



# COMP3770

## Management of IT Systems and Projects

Session 1, Weekday attendance, North Ryde 2020

*Dept of Computing*

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## General Information

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Credit points

10

Prerequisites

130cp at 1000 level or above including 20cp in COMP or ISYS or ACCG or STAT or BUS or BBA or MGMT units at 2000 level

Corequisites

Co-badged status

COMP6770

**Unit description**

This unit aims to provide an understanding of how information technology systems and projects can be efficiently managed. This unit includes detailed study of techniques for planning, tracking and measuring software projects. Issues covered include: quality evaluation; estimation measurement techniques; and project risk planning and management. The unit provides a sound grounding in how projects can be managed in regards to quality assurance and risk assessment. The unit also covers issues in the management of IT systems, including: change management; configuration management and planning; people management; hardware asset management; and capacity planning and availability.

## Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at <https://students.mq.edu.au/important-dates>

## Learning Outcomes

**ULO1:** Demonstrate competence in planning, tracking and measuring Information technology projects; including the ability to undertake quality evaluation and estimation measurement techniques, and project risk planning and management.

**ULO2:** Analyse, describe and summarise appropriate techniques relating to: change management; configuration management and planning; human resource management; hardware asset management and capacity planning and availability.

**ULO3:** Demonstrate an understanding of the role of the CIO in analysing the information technology strategic direction of a firm, with the aim of recommending investment appropriate to the business context.

**ULO4:** Demonstrate confidence in leadership skills; communication skills; critical analysis skills; problem-solving skills and creative thinking skills.

## Assessment Tasks

Name	Weighting	Hurdle	Due
<a href="#"><u>Assignment 1</u></a>	10%	No	16th March 2020
<a href="#"><u>Assignment 2</u></a>	20%	No	6th April 2020
<a href="#"><u>Assignment 3</u></a>	20%	No	25th May 2020
<a href="#"><u>Final examination</u></a>	50%	Yes	9-26th June 2020

## Assignment 1

Assessment Type <sup>1</sup>: Literature review

Indicative Time on Task <sup>2</sup>: 10 hours

Due: **16th March 2020**

Weighting: **10%**

A literature review on an area of IT Project Management.

On successful completion you will be able to:

- Demonstrate competence in planning, tracking and measuring Information technology projects; including the ability to undertake quality evaluation and estimation measurement techniques, and project risk planning and management.

## Assignment 2

Assessment Type <sup>1</sup>: Modelling task

Indicative Time on Task <sup>2</sup>: 20 hours

Due: **6th April 2020**

Weighting: **20%**

A briefing on a contemporary IT project is given. The assignment involves planning the project with the assistance of MS Project and then providing a succinct Project Management Plan which includes the Gantt Chart, Network Diagram, Resource Allocation and addresses scope, objectives, success metrics, controls and risk management.

On successful completion you will be able to:

- Demonstrate competence in planning, tracking and measuring Information technology projects; including the ability to undertake quality evaluation and estimation measurement techniques, and project risk planning and management.
- Analyse, describe and summarise appropriate techniques relating to: change management; configuration management and planning; human resource management; hardware asset management and capacity planning and availability.
- Demonstrate confidence in leadership skills; communication skills; critical analysis skills; problem-solving skills and creative thinking skills.

## Assignment 3

Assessment Type <sup>1</sup>: Project

Indicative Time on Task <sup>2</sup>: 20 hours

Due: **25th May 2020**

Weighting: **20%**

Extensive background information is available for a failed system. Groups of 4 students will work

on a new project plan outlining the context and business benefits and consider a more flexible project process model and formulate an effective risk management plan. A comprehensive report is required.

On successful completion you will be able to:

- Demonstrate competence in planning, tracking and measuring Information technology projects; including the ability to undertake quality evaluation and estimation measurement techniques, and project risk planning and management.
- Analyse, describe and summarise appropriate techniques relating to: change management; configuration management and planning; human resource management; hardware asset management and capacity planning and availability.
- Demonstrate an understanding of the role of the CIO in analysing the information technology strategic direction of a firm, with the aim of recommending investment appropriate to the business context.
- Demonstrate confidence in leadership skills; communication skills; critical analysis skills; problem-solving skills and creative thinking skills.

## Final examination

Assessment Type <sup>1</sup>: Examination

Indicative Time on Task <sup>2</sup>: 40 hours

Due: **9-26th June 2020**

Weighting: **50%**

**This is a hurdle assessment task (see [assessment policy](#) for more information on hurdle assessment tasks)**

A final closed book examination will cover all lecture, reference and tutorial material.

On successful completion you will be able to:

- Demonstrate competence in planning, tracking and measuring Information technology projects; including the ability to undertake quality evaluation and estimation measurement techniques, and project risk planning and management.
- Analyse, describe and summarise appropriate techniques relating to: change management; configuration management and planning; human resource management; hardware asset management and capacity planning and availability.
- Demonstrate an understanding of the role of the CIO in analysing the information technology strategic direction of a firm, with the aim of recommending investment appropriate to the business context.
- Demonstrate confidence in leadership skills; communication skills; critical analysis skills;

problem-solving skills and creative thinking skills.

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<sup>1</sup> If you need guidance or support to understand or complete this type of assessment, please contact the Learning Skills Team

<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

## Delivery and Resources

### Classes

Each week you should attend two hours of lectures (Thursday 11-1pm), the tutorial-lecture (Friday 12-1pm ) and the practicals (from week 2). For details of days, times and rooms consult the [timetables webpage](#).

*Note that practicals commence in week 2.*

### Resources to assist your learning

[Digital recordings](#) of lectures are available as **Echo360** through iLearn login.

### Textbook

**The textbook for COMP3770/6770 used this semester is:**

- Schwalbe, K., (2019) [Information Technology Project Management](#) 9th Ed.  
Thomson Course Technology Boston Mass. U.S.A

Numerous recent references have been used to compile the management series of lectures and workshops from Weeks 8 to 11. Students will be provided with online references and reference will be made to additional textbooks available in the library.

### Technology used

Use will be made of MS Project, Google Code, JIRA, TRAC and GitHub. Students are also expected to make use of MS Word and MS Powerpoint.

The textbooks typically offer a trial version of Project as well.

### Submission methods for assessment tasks:

Only soft copy assignment submissions are required and submitted. Marks returned will be done through the COMP3770/6770 page on iLearn.

### Late submission:

Late submission of individual work will incur a 10% penalty for every 24 hours, or part thereof, it is late. So within 24 hours, the maximum mark that can be obtained is 90% of the full grade for that assessment task; between 24 and 48 hours, the maximum mark that can be obtained is 80% of the full grade; and so on. No extra documentation is required unless the student wishes to have an extension (see below) applied.

Late submissions of group based assignments are not permitted unless under exceptional circumstances with documentary evidence provided to the unit convenor which may include medical certificates as per the Department of Computing policy. One person being sick does not mean the group cannot submit work. Students are recommended to have a backup plan for group based submissions.

## Extensions

The current process is for the student or group to contact student services and apply for a disruption. Medical causes will require a Macquarie University Professional Authority Form.

Once a disruption has been approved, the convenor can grant special consideration which is usually an appropriate extension.

## Exam:

The final exam will focus on content covered in the classes throughout the semester. Please see the assessments section for details on the final exam. The final examination in this unit is a hurdle requirement. You must get a mark of at least 40% in the examination to pass the unit. If you get a mark of 30-39% in your first attempt at the final examination you will be given a second and final attempt. If you are given a second opportunity to sit the final examination as a result of failing to meet the minimum mark required, you will be offered that chance during the same supplementary examination period and will be notified of the exact day and time after the publication of final results for the unit.

## Unit Schedule

Week	Lecture	Lecture References	Practicals	Assignments
1 - Peter	Unit outline Introduction to PM The IT context	Unit guide Schwalbe Chap 1 Schwalbe Chap 2		<b>Assign 1 released – PM report</b>
2 - Peter	Scope management Time/schedule management	Schwalbe Chap 5 Schwalbe Chap 6	MS Project, Part 1	
3 - Peter	Cost management Quality management	Schwalbe Chap 7 Schwalbe Chap 8	MS Project, Part 2	<b>Assign 2 released: Project planning - due 6/4/20</b>
4 - Peter	Project Management process	Schwalbe Chap 3	Google Code	<b>Assign 1 due 16/3/20</b>
5 - Peter	Integration management	Schwalbe Chap 4	GitHub	
6 - Peter	Recap - buffer	chapters 1-8	JIRA and TRAC	

7 - Jian	HR/resource management	Schwalbe Chap 9		Assign 2 due 6/4/20 Assign 3 released: due week 12 (25/5/20)
<b>Mid Semester Break - 10-27th April including Easter</b>				
8 - Jian	Communication management	Schwalbe Chap 10	Group time	
9 - Jian	Risk management	Schwalbe Chap 11	Group time	
10 - Jian	Mobile, social, wearables, trends  Succeeding as a IT Professional	JWT, 2014  <a href="#">Professionals Australia</a>	Group time	
11 - Jian	Procurement management  The Internet of Things	Schwalbe Chap 12  BI Intelligence, 2014	Group time	
12 - Jian	Stakeholder management	Schwalbe Chap 13		Assign 3 due 25/5/20
13 - Peter/Jian	Exam revision	Exam topics will be outlined		
<b>Exam</b>	11-28th June	Check online for details		50% of Final Mark

## Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central \(https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central\)](https://staff.mq.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.)

Students seeking more policy resources can visit the [Student Policy Gateway \(https://students.mq.edu.au/support/study/student-policy-gateway\)](https://students.mq.edu.au/support/study/student-policy-gateway). 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](http://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central) (<http://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 [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](http://ask.mq.edu.au) or if you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.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](http://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 Enquiry Service

For all student enquiries, visit Student Connect at [ask.mq.edu.au](http://ask.mq.edu.au)

If you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

## Equity Support

Students with a disability are encouraged to contact the [Disability Service](#) who can provide appropriate help with any issues that arise during their studies.

## IT Help

For help with University computer systems and technology, visit [http://www.mq.edu.au/about\\_us/offices\\_and\\_units/information\\_technology/help/](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

The two units COMP3770 (replacing ISYS302) and COMP6770 (replacing ITEC602) are now completely identical - all assessment and due dates are the same.

## Standards

Four standards, namely HD, D, CR, P summarize as many different levels of achievement. Each standard is precisely defined to help students know what kind of performance is expected to deserve a certain mark. The standards corresponding to the learning outcomes of this unit are given below:

HD	Apply techniques and knowledge in new contexts, show breadth and depth of understanding of quality evaluation, estimation measurement, project risk planning and measurement. Can use MS Project and Sharepoint to solve problems with high accuracy.	A sound grounding in how projects can be managed in regards to quality assurance and risk assessment. Show breadth and depth of understandings on issues in the management of IT systems, including: change management, configuration management and planning, People management, hardware asset management and capacity planning and availability. Able to apply these techniques and knowledge in new contexts.	Demonstrate leadership, creativity, critical thinking and analysis skills. Enthusiatic in acquiring new knowledge in the IS project management area. Demonstrate capability in applying new IS project management knowledge to solve real-world problems. Conduct team work effectively and play a key role in moving the whole project team forward.
D	Apply techniques and knowledge in some new contexts, show breadth and depth of understanding across most of the topics including: quality evaluation, estimation measurement, project risk planning and measurement. Can use MS Project to solve problems, with limited errors.	A sound grounding in most topics related to how projects can be managed in regards to quality assurance and risk assessment. Show breadth and depth of understandings on most issues in the management of IT systems, including: change management, configuration management and planning, People management, hardware asset management and capacity planning and availability. Able to apply these techniques and knowledge in some new contexts.	Demonstrate some leadership occasionally. Show creativity, critical thinking and analysis skills. Have the capability in applying IS project management knowledge to solve real-world problems. Collaborate with team members well and finish assigned tasks on time and with good quality.
CR	Show breadth of understanding across most of the topics including: quality evaluation, estimation measurement, project risk planning and measurement. Have fundamental knowledge about how to use MS Project, but with some non-major errors.	Understands some aspects of how projects can be managed in regards to quality assurance and risk assessment. Show breadth of understandings on most issues in the management of IT systems, including: change management, configuration management and planning, People management, hardware asset management and capacity planning and availability.	Demonstrate analysis skills in some occasions. Know how to apply IS project management knowledge to solve some of the real-world problems. Able to finish assigned tasks on time and with good quality most of the time.

P	Can reproduce definitions and ideas, show some breadth of understanding of the topics including: quality evaluation, estimation measurement, project risk planning and measurement. Some knowledge about MS Project with a few major misunderstandings or mistakes.	Can reproduce some definitions and ideas, show some breadth on issues in the management of IT systems, including: change management, configuration management and planning, People management, hardware asset management and capacity planning and availability.	Demonstrate limited analysis skills. Can apply IS project management knowledge to solve limited real-world problems. Able to finish all assigned tasks on time and with acceptable quality.
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## Grading

At the end of the semester, you will receive a grade that reflects your achievement in the unit

- **Fail (F):** 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.
- **Pass (P):** 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 in relation to the specified outcomes.
- **Credit (Cr):** 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.
- **Distinction (D):** 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.
- **High Distinction (HD):** 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 final examination in this unit is a hurdle requirement. You must get a mark of at least 40% in

the examination to pass the unit. If you get a mark of at least 30% in your first attempt at the final examination you will be given a second and final attempt. If you are given a second opportunity to sit the final examination as a result of failing to meet the minimum mark required, you will be offered that chance during the same supplementary examination period and will be notified of the exact day and time after the publication of final results for the unit.

The final mark for the unit will be calculated by combining the marks for all assessment tasks according to the percentage weightings shown in the assessment summary.