

# **COMP8770**

# Information Systems Project and Risk Management

Session 1, In person-scheduled-weekday, North Ryde 2022

School of Computing

# Contents

General Information	2
Learning Outcomes	2
General Assessment Information	3
Assessment Tasks	3
Delivery and Resources	6
Unit Schedule	7
Policies and Procedures	8
Changes from Previous Offering	10

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### **General Information**

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Credit points 10

Prerequisites ITEC602 or COMP6770 or Admission to MRadiopharmSc or Admission to MLabAQMgt

Corequisites

Co-badged status

### Unit description

This unit has three themes: IT project management, agile software development and risk management. Topics covered in the first theme include project definition, roles and responsibilities, resource management, time and cost estimation, project planning, project control and reporting, measuring project success and post-implementation review. Microsoft Project is used to assist with resource allocation, costing and schedule. Hands-on experience is gained using the Rational Unified Process during the second theme. Towards the end of the course we focus on identifying causes of project failure and managing project risk based on the International and Australian Standard, ISO31000.

### 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 an understanding of the contextual issues of an IT project to the identification and management of expectations of the main project stakeholders.
ULO2: Develop, maintain, manage and report against a project plan which defines the critical path and resource requirements, with tool support, such as MS Project 2019.
ULO3: Critically evaluate the concepts of agile methodologies such as the Rational

Unified Process, DSDM and DevOps and incorporate appropriate components into the planning for complex software development or off the shelf enterprise system projects. **ULO4:** Analyse IT project risks and formulate a risk management plan compliant with the international standard, ISO31000.

**ULO5:** Critically evaluate the role of the IT project manager and how to handle organization politics, individual and team management

### **General Assessment Information**

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Late assessments: Online quizzes, in-class activities, or scheduled tests and exam must be undertaken at the time indicated in the unit guide. Should the activity be missed due to illness or misadventure, Special Consideration may be applied for.

All other assessments must be submitted by 5:00 pm on their due date. Beyond this time, a 12-hour grace period will be given after which the following deductions will be applied to the assessment mark: 12 to 24 hours late = 10% deduction; for each day thereafter, an additional 10% per day or part thereof will be applied until five days beyond the due date. After this time, a mark of zero (0) will be given. For example, an assessment worth 20% is due 5 pm on 1 January. Student A submits the assessment at 1 pm, 3 January. The assessment received a mark of 15/20. A 20% deduction is then applied to the mark of 15, resulting in the loss of three (3) marks. Student A is then awarded a final mark of 12/20.

Name	Weighting	Hurdle	Due
Assignment 1	20%	No	Week 4
Assignment 2A - Group Project	20%	No	Week 11
Assignment 2B - Presentation	10%	No	Week 12
Final examination	50%	No	ТВА

### Assessment Tasks

### Assignment 1

Assessment Type <sup>1</sup>: Modelling task Indicative Time on Task <sup>2</sup>: 20 hours Due: **Week 4** Weighting: **20%** 

In the first part, you are given the tasks, resources and schedule for a project which need to be entered into MS Project 2019. You are required to answer a series of questions on the resource

requirements, critical path, schedule and costs associated with this project. For the second part of the assignment you are given a case study for a complex project and asked to identify the risks and possible mitigation strategies. Furthermore, you need to advise on how to use MS Project in this context.

On successful completion you will be able to:

- Apply an understanding of the contextual issues of an IT project to the identification and management of expectations of the main project stakeholders.
- Develop, maintain, manage and report against a project plan which defines the critical path and resource requirements, with tool support, such as MS Project 2019.

## Assignment 2A - Group Project

Assessment Type 1: Project Indicative Time on Task 2: 20 hours Due: **Week 11** Weighting: **20%** 

A series of IT projects will be allocated among groups of 4 students. These will include software development, off the shelf package and mixed projects (a package requiring integration with backend systems). Your team are consultants recommending your project and risk strategy to secure a go-ahead from the client organisation. Your focus is on the project process/ methodology and risk management plan to suit your project and client organisation.

On successful completion you will be able to:

- Apply an understanding of the contextual issues of an IT project to the identification and management of expectations of the main project stakeholders.
- Develop, maintain, manage and report against a project plan which defines the critical path and resource requirements, with tool support, such as MS Project 2019.
- Critically evaluate the concepts of agile methodologies such as the Rational Unified Process, DSDM and DevOps and incorporate appropriate components into the planning for complex software development or off the shelf enterprise system projects.
- Analyse IT project risks and formulate a risk management plan compliant with the international standard, ISO31000.
- Critically evaluate the role of the IT project manager and how to handle organization politics, individual and team management

### Assignment 2B - Presentation

Assessment Type 1: Presentation Indicative Time on Task 2: 10 hours Due: **Week 12** Weighting: **10%** 

A series of IT projects will be allocated among groups of 4 students. These will include software development, off the shelf package and mixed projects (a package requiring integration with back-end systems). Your team are consultants recommending your project and risk strategy to secure a go-ahead from the client organisation. Your focus is on the project process/ methodology and risk management plan to suit your project and client organisation.

On successful completion you will be able to:

- Apply an understanding of the contextual issues of an IT project to the identification and management of expectations of the main project stakeholders.
- Develop, maintain, manage and report against a project plan which defines the critical path and resource requirements, with tool support, such as MS Project 2019.
- Critically evaluate the concepts of agile methodologies such as the Rational Unified Process, DSDM and DevOps and incorporate appropriate components into the planning for complex software development or off the shelf enterprise system projects.
- Analyse IT project risks and formulate a risk management plan compliant with the international standard, ISO31000.
- Critically evaluate the role of the IT project manager and how to handle organization politics, individual and team management

### Final examination

Assessment Type 1: Examination Indicative Time on Task 2: 40 hours Due: **TBA** Weighting: **50%** 

A formal examination covering all the course work material.

On successful completion you will be able to:

- Apply an understanding of the contextual issues of an IT project to the identification and management of expectations of the main project stakeholders.
- Develop, maintain, manage and report against a project plan which defines the critical path and resource requirements, with tool support, such as MS Project 2019.
- Critically evaluate the concepts of agile methodologies such as the Rational Unified Process, DSDM and DevOps and incorporate appropriate components into the planning for complex software development or off the shelf enterprise system projects.
- Analyse IT project risks and formulate a risk management plan compliant with the international standard, ISO31000.
- Critically evaluate the role of the IT project manager and how to handle organization politics, individual and team management

<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.

<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**

Each week you should attend up to 3 hours of lectures and tutorials (please note Tutorials are on a different day to lectures now). For details of days, times and rooms consult the <u>timetables web</u> page.

### **Required and Recommended Texts:**

Students are expected to purchase and read the following textbook:

*Erik Larson and Clifford Gray, 'Project Management: The Managerial Process' 8th Edition (2021), McGraw Hill.* This book should be available from the University Co-op Bookstore. or available as an eBook - https://www.mheducation.com.au/9781307023077-aus-ebook-project-management-the-managerial-process-8e

# The following text book is suggested as recommended reading. Copies are available from the references and general sections of the library.

*Rob Thomsett, Radical Project Management, Prentice Hall, 2002,* not available as an eBook. However, it is available online.

The class Web site will have copies of lecture handouts and additional recommended reading material: <u>https://ilearn.mq.edu.au/</u> You will need to use the user name and password issued to you by the University Administration when you enrolled for the unit.

### Technology to be used and required:

We are using MS Project 2016 or 2019.

Other technology required is MS Word and MS PowerPoint.

#### Website and access to unit material:

The web page and content for this unit can be found at iLearn: <u>https://ilearn.mq.edu.au/login/M</u> Q/. Note that the unit content is not publicly available and requires for you to log in to access.

# **Unit Schedule**

Week	Lecturer	Торіс	Reading
1	Steve	Course Structure Types of Projects, Role of the Project Manager, IS/IT Projects are Different	Unit Outline Larson 1, Readings
2	Steve	Project Definition Introduction to MS Project Hand out Assignment One (Individual Assignment) 'MS Project 2019 and Case Study'	Larson 4 Erik Larson Videos
3	Steve	Project Selection and Success Criteria Estimating Project Times and Costs Sponsors and Other Stakeholders	Larson 2 Larson 5 Larson 10
4	Steve	DSDM Introduction and Tutorial Assignment One Due Hand out Assignment Two (Group Assignment) 'IS Project Management Plan'	DSDM Handbook
5	Steve	Rational Unified Process RUP Structure and Navigation RUP for COTS	IBM Sources
6	Guest Lecture Matt	Leadership / Communication Team Management	Larson 10 Larson 11, Thomsett articles
7	Steve	Risk Management Part 1	ISO31000
8	Steve	Risk Management Part 2	

9	Steve	DevOps Virtual Teams and Outsourcing Project Audit and Closure	Accenture, 2015 Larson 12 Larson 14
10	Steve	Project Plan Structure Progress Management and Evaluation Organisational Politics	Larson 6, 10, 12, 13
11	Steve	Group Assignment Review Tutorial	
12	Steve	Group Presentations	
13	Steve	Exam Revision + Group Presentations (cont) Assignment Two (2) Due	

## **Policies and Procedures**

Macquarie University policies and procedures are accessible from Policy Central (https://policie s.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/su</u> <u>pport/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 <u>Policy Central</u> (<u>https://policies.mq.e</u> 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 <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

## 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 an</u> d maths support, academic skills development and wellbeing consultations.

### Student Support

Macquarie University provides a range of support services for students. For details, visit <u>http://stu</u> dents.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
- <u>Safety support</u> to respond to bullying, harassment, sexual harassment and sexual assault
- Social support including information about finances, tenancy and legal issues

### **Student Enquiries**

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

# IT Help

For help with University computer systems and technology, visit <u>http://www.mq.edu.au/about\_us/</u>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**

Updated Lecture content, both Assignments updated and re-written

Updated assessments to align with IT and BioTech students.