

# **COMP6770**

# **Management of IT Systems and Projects**

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

School of Computing

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#### Disclaimer

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# **General Information**

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Credit points 10
Prerequisites
Corequisites
Co-badged status COMP3770

#### 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.

Learning in this unit enhances student understanding of global challenges identified by the United Nations Sustainable Development Goals (<u>UNSDGs</u>) 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 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 appreciation 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.

### **General Assessment Information**

### Requirements to Pass this Unit

To pass this Unit, you must achieve a total mark equal to or greater than 50%. Please note that there are no hurdles in this Unit.

**Late Assessment Submission Penalty** 

From 1 July 2022, Students enrolled in Session based units with written assessments will have the following university standard late penalty applied. Please see <a href="https://students.mq.edu.au/study/assessment-exams/assessments">https://students.mq.edu.au/study/assessment-exams/assessments</a> for more information.

The <u>Special Consideration Policy</u> 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 through ask.mq.edu.au.

Unless a Special Consideration request has been submitted and approved, a 5% penalty (of the total possible mark) will be applied each day a written assessment is not submitted, up until the 7th day (including weekends). After the 7th day, a grade of '0' will be awarded even if the assessment is submitted. Submission time for all written assessments is set at 11:55 pm. A 1-hour grace period is provided to students who experience a technical concern.

For any late submission of time-sensitive tasks, such as scheduled tests/exams, performance assessments/presentations, and/or scheduled practical assessments/labs, students need to submit an application for Special Consideration.

#### Assessments where Late Submissions will be accepted

In this unit, late submissions will accepted as follows:

- Assignment 1 YES, Standard Late Penalty applies
- Assignment 2 YES, Standard Late Penalty applies
- Assignment 3 YES, Standard Late Penalty applies

#### Assessment tools and submission

Marking rubrics are used for assignments

Assignments are submitted on iLearn and Turnitin

Assessments are marked as soon as practicable - typically within a couple of weeks.

The exam may take place via a pink paper or online. Where a special consideration for an exam has been submitted and accepted a supplementary exam is available some weeks after the initial exam.

#### To pass this unit you must:

Achieve a total mark equal to or greater than 50%.

# **Assessment Tasks**

Name	Weighting	Hurdle	Due
Assignment 1	10%	No	21/03/2025

Name	Weighting	Hurdle	Due
Assignment 2	20%	No	17/04/2025
Assignment 3	20%	No	23/05/2025
Final examination	50%	No	10-27th June

# **Assignment 1**

Assessment Type 1: Literature review Indicative Time on Task 2: 10 hours

Due: **21/03/2025** 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 1: Modelling task Indicative Time on Task 2: 20 hours

Due: **17/04/2025** 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.

### **Assignment 3**

Assessment Type 1: Project Indicative Time on Task 2: 20 hours

Due: **23/05/2025** 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, sustainability 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 appreciation 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 1: Examination Indicative Time on Task 2: 40 hours

Due: **10-27th June** Weighting: **50%** 

A final examination will cover all lecture, reference and SGTA 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 appreciation 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.
- <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**

#### **Lectures and Practicals**

Each week, you should attend a 2 hour Lecture and a 1 hour Practical. For details of days, times, and rooms, please consult your MQ timetable.

Note: Practicals commence in week 2.

### Resources to Assist your Learning

<u>Digital Recordings</u> of the Lectures would be available via Macquarie University's Echo360 Active Learning Platform.

# **Textbook**

The Textbook for the Unit is:

Information Technology Project Management, 9th Edition (Kathy Schwalbe)

<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

### **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.

#### **Final Examination**

The Final Examination would focus on the content covered in the Lectures throughout the Semester. Please see the Assessments Section for details pertinent to the Final Examination.

#### **Methods of Communication**

We will communicate with you via your Macquarie University's Email or through Announcements on iLearn. Queries to Convenor can either be placed on the iLearn Discussion Board or sent to <u>peter.busch@mq.edu.au</u> from your University Email Address.

#### **COVID Information**

For the latest information on the University's response to COVID-19, please refer to the Coronavirus infection page on the Macquarie University's website, <a href="https://www.mq.edu.au/about/coronavirus-faqs">https://www.mq.edu.au/about/coronavirus-faqs</a>. Remember to check this page regularly in case the information and requirements change during the Semester. If there are any changes to this Unit in relation to COVID, these will be communicated via iLearn.

#### **Unit Schedule**

Week #	Lecture	References	Practicals	Assignments
Week 1 Busch	Unit Outline Introduction to PM The IT Context	Unit Guide Schwalbe Chap 1 Schwalbe Chap 2	No practical	
Week 2 Busch	Scope Management	Schwalbe Chap 5	MS Project, Part 1	
Week 3 Busch	Time / Schedule Management	Schwalbe Chap 6	MS Project, Part 2	
Week 4 Busch	Cost Management	Schwalbe Chap 7	MS Project, Part 3	Assg 1 due - 21st March
Week 5 Busch	Quality Management	Schwalbe Chap 8	Google Code	
Week 6 Busch	Project Management Process Integration Management	Schwalbe Chap 3 Schwalbe Chap 4	GitHub	
Week 7 Smith	Human Resource Management	Schwalbe Chap 9	JIRA and TRAC	
Mid Semester Bro	eak - April 12-27th			Assg 2 due - 17th April

Week 8 Smith	Communications Management	Schwalbe Chap 10	Group time	
Week 9 Smith	Risk Management	Schwalbe Chap 11	Group Time	
Week 10 Smith	Procurement Management	Schwalbe Chap 12	Group Time	
Week 11 Smith	Stakeholder Management	Schwalbe Chap 13	Group Time	Assg 3 due - 23rd May
Week 12 Smith	Revision - Dr. Stephen Smith			
Week 13 Busch	Revision - Dr. Peter Busch			

#### **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 <u>Student Policies</u> (<u>https://students.mq.edu.au/support/study/policies</u>). 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.e du.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 <a href="mailto:eStudent">eStudent</a>, (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 <a href="mailto:eStudent">eStudent</a>. For more information visit <a href="mailto:connect.mq.edu.au">connect.mq.edu.au</a> or if you are a Global MBA student contact <a href="mailto:globalmba.support@mq.edu.au">globalmba.support@mq.edu.au</a>

### **Academic Integrity**

At Macquarie, we believe <u>academic integrity</u> – 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 <u>online writing and maths support</u>, academic skills development and wellbeing consultations.

# 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>

#### **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 the Service Connect Portal, or contact Service Connect.

## 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.

# **Changes from Previous Offering**

This year Ms. Fahmida Islam and Mr. Perera join us as practical demonstrators.

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.

### **Standards**

Four standards, namely, HD, D, CR, and P summarize different levels of achievement. Each standard is precisely defined to help students know what kind of performance is expected to deserve a certain mark.

HD	Apply techniques and knowledge in new contexts, show breadth and depth of understanding of quality evaluation, estimation measurement, and 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 understanding 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 acquring 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, and 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 understanding 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, and 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 understanding 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.

#### Unit guide COMP6770 Management of IT Systems and Projects

P	Can reproduce definitions and ideas, show some breadth of understanding of the topics including: quality evaluation, estimation measurement, and project risk planning and measurement. Some knowledge about MS Project with a few major misunderstandings or
	mistakes.

Can reproduce some defintions 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.

Unit information based on version 2025.03 of the Handbook