

# **COMP8871**

## **Internal Research Project**

Session 2, Special circumstance 2020

Department of Computing

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#### Disclaimer

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#### Notice

As part of Phase 3 of our return to campus plan, most units will now run tutorials, seminars and ot her small group learning activities on campus for the second half-year, while keeping an online ver sion available for those students unable to return or those who choose to continue their studies online

To check the availability of face-to-face and onlin e activities for your unit, please go to timetable viewer. To check detailed information on unit asses sments visit your unit's iLearn space or consult your unit convenor.

## **General Information**

Unit convenor and teaching staff

Convenor and Lecturer

Abhaya Nayak

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4 BD Bulding, Room 357

Friday 12:00 - 13:00, and/or by appointment

Lecturer

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#### Credit points

20

#### **Prerequisites**

40cp foundation zone units and 60cp core zone units and admission to MInfoTechNetworking or MInfoSysMgmt or MInfoTechCyberSec

#### Corequisites

#### Co-badged status

#### Unit description

Depending upon a candidate's specialist stream, interests and employment circumstances, this unit may comprise literature research, a case study, a software project development, or a project sponsored by the candidate's employer. Candidates are expected to demonstrate initiative and independence in researching, executing and documenting an involved information and communications technology project as well as its ethical implications.

## 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:** Apply research methods in the planning, analysis, design, implementation, delivery and maintenance of software systems.

**ULO2:** Design and execute a project from a brief initial specification through to a complete set of agreed outcomes and demonstrate an advanced understanding of systems analysis and/or development projects in the area of IT.

**ULO3:** Conduct a survey of the background literature, drawing out the key themes and issues and making comparisons between previous research studies and the research methods used for investigation and implementation of software systems.

**ULO4:** Demonstrate academic writing, note-taking and revision skills and effective timemanagement to achieve project deadlines.

**ULO5:** Present the results of work carried out in a detailed and appropriately structured report, and communicate effectively in both spoken and written forms.

**ULO6:** Demonstrate an understanding of the importance of professional ethics, and of how to recognize and address ethical issues when they arise.

### **General Assessment Information**

### **Submission Methods**

All assessment task are required to be submitted on ilearn. Each assessment task submitted will be given a numerical mark as an indication of the standard reached.

### Late Submission

No extensions will be granted without an approved application for <u>Special Consideration</u>. There will be a deduction of 10% of the total available marks made from the total awarded mark for each 24 hour period or part thereof that the submission is late. For example, 25 hours late in submission for an assignment worth 10 marks – 20% penalty or 2 marks deducted from the total.

If you are unable to submit an assignment on time due to unavoidable disruption (such as illness) then you should (1) notify the convenor immediately by email (2) submit what you have achieved by the deadline and (3) formally lodge a notification of disruption.

## Technology Used and Required

The written reports are to be submitted as **PDF files**. Students would use MS Word, Latex or some other word-processing tool to prepare the source-document from which the PDF files are generated. For presentations students are expected to make use of MS PowerPoint (or equivalent). Programming languages and technologies to be used depend on the requirements of the project. You may consult your project supervisor regarding these.

### What to Submit

- 1. There are altogether eight items to submit: four "reports" and four sets of presentation slides.
  - The four reports are: preliminary proposal, revised proposal, preliminary report, and final report.
  - The four sets of slides correspond to the four written submissions.
- 2. Submission of each set of slides is followed by an associated presentation.
- 3. The reports and associated presentation slides will need to be submitted by appropriate deadline. All submissions must be in appropriate format, and be appropriately named.
- 4. All submissions (reports as well as presentation slides) must be submitted via iLearn.

### **Final Grades**

At the end of the semester, you will receive a final grade based on the sum total of all the marks you receive in different assessment tasks. Specifically, in order to pass the unit, you should earn a total of at least 50 marks out of the maximum possible 100 marks in the unit. The Final Grade that you receive reflects your overall achievement in the unit. Different grades are defined in general terms as follows.

- Fail (F) -- total mark less than 50 -- does not provide evidence of attainment of all learning outcomes. There is missing or partial or superficial or faulty understanding and application of the fundamental concepts in the field of study; and incomplete, confusing or lacking communication of ideas in ways that give little attention to the conventions of the discipline. That is, overall work is unsatisfactory or still developing according to the standards defined above.
- Pass (P) -- total mark between 50 and 64 -- provides sufficient evidence of the
  achievement of learning outcomes. There is demonstration of understanding and
  application of fundamental concepts of the field of study; and communication of
  information and ideas adequately in terms of the conventions of the discipline. The
  learning attainment is considered satisfactory or adequate or competent or capable or
  functional in relation to the specified outcomes.
- Credit (Cr) --total mark between 65 and 74 -- provides evidence of learning that goes

beyond replication of content knowledge or skills relevant to the learning outcomes. There is demonstration of substantial understanding of fundamental concepts in the field of study and the ability to apply these concepts in a variety of contexts; plus communication of ideas fluently and clearly in terms of the conventions of the discipline. The overall learning attainment is proficient.

- Distinction (D) --total mark between 75 and 84 -- provides evidence of integration and
  evaluation of critical ideas, principles and theories, distinctive insight and ability in
  applying relevant skills and concepts in relation to learning outcomes. There is
  demonstration of frequent originality in defining and analysing issues or problems and
  providing solutions; and the use of means of communication appropriate to the discipline
  and the audience. The overall learning attainment is advanced.
- High Distinction (HD) -- total mark of 85 or above -- provides consistent evidence of
  deep and critical understanding in relation to the learning outcomes. There is substantial
  originality and insight in identifying, generating and communicating competing
  arguments, perspectives or problem solving approaches; critical evaluation of problems,
  their solutions and their implications; creativity in application. The overall learning
  attainment is outstanding.

With respect to the *quality of the projects* in particular, the higher grades have the following connotation:

- High Distinction: Outstanding quality IT projects with the addition of originality and/or creativity achieved by an outstanding understanding of concepts. Students are expected to go beyond the limits of lecture material.
- Distinction: Superior quality IT projects achieved by superior understanding of concepts. Students are expected to master the lecture material. They are expected to successfully achieve all the goals defined in the IT project.
- Credit: Good understanding of concepts and good quality IT projects. Students are
  expected to have good understanding of the lecture material. They are expected to
  successfully achieve most of the goals listed in IT project.

### **Assessment Tasks**

Name	Weighting	Hurdle	Due
Preliminary proposal	10%	No	Week 3
Revised proposal	10%	No	Week 6

Name	Weighting	Hurdle	Due
Progress presentation	10%	No	Weeks 3, 6 and 9
Prelimary report	10%	No	Week 9
Final presentation	15%	No	Week 13
Final report	45%	No	Week 14

## Preliminary proposal

Assessment Type 1: Plan

Indicative Time on Task 2: 20 hours

Due: Week 3 Weighting: 10%

Submission of the preliminary proposal, about 2 pages. Student peer review may be organised for extra feedback.

On successful completion you will be able to:

- Apply research methods in the planning, analysis, design, implementation, delivery and maintenance of software systems.
- Design and execute a project from a brief initial specification through to a complete set of agreed outcomes and demonstrate an advanced understanding of systems analysis and/ or development projects in the area of IT.
- Conduct a survey of the background literature, drawing out the key themes and issues
  and making comparisons between previous research studies and the research methods
  used for investigation and implementation of software systems.
- Demonstrate academic writing, note-taking and revision skills and effective timemanagement to achieve project deadlines.
- Present the results of work carried out in a detailed and appropriately structured report, and communicate effectively in both spoken and written forms.

## Revised proposal

Assessment Type 1: Plan

Indicative Time on Task 2: 20 hours

Due: Week 6 Weighting: 10% Submission of a revised proposal taking into account feedback received on preliminary proposal, about 4 pages. Student peer review may be organised for extra feedback.

On successful completion you will be able to:

- Apply research methods in the planning, analysis, design, implementation, delivery and maintenance of software systems.
- Design and execute a project from a brief initial specification through to a complete set of agreed outcomes and demonstrate an advanced understanding of systems analysis and/ or development projects in the area of IT.
- Conduct a survey of the background literature, drawing out the key themes and issues
  and making comparisons between previous research studies and the research methods
  used for investigation and implementation of software systems.
- Demonstrate academic writing, note-taking and revision skills and effective timemanagement to achieve project deadlines.

### Progress presentation

Assessment Type 1: Presentation Indicative Time on Task 2: 10 hours

Due: Weeks 3, 6 and 9

Weighting: 10%

About one-third of the class will be randomly selected to make an interim presentation in weeks 3, 6, and 9. Every student will be selected to make at least one interim presentation. Every student must be prepared to make presentation in each of these sessions. If the student is not present (without good reason) or is not prepared to make the presentation will attract penalty.

On successful completion you will be able to:

- Demonstrate academic writing, note-taking and revision skills and effective timemanagement to achieve project deadlines.
- Present the results of work carried out in a detailed and appropriately structured report,
   and communicate effectively in both spoken and written forms.

## Prelimary report

Assessment Type 1: Report

Unit guide COMP8871 Internal Research Project

Indicative Time on Task 2: 20 hours

Due: Week 9 Weighting: 10%

Submission of a draft project report (about 7 pages). Student peer review may be organised for

extra feedback.

On successful completion you will be able to:

• Apply research methods in the planning, analysis, design, implementation, delivery and

maintenance of software systems.

Design and execute a project from a brief initial specification through to a complete set of

agreed outcomes and demonstrate an advanced understanding of systems analysis and/

or development projects in the area of IT.

Conduct a survey of the background literature, drawing out the key themes and issues

and making comparisons between previous research studies and the research methods

used for investigation and implementation of software systems.

· Demonstrate academic writing, note-taking and revision skills and effective time-

management to achieve project deadlines.

Final presentation

Assessment Type 1: Presentation

Indicative Time on Task 2: 15 hours

Due: Week 13 Weighting: 15%

An audio-visual presentation of project results and conclusions.

On successful completion you will be able to:

Demonstrate academic writing, note-taking and revision skills and effective time-

management to achieve project deadlines.

• Present the results of work carried out in a detailed and appropriately structured report,

and communicate effectively in both spoken and written forms.

Final report

Assessment Type 1: Report

Indicative Time on Task 2: 80 hours

Due: Week 14 Weighting: 45%

Submission of Final Report (20 pages). Student peer review may be organised for extra feedback.

On successful completion you will be able to:

- Apply research methods in the planning, analysis, design, implementation, delivery and maintenance of software systems.
- Design and execute a project from a brief initial specification through to a complete set of agreed outcomes and demonstrate an advanced understanding of systems analysis and/ or development projects in the area of IT.
- Conduct a survey of the background literature, drawing out the key themes and issues
  and making comparisons between previous research studies and the research methods
  used for investigation and implementation of software systems.
- Demonstrate academic writing, note-taking and revision skills and effective timemanagement to achieve project deadlines.
- Present the results of work carried out in a detailed and appropriately structured report,
   and communicate effectively in both spoken and written forms.
- Demonstrate an understanding of the importance of professional ethics, and of how to recognize and address ethical issues when they arise.
- <sup>1</sup> 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.

## **Delivery and Resources**

COMP8871 is taught via seminars and presentations. The feedback that you receive on writing and presentations plays a crucial role in your learning. The feedback will be provided in lectures, presentation classes, on iLearn forums and consultations.

Make sure you are completely familiar with the content of the official Unit Outline. You are

<sup>&</sup>lt;sup>2</sup> Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

expected to regularly consult your supervisor. You should also attend all the lectures and presentations.

- 1. Note that we will be using <u>iLearn</u> as the central web-based communication point for this unit. If you are enrolled in the unit, it is essential that you check the iLearn site once a day, since important information will always be posted there in the News Forum. You should be able to login to iLearn using your MQ student ID and password; if you experience any problems, contact the Faculty of Science <u>IT Help Desk</u>. The IT help desk website is located at <a href="http://web.science.mg.edu.au/it/doc//helpdesk/">http://web.science.mg.edu.au/it/doc//helpdesk/</a>.
- 2. The core of this unit is a project. You will be working on a project agreed upon with the unit convenor.
- 3. Classroom and class time can be found at <a href="https://timetables.mq.edu.au/2020/">https://timetables.mq.edu.au/2020/</a>. Note that for this unit you are also expected to be working on your project during the recess, so there are really 15 weeks that are relevant for scheduling purposes. Make sure you are familiar with the class schedule.
- 4. Check out how the assessment for the unit works.
- 5. The unit culminates in an end-of-semester workshop where everyone gives a presentation on their project.

### Other Resources

A significant proportion of the class time in this unit focuses on communication skills, but we don't have the time or space to go into some matters in as much detail as some people would like. If you would like to improve your skills in academic writing, you should check out the <a href="Postgraduate Academic Literacy Workshops">Postgraduate Academic Literacy Workshops</a>.

You have many opportunities to seek for and receive feedback. During seminars, you are encouraged to ask the lecturer questions to clarify anything you might not be sure of. You will be regularly given assignments to complete. This will at times involve contributing to a group of students and presenting solutions to the class. The comments and the solutions provided will help you to understand the objectives of the unit, prepare you for the work in assignments. It is important that you keep up with these assignments on a timely fashion.

**Discussion Boards** The unit makes use of discussion boards hosted within iLearn. Please post questions of general interest there (for example, about assessment tasks), they are monitored by the staff on the unit.

**Student Support Services** Macquarie University provides a range of Academic Student Support Services. Details of these services can accessed at <a href="http://www.student.mq.edu.au">http://www.student.mq.edu.au</a>.

If you have exhausted all other avenues, then you should consult Director of Postgraduate Program or the Head of Department. You are entitled to have your concerns raised, discussed and resolved.

### **Unit Schedule**

The first scheduled class is in Week 1, and the current schedule for all weeks is shown below. Note that this schedule is still provisional, and the particular Fridays we meet may change at short notice depending upon circumstances. So you should be prepared for attendance every Friday during semester.

In general, on each occasion that we meet, around half of the class time will be in the form of a lecture and discussion session on material that is relevant to an upcoming assessable activity; the other half of the class will be occupied by class members giving short presentations on progress on their projects.

WEEK 1	Class Logistics; Assessment and Expectations; Writing Up Your Project Proposal;		
WEEK 2	NO CLASS		
WEEK 3	Preliminary Proposal Presentations	Preliminary Proposal	
WEEK 4	Summary of Preliminary Proposals		
WEEK 5	NO CLASS		
WEEK 6	Revised Project Proposal Presentations	Revised Project Proposal	
WEEK 7	Summary of Revised Project Proposals		
MID-SEMESTER BREAK			
WEEK 8	NO CLASS		
WEEK 9	Preliminary Report Presentations	Preliminary Reports	
WEEK 10	Summary of Preliminary Reports		
WEEK 11	NO CLASS		
WEEK 12	NO CLASS		
WEEK 13	Postgraduate Workshop	Final Presentation (Final Report Submission Week 14)	

## **Policies and Procedures**

Macquarie University policies and procedures are accessible from <u>Policy Central</u> (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-centr

<u>al</u>). 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.)

Students seeking more policy resources can visit the <u>Student Policy Gateway</u> (https://students.m <u>q.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.mq.edu.au/study/getting-started/student-conduct

#### Results

Results published on platform other than <u>eStudent</u>, (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 <u>eStudent</u>. For more information visit <u>ask.mq.edu.au</u> or if you are a Global MBA student contact globalmba.support@mq.edu.au

### Student Support

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

### **Learning Skills**

Learning Skills (<u>mq.edu.au/learningskills</u>) provides academic writing resources and study strategies to help you improve your marks and take control of your study.

- Getting help with your assignment
- Workshops
- StudyWise
- · 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

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

If you are a Global MBA student contact globalmba.support@mq.edu.au

### IT Help

For help with University computer systems and technology, visit <a href="http://www.mq.edu.au/about\_us/">http://www.mq.edu.au/about\_us/</a> 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.