



COMP7900

Research Frontiers in Computing

Session 1, In person-scheduled-weekday, North Ryde 2025

School of Computing

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General Information

Unit convenor and teaching staff

Convenor, Lecturer

Mehmet Orgun

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Contact via Contact via email

4RPD, 282

Credit points

10

Prerequisites

Admission to GradDipResFSE or GradCertResFSE

Corequisites

Co-badged status

Unit description

This unit is designed to engage students with current research in computing. It will introduce students to a number of the current open research questions, new challenges and directions across the breadth of the discipline. Activities undertaken may include seminars by research groups and academics, directed reading and critical analysis of research papers and introduction to advanced methods and techniques. Students will demonstrate their understanding of current research presented in seminars, develop their science communication skills and reflect on their future goals in their chosen discipline. Presentation of student seminars and written reports based on the topics discussed in the class are required for completion of this unit.

Learning in this unit enhances student understanding of global challenges identified by the United Nations Sustainable Development Goals ([UNSDGs](#)) Industry, Innovation and Infrastructure

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: Demonstrate an understanding of current research being done in Computing

ULO2: Critically analyze and discuss current research with peers and other researchers

ULO3: Interpret and apply the principles of ethical conduct in selected disciplines of Computing

ULO4: Communicate current research questions, methods and results in multiple formats to peers and other researchers

ULO5: Critically reflect on your current knowledge and transferability of these in relation to your future goals

General Assessment Information

All the assessments in this unit align with the Faculty's and the School's Graduate Diploma of Research program. The main goal of this unit is to introduce the students to selected research areas and topics in computing, as well as discussing a few of the current open research questions across the breadth of the discipline.

Discussion Sessions

(Session 1) Assessment Type: Summary Indicative Time on Task: 10 hours Released by: **4pm March 10** Due: **4pm March 17** Weighting: 10%

(Session 2) Assessment Type: Summary Indicative Time on Task: 10 hours Released by: **4pm May 5** Due: **4pm May 12** Weighting: 10%

Students will present critical analyses of very recent papers on a topic relevant to each academic seminar and participate in discussions with the seminar speakers and their peers.

Written Reports

(Report 1) Assessment Type: Report Indicative Time on Task: 30 hours Released by: **4pm March 17** Due: **4pm April 7** Weighting: 30%

(Report 2) Assessment Type: Report Indicative Time on Task: 30 hours Released by: **4pm May 12** Due: **4pm June 2** Weighting: 30%

Presentations

(Presentation 1) Assessment Type: Presentation Indicative Time on Task: 10 hours Released by: **4pm March 17** Due: **4pm April 7** Weighting: 10%

(Presentation 2) Assessment Type: Presentation Indicative Time on Task: 10 hours Released by: **4pm May 12** Due: **4pm June 2** Weighting: 10%

Students will present two seminars to the class based on their written reports 1 & 2 respectively and participate in discussions with their peers.

Requirement to Pass this Unit

To pass this unit, you must achieve a total mark equal to or greater than 50%.

Late Assessment Submission

Late assessments are not accepted in this unit unless a [Special Consideration](#) has been submitted and approved.

The [Special Consideration Policy](#) aims to support students who have been impacted by short-term circumstances or events that are serious, unavoidable and significantly disruptive, and which may affect their performance in assessment. If you experience circumstances or events that affect your ability to complete the assessments in this unit on time, please inform the convenor and submit a Special Consideration request.

Assessment Tasks

Name	Weighting	Hurdle	Due
Discussion sessions	20%	No	4pm March 17 (Session 1); 4pm May 12 (Session 2)
Written report 1	30%	No	4pm April 7
Presentation 1	10%	No	4pm April 7
Written Report 2	30%	No	4pm June 2
Presentation 2	10%	No	4pm June 2

Discussion sessions

Assessment Type [1](#): Summary

Indicative Time on Task [2](#): 20 hours

Due: **4pm March 17 (Session 1); 4pm May 12 (Session 2)**

Weighting: **20%**

Students will present critical analyses of very recent papers on a topic relevant to each academic seminar

On successful completion you will be able to:

- Demonstrate an understanding of current research being done in Computing
- Critically analyze and discuss current research with peers and other researchers
- Interpret and apply the principles of ethical conduct in selected disciplines of Computing

Written report 1

Assessment Type [1](#): Report

Indicative Time on Task ²: 30 hours

Due: **4pm April 7**

Weighting: **30%**

For a chosen topic based on academic seminars, students will submit a report including a discussion of transfer-ability of the topic in relation to their future goals

On successful completion you will be able to:

- Interpret and apply the principles of ethical conduct in selected disciplines of Computing
- Communicate current research questions, methods and results in multiple formats to peers and other researchers
- Critically reflect on your current knowledge and transferability of these in relation to your future goals

Presentation 1

Assessment Type ¹: Presentation

Indicative Time on Task ²: 10 hours

Due: **4pm April 7**

Weighting: **10%**

Students will present a seminar to the class based on their Written Report 1.

On successful completion you will be able to:

- Critically analyze and discuss current research with peers and other researchers
- Interpret and apply the principles of ethical conduct in selected disciplines of Computing
- Communicate current research questions, methods and results in multiple formats to peers and other researchers

Written Report 2

Assessment Type ¹: Report

Indicative Time on Task ²: 30 hours

Due: **4pm June 2**

Weighting: **30%**

For a chosen topic based on academic seminars, students will submit a report including a

discussion of transfer-ability of the topic in relation to their future goals

On successful completion you will be able to:

- Interpret and apply the principles of ethical conduct in selected disciplines of Computing
- Communicate current research questions, methods and results in multiple formats to peers and other researchers
- Critically reflect on your current knowledge and transferability of these in relation to your future goals

Presentation 2

Assessment Type ¹: Presentation

Indicative Time on Task ²: 10 hours

Due: **4pm June 2**

Weighting: **10%**

Students will present a seminar to the class based on their Written Report 2.

On successful completion you will be able to:

- Critically analyze and discuss current research with peers and other researchers
- Interpret and apply the principles of ethical conduct in selected disciplines of Computing
- Communicate current research questions, methods and results in multiple formats to peers and other researchers

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

Classes

A 2 hour Lecture would be delivered each week on campus. There are no other activities on campus besides the lectures.

Week 1 Classes

Note that lectures will start in week 1.

Required and Recommended Texts

All required and recommended readings will be provided as part of the lecture material.

Assignments

Assignments would be made available on [iLearn](#) and would be submitted online via Turnitin.

Methods of Communication

We will communicate with you via your Macquarie University's Email or through Announcements on [iLearn](#).

Students are highly encouraged to ask questions from the Lecturer(s) in a bid to clarify anything they might not be sure of. Students are also encouraged to engage in active discussion via the General Discussion Forum on [iLearn](#).

Unit Schedule

The following schedule is tentative. Please consult iLearn for any possible updates.

Week	Topic	Lecturer
Week 1	Welcome and Introduction	Mehmet Orgun
Week 2	Doing Postgraduate Research	Mehmet Orgun
Week 3	Seminar 1	TBA
Week 4	Discussion Session 1	TBA
Week 5	How to Give Presentations	Mehmet Orgun
Week 6	Academic Integrity	Mehmet Orgun
Week 7	Presentations of the first written reports	Mehmet Orgun
	2-Week Recess	
Week 8	Independent reading	Mehmet Orgun
Week 9	Seminar 2	TBA
Week 10	Discussion Session 2	TBA
Week 11	MRes Program & Future Goals	TBA
Week 12	Open discussion & catchup session	Mehmet Orgun
Week 13	Presentations of the second written reports	Mehmet Orgun

Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central \(https://policies.mq.edu.au\)](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 \(https://students.mq.edu.au/support/study/policies\)](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 \(https://policies.mq.edu.au\)](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 connect.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/>

Academic Success

[Academic Success](#) 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 the [Service Connect Portal](#), 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. As such we encourage students to provide constructive feedback via student surveys, to the teaching staff directly, or via the FSE Student Experience & Feedback link in the [iLearn](#) page.

Student feedback from the previous offerings of this unit was very positive overall, with students pleased with the clarity around assessment requirements and the level of support from teaching staff. As such, no change to the delivery of the unit is planned, however we will continue to strive to improve the level of support and the level of student engagement.

Unit information based on version 2025.06 of the [Handbook](#)