COMP8990

Master of Research - Computing

Session 2, In person-scheduled-weekday, North Ryde 2023

School of Computing

Contents

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General Information

Unit convenor and teaching staff Abhaya Nayak abhaya.nayak@mq.edu.au
Credit points 80
Prerequisites
Corequisites
Co-badged status
Unit description The 800-level components of the Master of Research are not designed around units. The thesis together with four core research activities form a single coherent research unit based on individual research plans and will consists of the following: 1. Research Frontiers 2: you will attend a number of department or faculty-run sessions and engage in a program of activities developing your knowledge of the sub-disciplinary field in which you want to situate your own research 2. Literature Review: you will attend sessions explaining how researchers in your field engage with previous research literature, and produce a draft of your own literature review for your thesis 3. Research Methods: with other students and led by academic staff, you will develop the research methods you will use in your research project 4. Research Planning: through a combination of group sessions and individual work with your supervision team, you will develop a plan for a large scale research project, part of which will be completed in the MRes 5. Thesis: you will complete a small research project, and write it up in a short thesis of about 20,000 words.

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:

> **ULO1:** Formulate a research question that has the potential to make original

contributions within their research field

ULO2: Research and compose a comprehensive and critical literature review in a specific research area centered around a research question.

ULO4: Use well-developed judgement to undertake research ethically and responsibly at the highest professional standards

ULO3: Conduct independent scholarly research in your field or discipline following well-established research methodology within their research field.

ULO5: Undertake a qualitative or quantitative analysis of the data collected, identify and apply appropriate research methods for the research question at hand, inclusive of critical reasoning, argumentation and justification.

ULO6: Write a significant research thesis of 20,000 words with a professional presentation

General Assessment Information

The three main assessment tasks -- Project Planning, Research Methods and Literature Review -- involve submission of reports via TurnItIn, will receive a 'Satisfactory' (50% mark) or 'Non-Satisfactory' (0% mark) -- grade. These are formative assessments, and intended to contribute to the thesis that the student will finally submit. Students receive verbal feedback on their work, and will need to obtain a satisfactory grade in each of these components. The Research Frontiers 2 and and Thesis are separately assessed.

Being cognizant of the different needs of research students, and of the different nature of this unit, student requests for late submission are decided on a case-by-case basis by the convenor. Students are encouraged to directly contact the convenor for this purpose.

Assessment Tasks

Name	Weighting	Hurdle	Due
Project planning	0%	No	Week 4
Research Methods	0%	No	Week 10
Literature Review	0%	No	Week 13
Research Frontiers 2	10%	No	Mid-November (TBC)
Thesis	90%	No	May 2024

Project planning

Assessment Type [1]: Plan
Indicative Time on Task [2]: 10 hours

Due: **Week 4**
Weighting: **0%**

The objective is to provide training in project management, and planning of a major research project. A brief project plan & budget will be developed.

On successful completion you will be able to:

- Formulate a research question that has the potential to make original contributions within their research field
- Use well-developed judgement to undertake research ethically and responsibly at the highest professional standards

Research Methods

Assessment Type [1]: Report
Indicative Time on Task [2]: 20 hours
Due: **Week 10**
Weighting: **0%**

The goal of this task is for you to really scrutinise the experimental and/or theoretical design of your research and to write the methods section of your thesis.

On successful completion you will be able to:

- Formulate a research question that has the potential to make original contributions within their research field
- Use well-developed judgement to undertake research ethically and responsibly at the highest professional standards
- Conduct independent scholarly research in your field or discipline following well-established research methodology within their research field.
- Undertake a qualitative or quantitative analysis of the data collected, identify and apply appropriate research methods for the research question at hand, inclusive of critical reasoning, argumentation and justification.

Literature Review

Assessment Type [1]: Literature review
Indicative Time on Task [2]: 40 hours

Due: **Week 13**
Weighting: **0%**

The goal of this task is to collate and understand the background literature for your chosen project and to produce a written report which will be part of your thesis.

On successful completion you will be able to:

- Formulate a research question that has the potential to make original contributions within their research field
- Research and compose a comprehensive and critical literature review in a specific research area centered around a research question.
- Use well-developed judgement to undertake research ethically and responsibly at the highest professional standards
- Conduct independent scholarly research in your field or discipline following well-established research methodology within their research field.

Research Frontiers 2

Assessment Type [1]: Poster
Indicative Time on Task [2]: 20 hours
Due: **Mid-November (TBC)**
Weighting: **10%**

This will have two components: (1) a research poster and (2) five short reports on your attended Departmental seminars.

On successful completion you will be able to:

- Research and compose a comprehensive and critical literature review in a specific research area centered around a research question.
- Use well-developed judgement to undertake research ethically and responsibly at the highest professional standards

Thesis

Assessment Type [1]: Thesis
Indicative Time on Task [2]: 1084 hours
Due: **May 2024**

Weighting: **90%**

This is the major component of the year, the writing of a thesis; the other activities are all designed to support this.

On successful completion you will be able to:
- Formulate a research question that has the potential to make original contributions within their research field
- Research and compose a comprehensive and critical literature review in a specific research area centered around a research question.
- Use well-developed judgement to undertake research ethically and responsibly at the highest professional standards
- Conduct independent scholarly research in your field or discipline following well-established research methodology within their research field.
- Undertake a qualitative or quantitative analysis of the data collected, identify and apply appropriate research methods for the research question at hand, inclusive of critical reasoning, argumentation and justification.
- Write a significant research thesis of 20,000 words with a professional presentation

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[1] If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the Writing Centre for academic skills support.

[2] Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

Delivery and Resources

Two hours are set aside everyweek for lectures and studenrt presentations. There are no other classes such as labs. The classes will be held in 4 Research Park Dr - G14 on Fridays (2:00pm-4:00pm). Students are encouraged to check MQ timateble for any, unlikely, last minute change in schedule.

Should the students need to communicate with the convenor outside the class hours, email is the preferred mode of communication. Students must use their MQ email address for this purpose.

For the latest information on the University's response to COVID-19, please refer to the

Coronavirus infection page on the Macquarie website: https://www.mq.edu.au/about/coronavirus-faqs. Remember to check this page regularly in case the information and requirements change during semester. If there are any changes to this unit in relation to COVID, these will be communicated via iLearn.

Unit Schedule

Weeks	Deliverables	Discussion Topics
1		Introduction & Administrative Matters
2		General discussion of discipline-specific research methods; expectations for research planning & budgeting
3		Writing & reviewing research papers; Ethics and academic honesty policies
4	**The research plan & budget** **[Due 9am on Friday]**	Discussion of how to structure and write a discipline-specific literature review;
5		Giving presentations at conferences
6	**5MT presentation slides** **[Due 9am on Friday]**	5MT presentations of research plans & budgets by the students
7	**Paper review** **[Due 9am on Friday]**	Deciding on where to publish work; Searching for information on publication venues
Recess **(11-22 September)**		
8	**Progress Report** **[Due 9am on Friday]**	Scientific writing using LaTeX
9		Writing a thesis; using LaTeX thesis styles

10	**The research methods report** **[Due 9am on Friday]**	Independent reading & study
11		Introduction to MQPGRF and other funding sources for research
12	**10MT presentation slides [Due 9am on Friday]**	10MT presentation of the research methods
13	**The literature review** **[Due 9am on Friday]**	10MT presentation of the research methods (cont'd)

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). 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
- Assessment Procedure
- Complaints Resolution Procedure for Students and Members of the Public
- Special Consideration Policy

Students seeking more policy resources can visit Student Policies (https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.edu.au) and use the search tool.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

Results

Results published on platform other than eStudent, (eg. iLearn, Coursera etc.) 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 or if you are a Global MBA

student contact globalmba.support@mq.edu.au

Academic Integrity

At Macquarie, we believe academic integrity – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free online writing and maths support, academic skills development and wellbeing consultations.

Student Support

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

The Writing Centre

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- Chat with a WriteWISE peer writing leader
- Access StudyWISE
- Upload an assignment to Studiosity
- Complete the Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian

Student Services and Support

Macquarie University offers a range of Student Support Services including:

- IT Support
- Accessibility and disability support with study
- Mental health support
- Safety support to respond to bullying, harassment, sexual harassment and sexual assault
- Social support including information about finances, tenancy and legal issues
- Student Advocacy provides independent advice on MQ policies, procedures, and processes

Student Enquiries

Got a question? Ask us via AskMQ, or contact Service Connect.

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.

Changes from Previous Offering

We value student feedback to be able to continually improve the way we offer our units, and encourage students to provide constructive feedback to the teaching staff directly.

Student feedback from the previous offering of this unit was very positive overall, and so no change to the delivery of the unit is planned at the moment.