ICT100 FOUNDATIONS OF INFORMATION SYSTEMS T326 BRIEF

All information in the Subject Outline is correct at the time of approval. KOI reserves the right to make changes to the Subject Outline if they become necessary. Any changes require the approval of the KOI Academic Board and will be formally advised to those students who may be affected by email and via Moodle.
Information contained within this Subject Outline applies to students enrolled in the trimester as indicated

1. General Information

1.1 Administrative details

Associated HE Award(s)	Duration	Level	Subject Coordinator
Bachelor of Information Technology (BIT) Diploma in Information Technology(DIT)	1 trimester	Level 1	**Dr Kazi Abu Sayeed** kazi.sayeed@koi.edu.au P: +61 (2) 9283 3583 L: 7-11, 11 York St. Consultation: via Moodle or by appointment.

1.2 Core / Elective
Core subject for BIT
Core subject for DIT

1.3 Subject Weighting

The weighting of this subject and the total course points are indicated below.

Subject Credit Points	Total Course Credit Points
4 Credit Points	BIT (96 credit points) DIT(32 credit points)

1.4 Student Workload

The expected student workload per week for this subject is indicated below.

No. Timetabled Hours/Week*	No. Personal Study Hours/Week**	Total Workload Hours/Week***
4 hours/week (2 hour Lecture + 2 hour Tutorial)	6 hours/week	10 hours/week

* Total time spent per week at lectures and tutorials
** Total time students are expected to spend per week in studying and completing assignments.
*** That is, * + ** = workload hours.

1.5 Mode of Delivery Classes will be face-to-face or hybrid. Certain classes will be online (e.g., special arrangements).

1.6 Pre-requisites Nil

1.7 General Study and Resource Requirements

- Dedicated computer laboratories are available for student use. Normally, tutorial classes are conducted in the computer laboratories.
- Students are expected to attend classes with the requisite textbook and must read specific chapters prior to each tutorial. This will allow them to actively take part in discussions. Students should have elementary skills in both word processing and electronic spreadsheet software, such as Office 365 or MS Office.
- Computers and WIFI facilities are extensively available for student use throughout KOI. Students are encouraged to make use of the campus Library for reference materials.
- Students will require access to the internet and email. Where students use their own computers, they should have internet access. KOI will provide access to required software.

Software resource requirements specific to this subject: Office 365, Microsoft Imagine.

1.8 Academic Advising

Academic advising is available to students throughout teaching periods including the exam weeks. As well as requesting help during scheduled class times, students have the following options:

- Consultation times: A list of consultation hours is provided on the homepage of Moodle where appointments can be booked.
- Subject coordinator: Subject coordinators are available for contact via email. The email address of the subject coordinator is provided at the top of this subject outline.
- Academic staff: Lecturers and Tutors provide their contact details in Moodle for the specific subject. In most cases, this will be via email. Some subjects may also provide a discussion forum where questions can be raised.
- Head of Program: The Head of Program is available to all students in the program if they need advice about their studies and KOI procedures.
- Vice President (Academic): The Vice President (Academic) will assist students to resolve complex issues (but may refer students to the relevant lecturers for detailed academic advice).

2. Academic Details

2.1 Overview of the Subject

Organisations are constantly reshaped by internal and external forces. Information is one of these forces. Businesses and organisations use various types of information systems to support their processes and adapt to changes in their environment. Companies are continually looking for innovative ways to use information systems for competitive advantage. This subject familiarises students with these management information systems, which form an important part of business today and provides a rigorous foundation for system design and database management. It also explores how information systems support business models used by companies operating in the digital world.

2.2 Graduate Attributes for Undergraduate Courses

Graduates of Bachelor courses from King's Own Institute (KOI) will achieve the graduate attributes expected under the Australian Qualifications Framework (2nd edition, January 2013). Graduates at this level will be able to apply an advanced body of knowledge from their major area of study in a range of contexts for professional practice or scholarship and as a pathway for further learning.

King's Own Institute's generic graduate attributes for a bachelor's level degree are summarised below:

	KOI Bachelor Degree Graduate Attributes	**Detailed Description**

	Knowledge	Current, comprehensive and coherent knowledge
	Critical Thinking	Critical thinking and creative skills to analyse and synthesise information and evaluate new problems
	Communication	Communication skills for effective reading, writing, listening and presenting in varied modes and contexts and for transferring knowledge and skills to a variety of audiences
	Information Literacy	Information and technological skills for accessing, evaluating, managing and using information professionally
	Problem Solving Skills	Skills to apply logical and creative thinking to solve problems and evaluate sources
	Ethical and Cultural Sensitivity	Appreciation of ethical principles, cultural sensitivity and social responsibility, both personally and professionally
	Teamwork	Leadership and teamwork skills to collaborate, inspire colleagues and manage responsibly with positive results
	Professional Skills	Professional skills to exercise judgement in planning, problem solving and decision making

Across the course, these skills are developed progressively at three levels:

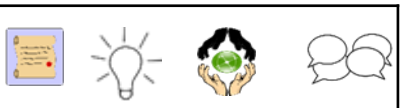
- **Level 1 Foundation –** Students learn the basic skills, theories and techniques of the subject and apply them in basic, standalone contexts
- **Level 2 Intermediate –** Students further develop the skills, theories and techniques of the subject and apply them in more complex contexts, and begin to integrate the applications with other subjects.
- **Level 3 Advanced** – Students demonstrate an ability to plan, research and apply the skills, theories and techniques of the subject in complex situations, integrating the subject content with a range of other subject disciplines within the context of the course.

2.3 Subject Learning Outcomes

This is a Level 1 subject.

On successful completion of this subject, students should be able to:

Subject Learning Outcomes	Contribution to Graduate Attributes
a) Explain and apply the basic concepts and terminology used in information systems	
b) Explain how and why information systems are used in business for competitive advantage	

c) Discuss the security of information systems and the ethical issues related to them	
d) Produce reports and presentations using charts, graphs and presentation software	

2.4 Subject Content and Structure

Below are details of the subject content and how it is structured, including specific topics covered in lectures and tutorials. Reading refers to the text unless otherwise indicated.

Weekly Planner:

Week (beginning)	Topic covered in each week's lecture	Reading(s)	Expected work as listed in Moodle
Week 1 26 October	Managing in the digital world technology, data, networks, people and services	Ch. 1	Describe the characteristics of the digital world, contemporary social issues of the digital world, and IT megatrends shaping the digital future. Microsoft Word Familiarisation – an understanding of Microsoft Word 10 key features required for ICT100. Formative not graded
Week 2 02 November	Gaining competitive advantage through information systems	Ch. 2	Describe how information systems can be used for automation, organisational learning, and strategic advantages. Microsoft PowerPoint Familiarisation – an understanding of Microsoft PowerPoint 10 key features required for ICT100. Summative 2%
Week 3 09 November	Managing the information systems infrastructure and services	Ch. 3	Describe how changes in businesses' competitive landscape influence changing IS infrastructure needs. Describe the essential components of an organisation's IS infrastructure. Describe cloud computing. Define Referencing and the two types – Citation and Reference table. Understand when and how to utilize citation. Summative 2%
Week 4 16 November	Enabling business-to-consumer electronic commerce	Ch. 4	Describe different approaches to competing in cyberspace as well as other forms of electronic government and e-finance. Summative 2%

Week (beginning)	Topic covered in each week's lecture	Reading(s)	Expected work as listed in Moodle
Week 5 23 November	Enhancing organisational communication and collaboration using social media	Ch. 5	Explain organisations' needs for communication and collaboration. Summative 2%
Week 6 30 November	Enhancing Business Intelligence Using Big Data Analytics and ACS Code of Conduct and Ethics	Ch. 6	Describe the need for business intelligence and advanced analytics and how databases serve as a foundation for making better business decisions. Summative 2%
Week 7 07 December	Enhancing business processes using enterprise information systems	Ch. 7	Describe what enterprise systems are and how they have evolved. Describe enterprise resource planning systems and how they help to improve internal business processes. Summative 2% **Assessment 2: In-Class Quiz (20 %)**
Week 8 14 December	Strengthening business-to-business relationships via supply chain and customer relationship management	Ch. 8	Describe supply chain management systems. Describe customer relationship management. Summative 2%
Week 9 04 January	The challenges of big data	Reading provided	Define Big Data Identify the Big Data Characteristics and Challenges. Summative 2%
Week 10 11 January	Developing and acquiring information systems	Ch. 9	Describe how to formulate and present the business case for technology investments. Describe the systems development life cycle and its various phases. Summative 2% **Assessment 3: Individual assessment (Report: 20 % + Presentation: 5 %)**
Week 11 18 January	Securing information systems	Ch. 10	Define computer crime and describe several types of computer crime. Define the process of managing IS security and describe various IS controls that can help ensure IS security. Summative 2%

Week (beginning)	Topic covered in each week's lecture	Reading(s)	Expected work as listed in Moodle
Week 12 25 January	Study review week + Practice Test	All subject material	**Assessment 4: Invigilated In-Class Test (35%)**
Week 13 01 February	Study review week and Final Exam Week		
Week 14 08 February	- Final Exam Week - Continuing students - enrolments for T127 open		Please see the exam timetable for the exam date, time and location
Week 15 15 February	- Student Vacation begins - New students - enrolments for T127 open		
Week 16 22 February	o Results Released o Review of Grade Day for T326 – see Sections 2.6 and 3.2 below for relevant information. o Certification of Grades NOTE: More information about the dates will be provided at a later date through Moodle/KOI email.		
T127 01 March 2027			
Week 1 01 March	Week 1 of classes for T127		

2.5 Teaching Methods/Strategies

Briefly described below are the teaching methods/strategies used in this subject:

- *Lectures* (2 hours/week) are conducted in seminar style and address the subject content, provide motivation and context and draw on the students' experience and preparatory reading.
- *Tutorials* (2 hours/week) include class discussion of case studies and research papers, practice sets and problem-solving and syndicate work on group projects. Tutorials often include group exercises and so contribute to the development of teamwork skills and cultural understanding. Tutorial participation is an essential component of the subject and contributes to the development of many of the graduate attributes (see section 2.2 above). Tutorial participation contributes towards the assessment in many subjects (see details in Section 3.1 for this subject). Supplementary tutorial material such as case studies, recommended readings, review questions etc. will be made available each week in Moodle.
- *Online* teaching resources include class materials, readings, model answers to assignments and exercises and discussion boards. All online materials for this subject as provided by KOI will be found in the Moodle page for this subject. Students should access Moodle regularly as material may be updated at any time during the trimester
- *Other contact* - academic staff may also contact students either via Moodle messaging, or via email to the email address provided to KOI on enrolment.

2.6 Student Assessment

Assessment is designed to encourage effective student learning and enable students to develop and demonstrate the skills and knowledge identified in the subject learning outcomes. Assessment tasks during the first half of the study period are usually intended to maximise the developmental function of assessment (formative assessment). These assessment tasks include weekly tutorial exercises (as indicated in the weekly planner) and low stakes graded assessments (as shown in the graded assessment table). The major assessment tasks where students demonstrate their knowledge and skills (summative assessment) generally occur later in the study period. These are the major graded assessment items shown in the graded assessment table.

Final grades are awarded by the Board of Examiners in accordance with KOI's Assessment and Assessment Appeals Policy. The definitions and guidelines for the awarding of final grades within the BIT degree are:

- HD High distinction (85-100%) an outstanding level of achievement in relation to the assessment process.
- DI Distinction (75-84%) a high level of achievement in relation to the assessment process.
- CR Credit (65-74%) a better than satisfactory level of achievement in relation to the assessment process.
- P Pass (50-64%) a satisfactory level of achievement in relation to the assessment process.
- F Fail (0-49%) an unsatisfactory level of achievement in relation to the assessment process.
- FW This grade will be assigned when a student did not submit any of the compulsory assessment items.

Provided below is a schedule of formal assessment tasks and major examinations for the subject.

Assessment Type	When assessed	Weighting	Learning Outcomes Assessed
Assessment 1: Weekly tutorial exercises	Weeks 2 - 11	20%	a, b, c, d
Assessment 2: **In-class Quiz** (Based on topics from Week 1 to Week 6)	Week 7	20%	a, b
Assessment 3: Individual assessment Case Study (1500 words) and Presentation	Report: Week 10 Presentation	Report: 20% Presentation: 5% **Total: 25%**	b, c, d
Assessment 4: In-Class Test	Week 12	35%	a, b, c

Requirements to Pass the Subject:

To gain a pass or better in this subject, students must gain a *minimum of 50%* of the total available subject marks.

2.7 Prescribed and Recommended Readings

Provided below, in formal reference format, is a list of the prescribed and recommended readings.

Prescribed Text:

Valacich, J., and Schneider, C., 2022. *Information Systems Today: Managing the Digital World*, Global 9th Edition, Pearson Education Limited, Harlow, United Kingdom. ISBN: 9781292438061.

Recommended Readings:

Raisinghani, M.S., 2025. *Foundations of Information Systems*. OpenStax. Available at: OpenStax (Digital PDF), ISBN: 978-1-961584-63-1

Rainer, R. K., and Prince, B., 2024. *Introduction to information systems*. 8th Australia & New Zealand ed. Wiley. ISBN: 9781119665984.

ACS recommended links:

- https://www.acs.org.au/memberships/professional-ethics-conduct-and-complaints.html
- https://ia.acs.org.au/article/2024/new-acs-code-of-professional-ethics-.html
- https://www.acs.org.au/governance/rules-and-regulations.html

Security and Privacy recommended links:

1. https://www.ibm.com/au-en
2. https://cpl.thalesgroup.com/
3. https://www.checkpoint.com/

References available from EBSCOhost research databases:

1. ACM Transactions On Information Systems
2. International Journal of Information Technology & Management
3. Information Systems & e-Business Management
4. Journal of Strategic Information Systems
5. Management Information Systems Quarterly

Conference / Journal Articles:

Conference:

- **Work System Quality Assessment: A TIHPS Grounded Instrument — HICSS 57, 2024**. Good if you want a work-systems angle; the paper explicitly grounds assessment in TIHPS and overlaps with Work System Theory.
- **The Interplay of Data-Driven Organizations and Data Spaces — HICSS 57, 2024**. Helpful for modern data-centered IS foundations, especially organizational capabilities and shared data environments

Journal:

- **Expanding the Scope of IS Research Impact: A Framework and Guidelines — JAIS, 2026**. Good discipline-level reading on what counts as impact in IS research and teaching;
- **Understanding and Improving Data Repurposing — MIS Quarterly, 2026**. Excellent modern foundation piece for data lifecycle thinking; it develops a framework for adapting existing data to new tasks.

Students are encouraged to read peer reviewed journal articles and conference papers. Google Scholar provides a simple way to broadly search for scholarly literature. From one place, you can search across many disciplines and sources: articles, theses, books, abstracts and court opinions, from academic publishers, professional societies, online repositories, universities and other web sites.

Useful Websites:

The following industry websites are useful introductory sources covering a range of information useful for this subject.

1. https://techcrunch.com/
2. https://hbr.org/
3. https://www.informationweek.com/

Others:

- https://www.technologyreview.com/
- https://www.computerworld.com/au/

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