.** Weighting: **10%**

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

On successful completion you will be able to:

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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.

On successful completion you will be able to:

- Students in comp188 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.
- Development of technical skills applied in an unfamiliar situation. The precise skills will depend on the nature of the project.
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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.

On successful completion you will be able to:

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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 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 (https://staff.m.g.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- · Fitness to Practice Procedure
- Grade Appeal Policy
- Complaint Management Procedure for Students and Members of the Public
- Special Consideration Policy (Note: The Special Consideration Policy is effective from 4

 December 2017 and replaces the Disruption to Studies Policy.)

Undergraduate students seeking more policy resources can visit the <u>Student Policy Gateway</u> (htt <u>ps://students.mq.edu.au/support/study/student-policy-gateway</u>). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

If you would like to see all the policies relevant to Learning and Teaching visit Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central).

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mg.edu.au/study/getting-started/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.m q.edu.au.

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://www.mq.edu.au/about_us/ offices_and_units/information_technology/help/.

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

Graduate Capabilities

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 significant research project (in collaboration with a staff member).
- Development of management skills, including managing time, choosing appropriate

methods and determining aims and objectives.

- Development of technical skills applied in an unfamiliar situation. The precise skills will depend on the nature of the project.
- Technical writing and communication skills will be developed to explain how the technical deliverable contributes to the overall project aims and objectives.

Assessment tasks

- · Project specification
- · Technical deliverable

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 comp188 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

- Students in comp188 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

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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- Students in comp188 will have individual experience in scoping a significant research project (in collaboration with a staff member).
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Report

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:

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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 comp188 will have individual experience in scoping a significant research project (in collaboration with a staff member).
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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 comp188 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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