

COMP8750

Information Systems Design and Management

Session 2, 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	7
Unit Schedule	8
Policies and Procedures	9
Changes from Previous Offering	11

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General Information

Unit convenor and teaching staff

Convenor

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Lecturer

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Credit points

10

Prerequisites

ITEC602 or COMP6770

Corequisites

Co-badged status

Unit description

This unit focuses on enterprise management information systems and the technologies used in their design, implementation and maintenance. The alignment of information systems with business strategy and the socio-technical aspects of systems development are explored. Systems discussed include ERP, CRM, Business Intelligence and Groupware. The nexus between social media, cloud computing, mobile devices and big data is considered. A case study analysing the business rationale for an enterprise systems project is conducted.

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: Analyse the business value of information systems to assist in the justification of an IT investment based on the delivery of specific business benefits.

ULO2: Analyse the functionality and business context for major enterprise systems

including ERP, BI, CRM and Enterprise 2.0, and recommend appropriate investments based on the specific business context.

ULO3: Use your understanding of the nexus of mobile, cloud, social and big data trends to an enterprise IT strategic plan to generate opportunities from these developing technologies

ULO4: Critically evaluate contemporary and emerging enterprise IT technologies to establish a watching brief for an IT department within a major enterprise.

General Assessment Information

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 https://students.mq.edu.au/stud y/assessment-exams/assessments for more information.

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 "Case for IT Capital Project" YES, Standard Late Penalty applies
- Assignment "ERP Analysis" YES, Standard Late Penalty applies
- Assignment "Strategic IT Initiatives YES, Standard Late Penalty applies

Assessment Tasks

Name	Weighting	Hurdle	Due
Weeky Quiz	10%	No	Weeks 3-12
Case for IT Capital Project	10%	No	Week 5
ERP Analysis	10%	No	Week 8
Strategic IT Initiatives	20%	No	Week 12

Name	Weighting	Hurdle	Due
Final Examination	50%	No	TBA

Weeky Quiz

Assessment Type 1: Quiz/Test Indicative Time on Task 2: 0 hours

Due: Weeks 3-12 Weighting: 10%

Student will complete a weekly quiz - solutions submitted online.

On successful completion you will be able to:

- Analyse the business value of information systems to assist in the justification of an IT investment based on the delivery of specific business benefits.
- Analyse the functionality and business context for major enterprise systems including ERP, BI, CRM and Enterprise 2.0, and recommend appropriate investments based on the specific business context.
- Use your understanding of the nexus of mobile, cloud, social and big data trends to an
 enterprise IT strategic plan to generate opportunities from these developing technologies
- Critically evaluate contemporary and emerging enterprise IT technologies to establish a
 watching brief for an IT department within a major enterprise.

Case for IT Capital Project

Assessment Type 1: Project

Indicative Time on Task 2: 22 hours

Due: Week 5 Weighting: 10%

Justification for IT Capital Projects - This is an individual assignment which considers a series of IT capital projects and uses non-financial models to prioritise these projects for the given business context. Eight contemporary IT capital projects are suggested. Each project has good financial returns and is useful to the business, but only 3 to 4 projects can be funded. Nonfinancial models are used to prioritise the projects.

On successful completion you will be able to:

- Analyse the business value of information systems to assist in the justification of an IT investment based on the delivery of specific business benefits.
- Analyse the functionality and business context for major enterprise systems including ERP, BI, CRM and Enterprise 2.0, and recommend appropriate investments based on the specific business context.
- Use your understanding of the nexus of mobile, cloud, social and big data trends to an enterprise IT strategic plan to generate opportunities from these developing technologies
- Critically evaluate contemporary and emerging enterprise IT technologies to establish a
 watching brief for an IT department within a major enterprise.

ERP Analysis

Assessment Type 1: Essay Indicative Time on Task 2: 25 hours

Due: Week 8 Weighting: 10%

An Individual assignment which considers a detailed real world case study about a failed ERP implementation and provides guidance based on course material on how this company should now proceed. This real company in Taiwan failed with their first wave ERP upgrade. Students are to identify the reasons for this failure and consider a series of different go forward strategies based on the latest available technology.

On successful completion you will be able to:

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- Analyse the functionality and business context for major enterprise systems including ERP, BI, CRM and Enterprise 2.0, and recommend appropriate investments based on the specific business context.
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 watching brief for an IT department within a major enterprise.

Strategic IT Initiatives

Assessment Type 1: Report Indicative Time on Task 2: 40 hours

Due: Week 12 Weighting: 20%

This is a group assignment. Students start with a contemporary IT major initiative e.g. ERP upgrade, BI, CRM, AI, Cloud, KM, Mobile and IoT. Then, a suitable company is selected and a high level business plan is submitted for the proposal identifying the business context, expected business benefits, a possible technical solution and major risks. Each student is allocated a segment of the report. One deliverable is the group report and the second deliverable is an individual presentation on the component that the student was allocated. Each of these two deliverables counts towards 10% of the final grade.

On successful completion you will be able to:

- Analyse the business value of information systems to assist in the justification of an IT investment based on the delivery of specific business benefits.
- Use your understanding of the nexus of mobile, cloud, social and big data trends to an enterprise IT strategic plan to generate opportunities from these developing technologies

Final Examination

Assessment Type 1: Examination Indicative Time on Task 2: 13 hours

Due: TBA

Weighting: 50%

This is an exam with short and long answer questions based on the lecture and reference material presented throughout the course.

On successful completion you will be able to:

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- Analyse the functionality and business context for major enterprise systems including ERP, BI, CRM and Enterprise 2.0, and recommend appropriate investments based on the specific business context.
- Use your understanding of the nexus of mobile, cloud, social and big data trends to an enterprise IT strategic plan to generate opportunities from these developing technologies

 the academic teaching staff in your unit for guidance in understanding or completing this type of assessment

¹ If you need help with your assignment, please contact:

· the Writing Centre for academic skills support.

Delivery and Resources

Classes

Mode of delivery is a Hybrid mode. COMP7750/8750 is taught via lectures (via Zoom live and recorded for revision purposes) and the tutorial session component is expected to be online via Zoom.

There is one class per week that will consist of three (3) hours (Lecture 2 hours + Tutorial 1 hour). The timetables portal is available here: http://timetables.mq.edu.au

Recommended Texts:

he following text is recommended, especially for students without an extensive IT background: K. C. Laudon and J. P. Laudon "Management Information Systems: Managing The Digital Firm" 16th Edition, Pearson, 2019.

This book is available from Pearson as an eBook https://www.pearson.com.au/9781292296562 . If unsure about the value of this text, I will be referencing the 16th and most up to date edition, however, earlier editions are quite similar.

The following books are suggested as recommended reading. Copies of these books are available from the library.

Sumner, M, "Enterprise Resource Planning" Prentice Hall, 2005

Magal, S.R. and Word, J., "Integrated Business Processes with ERP Systems", Wiley, 2012.

Turban, E., Sharda, R, Delen, D and King, D, "Business Intelligence: A Managerial Approach" 3rd Edition, Pearson, New International Edition, 2014

Lectures will list appropriate Web based references and further reading for some of the rapidly evolving technologies discussed in this course. These additional references will be available for download through the class website.

Unit Material

A student folder with all the lecture notes and electronic references will be available for download through the class web site on iLearn at: https://ilearn.mq.edu.au/

All assignments are accessed from iLearn and submitted through iLearn.

Supplementary Final Exam

If you receive special consideration for the final exam, a supplementary exam will be scheduled in December 2022. By making a special consideration application for the final exam you are declaring yourself available for a re-sit during the supplementary examination period and will not be eligible for a second special consideration approval based on pre-existing commitments. Please ensure you are familiar with the policy prior to submitting an application. Approved

² Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

applicants will receive an individual notification one week prior to the exam with the exact date and time of their supplementary examination.

Unit Schedule

Week	Topic	Reference
1 Steve	Course Introduction Information Systems in Global Business Today Strategic Alignment	Gartner Laudon & Laudon Chapter 1 Henderson and Venkatraman
2 Matt	Global E-Business and Collaboration Hand out Assignment 1	Laudon & Laudon Chapter 2
3 Matt	Information Systems, Organisations and Strategy	Laudon & Laudon Chapter 3
4 Matt	Ethical and Social Issues in Information Systems IT Infrastructure and Emerging Technologies Hand out Assignment 2	Laudon & Laudon Chapters 4 & 5
5 Steve	Assignment 1 - Due Big Data Analytics Analytics for Marketing Foundations of Business Intelligence	IBM, Gartner Laudon & Laudon Chapter 6
6 Steve	Al/Fuzzy Logic Hand out Group Assignment 3	Research Articles
7 Steve	Managing Knowledge and Artificial Intelligence Enhancing Decision Making	Laudon & Laudon Chapters 11 & 12
	Mid semester break 12-23rd September	
8 Matt	Achieving Operational Excellence: E-Commerce: Digital Markets Assignment 2 Due	Laudon & Laudon Chapters 9 & 10
9 Matt	Knowledge Management	Gartner
10 Steve	Telecommunications, the Internet, and Wireless Technology, Security	Laudon & Laudon Chapter 7 & 8
11 Steve	Group Assignment Tutorial	

12 Matt	Building Information Systems Making The Business Case for (Global) IS Assignment 3 Due	Laudon & Laudon Chapters 13,14 & 15
13 Steve, Matt	Group Presentations Examination Revision	
14 Steve	Examination Revision (if required)	

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.mg.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 ask.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 an d 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/

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 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

Lectures have been re-structured to more cloesly align with the prescribed "textbook"