



ICT 301 INFORMATION TECHNOLOGY PROJECT 1 T125

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)	1 trimester	Level 3	Dr Mubashir Hussain mubashir.hussain@koi.edu.au P: +61 (2) 9283 3583 L: Level 1-2, 17 O'Connell St. Consultation: via Moodle or by appointment.

1.2 Core / Elective

Core subject for BIT

1.3 Subject Weighting

Indicated below is the weighting of this subject and the total course points.

Subject Credit Points	Total Course Credit Points
4	BIT (96 Credit Points)

1.4 Student Workload

Indicated below is the expected student workload per week for this subject

No. Timetabled Hours/Week*	No. Personal Study Hours/Week**	Total Workload Hours/Week***
3 hours/week (1 hour Lecture + 2 hour Tutorial)	7 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, completing assignments, etc.

*** Combination of timetable hours and personal study.

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/Co-requisites

Pre-requisite: ICT204 Project Management, plus 40 credit points

Co-requisite: ICT272 Web Design and Development

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.

Resource requirements specific to this subject: MS Imagine, MS Azure, Office365, Internet Connections, Moodle site access.

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

The subject is designed for final year students. It provides an opportunity to complete an information technology project related to each student's professional interests, and includes the necessary preparation for the project. Student will be asked to participate in project work including peer reviews. The main features of the subject are: Group-based project; learning collaboration, reflection, self-regulation methods through learning by doing; learning important steps that are used in projects in large organisations; role development in projects; and developing different project artefacts (e.g. requirements, design, prototypes) and activities (e.g., documenting, testing, implementing, reviewing). Students are required to apply, synthesize and demonstrate the skills that they have developed in earlier information technology subjects. Please refer to Appendix A for more details.

Students work in groups (maximum of 4) guided by an academic supervisor and industry mentor. Students are required to develop an integrated solution with a technical specification to real-world system requirements. The activities involve requirements capture, analysis and design, coding, and testing. Suitable projects are sourced from external organisations or within KOI. When the projects are sourced from external organisations, the academic supervisor may add additional requirements in order to increase the complexity of the given problems. Please refer to Appendix B for the minimum requirements of the Capstone Project.

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 a broad and coherent 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 and connected 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 solutions
	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 this application 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 3 subject.

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

Subject Learning Outcomes	Contribution to Graduate Attributes
a) Analyse business and technical requirements to determine resource requirements and the impact the solution will have on the organisation	      
b) Identify and resolve technical problems using troubleshooting and research techniques	    
c) Design, plan, budget and propose an IT solution for an identified need within a specific scope	    



- d) Plan and develop a technical specification for the project and present a report.



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
1 03 Mar	Project Management, Ethics and Professional Communication	No prescribed textbook. Project description provided by the supervisor ACS code of Ethics	Form project groups; please see Moodle subject website for introduction to project by academic supervisor. Email industry supervisor for first meeting.
2 10 Mar	Introduction and Project Proposal	Reading resources provided on Moodle	- Group weekly meeting. - Weekly Participation and Presentation - Context and background of the Project Meeting 1: First introductory meeting with client - Sign KOI industry agreement Summative worth 2%
3 17 Mar	Literature Review, Technology Review and Project Planning	Reading resources provided on Moodle	- Group weekly meeting. - Weekly Participation and Presentation - Literature and Technology Review - Gantt Chart and Work breakdown Structure Proposal Submission Summative worth 2%
4 24 Mar	Requirements Gathering	Reading resources provided on Moodle	- Group weekly meeting. - Weekly Participation and Presentation - Requirement Gathering Questionnaire Email the industry supervisor for second meeting Summative worth 2%
5 31 Mar	Requirements Analysis	Reading resources provided on Moodle General Data Protection Regulation (GDPR)	- Group weekly meeting. - Weekly Participation and Presentation - User stories and Acceptance Criteria - Functional and Non-functional requirements



Week (beginning)	Topic covered in each week's lecture	Reading(s)	Expected work as listed in Moodle
			Meeting 2: Second meeting with client about requirements Summative worth 2%
6 7 Apr	Project Design	Reading resources provided on Moodle	- Group weekly meeting. - Weekly Participation and Presentation - System Design, Site/App maps and Flowcharts Summative worth 2%
7 14 Apr	Database Design	Reading resources provided on Moodle	- Group weekly meeting. - Weekly Participation and Presentation - Database Design Summative worth 2%
8 22 Apr (Tue)	User Interface Design	Reading resources provided on Moodle	- Group weekly meeting. - Weekly Participation and Presentation - Wireframes Email the industry supervisor for third meeting Summative worth 2%
9 28 April	Prototype	Reading resources provided on Moodle	- Group weekly meeting. - Weekly Participation and Presentation - Prototype Design Meeting 3: Third meeting with the client to show design Summative worth 2%
10 5 May	Documentation: Report Writing	Reading resources provided on Moodle	- Group weekly meeting. - Weekly Participation and Presentation - Improved wireframes and prototypes based on industry supervisor feedback Email the industry supervisor for final meeting Summative worth 2%
11 12 May	Project Presentation Skills	Reading resources provided on Moodle	- Group weekly meeting. - Weekly Participation and Presentation - Final Prototype and Phase I summary document Meeting 4: Client Presentation Summative worth 2% Assessment 2: Group project report due Summative worth 50%.



Week (beginning)	Topic covered in each week's lecture	Reading(s)	Expected work as listed in Moodle
12 19 May	Project Presentation	Project Presentation	Assessment 3: Project Presentation due Summative worth 30%
13 26 May	Study Review Week and Final Exam Week		
14 02 Jun	Examinations Continuing students - enrolments for T225 open		Please see exam timetable for exam date, time and location
15 09 Jun	Student Vacation begins New students - enrolments for T225 open		
16 16 Jun	• Results Released • Review of Grade Day for T125 – see Sections 2.6 and 3.2 below for relevant information. • Certification of Grades NOTE: More information about the dates will be provided at a later date through Moodle/KOI email.		
T225 30 June 2025			
1 30 Jun	Week 1 of classes for T225		

2.5 Public Holiday Amendments

Please note: KOI is closed on all scheduled NSW Public Holidays.

T125 has Four (4) public holidays that occur during this trimester. Classes scheduled for these public holidays (Calendar Class Dates) will be rescheduled as per the table below.

This applies to ALL subjects taught in T125.

Please see the table below and adjust your class timing as required. Please make sure you have arrangements in place to attend the rescheduled classes if applicable to your T125 enrolment.

Classes will be conducted at the same time and in the same location as your normally scheduled class except these classes will be held on the date shown below.

Calendar Class Date	Rescheduled Class Date
Friday 18 April 2025 Saturday 19 April 2025 Monday 21 April 2025 Friday 25 April 2025	Monday 26 May 2025 Tuesday 27 May 2025 Wednesday 28 May 2025



2.6 Review of Grade, Deferred Exams & Supplementary Exams/Assessments

Review of Grade:

There may be instances when you believe that your final grade in a subject does not accurately reflect your performance against the marking criteria. Section 8 of the *Assessment and Assessment Appeals Policy* (www.koi.edu.au) describes the grounds on which you may apply for a Review of Grade.

If you have a concern about your marks and you are unable to resolve it with the Academic staff concerned, then you can apply for a formal Review of Grade as explained in section 3.2(e) Appeals Process below. Please note the time limits for requesting a review. Please ensure you read the Review of Grade information before submitting an application.

Review of Grade Day:

Final exam scripts will not normally be returned to students. Students can obtain feedback on their exam performance and their results for the whole subject at the Review of Grade Day. KOI will hold the Review of Grade Day for all subjects studied in T125. **The ROG day will be in Week 16, the date will be announced at a later date and the students will be notified through Moodle/KOI email.**

Only final exams and whole subject results will be discussed as all other assessments should have been reviewed during the trimester. Further information about Review of Grade Day will be available through Moodle.

If you fail one or more subjects and you wish to consider applying for a Review of Grade you are **STRONGLY ADVISED** to attend the Review of Grade Day. You will have the chance to discuss your final exam and subject result with your lecturer, and will be advised if you have valid reasons for applying for a Review of Grade (see Section 3.2 below and the *Assessment and Assessment Appeals Policy*).

A formal request for a review of grade may not be considered unless you first contact the subject coordinator to discuss the result.

Deferred Exams:

If you wish to apply for a deferred exam because you are unable to attend the scheduled exam, you should submit the Assignment Extension / Exam Deferment Form available by contacting academic@koi.edu.au as soon as possible, *but no later than three (3) working days of the assessment due date*.

If you miss your mid-trimester or final exam there is no guarantee you will be offered a deferred exam.

You must apply within the stated timeframe and satisfy the conditions for approval to be offered a deferred exam (see Section 8.1 of the *Assessment and Assessment Appeals Policy and the Application for Assignment Extension or Deferred Exam Forms*). In assessing your request for a deferred exam, KOI will take into account the information you provide, the severity of the event or circumstance, your performance on other items of assessment in the subject, class attendance and your history of previous applications for special consideration.

Deferred mid-trimester exams will be held before the end of week 9. Deferred final exams will be held on two days during week 1 or 2 in the next trimester. You will not normally be granted a deferred exam on the grounds that you mistook the time, date or place of an examination, or that you have made arrangements to be elsewhere at that time; for example, have booked plane tickets.

If you are offered a deferred exam, but do not attend *you will be awarded 0 marks for the exam*. This may mean it becomes difficult for you to pass the subject. If you apply for a deferred exam within the required time frame and satisfy the conditions you will be advised by email (to your KOI student email address) of the time and date for the deferred exam. Please ensure that you are available to take the exam at this time.

Marks awarded for the deferred exam will be the marks awarded for that item of assessment towards your final mark in the subject.

Supplementary Assessments (Exams and Assessments):



A supplementary assessment may be offered to students to provide a final opportunity to demonstrate successful achievement of the learning outcomes of a subject. *Supplementary assessments are only offered at the discretion of the Board of Examiners.* In considering whether or not to offer a supplementary assessment, KOI will take into account your performance on all the major assessment items in the subject, your attendance, participation and your history of any previous special considerations.

If you are offered a supplementary assessment, you will be advised by email to your *KOI student email address* of the time and due date for the supplementary assessment – supplementary exams will normally be held at the same time as deferred final exams during week 1 or week 2 of the next trimester.

You must pass the supplementary assessment to pass the subject. The maximum grade you can achieve in a subject based on a supplementary assessment is a PASS grade.

If you:

- are offered a supplementary assessment, but fail it;
 - are offered a supplementary exam, but do not attend; or
 - are offered a supplementary assessment but do not submit by the due date;
- you will receive a FAIL grade for the subject.

Students are also eligible for a supplementary assessment for their final subject in a course where they fail the subject but have successfully completed all other subjects in the course. You must have completed all major assessment tasks for the subject and obtained a passing mark on at least one of the major assessment tasks to be eligible for a supplementary assessment.

If you believe you meet the criteria for a supplementary assessment for the final subject in your course, but have not received an offer, complete the *Complaint, Grievance, Appeal Form* and send your form to reception@koi.edu.au. The deadline for applying for supplementary assessment is the Friday of the first week of classes in the next trimester.

2.7 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.



2.8 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 assessment (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.

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 progress and class participation	Weeks 2 - 11	20% Weekly Participation & Presentation 10% Weekly Submission 10% Total value: 20%	a, b
Assessment 2: Group Project Technical Report (3,000 words)	Week 11	Report 40% Group activity log: 10% Total value 50%	a, b, c, d
Assessment 3: Group project presentation (20 minutes)	Week 12	30% Group Presentation 20% Individual Presentation Skills 10% Total value: 30%	c, d

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.

2.9 Prescribed and Recommended Readings

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



Prescribed Texts:

There are no required textbooks for this subject. Students are encouraged to read journal articles and peer reviewed conference papers.

Recommended Readings:

ACS Code of Professional

Ethics: https://www.acs.org.au/content/dam/acs/ACSimages/ethicsdiscipline/CodeOfProfessionalEthics_Mar_2023.pdf

Dakić, M. (2023) Mobile app development for businesses: Create a product roadmap and digitize your operations. United States: Apress.

Caelen, O. and Blete, M.-A. (2024) Developing apps with GPT-4 and ChatGPT: Build intelligent chatbots, content generators, and more. Cambridge: O'Reilly.

Jafari, M., Zahedi, M., & Khanachah, S. N. (2024). Identify and Prioritize the Challenges of Customer Knowledge in Successful Project Management: An Agile Project Management Approach. *Journal of Information & Knowledge Management*, 23(02), 2350060.

Kirkpatrick, A. (no date) *Web content accessibility guidelines (WCAG) 2.2*, W3C. Edited by C. Adams et al. Available at: <https://www.w3.org/TR/WCAG22/> (Accessed: 07 August 2023).

Visser, C. (2023) *A detailed guide to WCAG compliance in 2023, Accessibility Checker*. Research by H. Ilyas. Available at: <https://www.accessibilitychecker.org/guides/wcag/> (Accessed: 07 August 2023).

Kundariya, H. (2022) *11 web development trends to expect in 2023, according to Experts & Data*, HubSpot Blog. Available at: <https://blog.hubspot.com/website/web-development-trends> (Accessed: 07 August 2023).

Patel, B. (2023) *Artificial Intelligence in mobile app development, Space O Technologies*. Available at: <https://www.spaceotechnologies.com/blog/artificial-intelligence-in-mobile-app-development/> (Accessed: 07 August 2023).

Mendes, A. (2023) *Web app development: The ultimate guide for 2023*, Blog | Imaginary Cloud. Available at: <https://www.imaginarycloud.com/blog/web-app-development-the-ultimate-guide/> (Accessed: 07 August 2023).

An empirical investigation of performance overhead in cross-platform mobile development frameworks, Andreas Bjørn-Hansen^{1,2} · Christoph Rieger³ · Tor-Morten Grønli¹ Tim A. Majchrzak⁴·Gheorghita Ghinea¹, *Empirical Software Engineering* (2020) 25:2997–3040.

Smyth, N 2019. *Android Studio 3.5 Development Essentials - Java Edition*. Payload Media, Cary. Available from: ProQuest Ebook Central. [3 June 2020].

Writing with Internet Sources:

http://isites.harvard.edu/fs/docs/icb.topic229960.files/Writing_with_Internet_Sources.pdf
<http://isites.harvard.edu/icb/icb.do?keyword=k24101&tabgroupid=icb.tabgroup35038>

Journals:

- IEEE Intelligent Systems
- Information Resources Management Journal
- Applied Mathematical Modelling: simulation and computation
- Journal of Intelligent and Fuzzy Systems
- International journal for advances of computer science



- Information Systems Journal
- International Journal of Knowledge Based and Intelligent Engineering Systems
- IEEE Network: the magazine of global information exchange
- IEEE ACM Transactions on Networking

Useful Websites:

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

- Harbottle, P. (2023) *Website accessibility laws in Australia: Legal guidelines*, Recite Me. Available at: <https://reciteme.com/au/news/understanding-website-accessibility-laws-in-australia/> (Accessed: 10 April 2024).
- Oaic (no date) *Mobile privacy; A Better Practice Guide for Mobile app developers*, OAIC. Available at: <https://www.oaic.gov.au/privacy/privacy-guidance-for-organisations-and-government-agencies/more-guidance/mobile-privacy-a-better-practice-guide-for-mobile-app-developers> (Accessed: 10 April 2024).
- *Data protection in the EU* (no date) European Commission. Available at: https://commission.europa.eu/law/law-topic/data-protection/data-protection-eu_en (Accessed: 10 April 2024).
- 10 AI Tools Transforming Web Development in 2024: <https://www.digitalocean.com/resources/article/ai-tools-web-development> Australian Signals Directorate and Australian Cyber Security Center: <https://www.cyber.gov.au/Cybersecurity> Framework NIST: <https://www.nist.gov/cyberframework>
- Figma Tutorial: <https://help.figma.com/hc/en-us/sections/4405269443991-Figma-for-beginners-4-parts>

Conference/ Journal Articles:

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.

3. Assessment Details

3.1 Details of Each Assessment Item

The assessments for this subject are described below. Other assessment information and/or assistance can be found in Moodle.

KOI expects students to submit their own original work in both assignments and exams, or the original work of their group in the case of group assignments.

Marking guides for assessments follow the assessment descriptions. Students should compare final drafts of their assessment against the marking guide before submission.

Assessment 1

Assessment type: Weekly progress on the chosen project

Purpose: This assessment will allow students to demonstrate their weekly activity done towards the development of the chosen project. This assessment contributes to learning outcomes a and b.

Value: 20% (2% per week)

Due Date: Weeks 2 - 11 in usual tutorial timeslots



Assessment topic:

Project Planning, Introduction, Literature Review, Technology Review, Requirement Gathering, Requirement Analysis, Use case diagram, Flow chart, Database Design, User Interface, Wireframes, Prototype, Technical writing.

Task Details: Need to present and discuss weekly progress towards the development of the chosen project.

Marking Rubric for Assessment 1. Weekly Progress and class participation ; Value 20% (Weekly Participation and Presentation: 1% and Weekly Submission: 1% per week)

Assessment 1: Weekly Submission 10%

Criteria	Fail (0 - 49%)	Pass (50 - 64%)	Credit (65 - 74%)	Distinction (75 - 84%)	High Distinction (85 - 100%)
A. Students embark on inquiry* and so determine a need for knowledge / understanding (0.25 marks)	Objectives not clearly stated or inappropriate. Background & relevant works minimally surveyed	Objectives present but not clear, focused or made explicit. Background & relevant works superficially surveyed	Objectives clearly stated, remain within supervisor guidelines. Background & relevant works suitably surveyed	Objectives clear, focused and innovative, remain within supervisor guidelines. Background & relevant works broadly surveyed	Objectives clear, focused and innovative, extending past supervisor guidelines. Background & relevant works broadly surveyed & analysed
B. Students find/generate needed information / data / ideas using appropriate approach / method (0.25 marks)	Most key technical challenges identified but insufficiently addressed in approach. No or inappropriate references used to inform project approach	Most key technical challenges identified and moderately addressed in approach. Few appropriate references used to inform project approach	Most key technical challenges identified and mostly addressed in approach. Several appropriate references used to inform project approach	All key technical challenges identified and mostly addressed in approach. Numerous appropriate references sources used to inform project approach	All key technical challenges identified and fully addressed in approach. Numerous appropriate references from a wide range of sources used to inform project approach
C. Students critically evaluate information / data / ideas, their approach and results, and react appropriately (0.25 marks)	Invalid or no technical reasoning in report Approach is flawed in conception and is infeasible. Aspects of approach are minimally presented	Little valid technical reasoning in report Approach has some issues which affects its feasibility. Few aspects of approach are presented in appropriate depth	Mostly valid technical reasoning in report Approach is an effective solution to the identified challenges. Most aspects of approach are presented in appropriate depth	Comprehensive and valid technical reasoning in report Approach is a highly effective solution to the identified challenges. All aspects of approach are presented in appropriate depth	Comprehensive, insightful and valid technical reasoning in report. Approach is a highly effective and elegant solution to the identified challenges. All aspects of approach presented in depth and with strong insight
D. Students perform Necessary processes to meet Stated project objectives (0.25 marks)	Progress is not satisfactory with respect to plan. No discussions on milestones completed. No discussions on future project plan. No strategy to ensure progress	Progress is barely satisfactory with respect to plan. Limited discussions on milestones completed. Limited discussions on future project plan Strategy to ensure progress is stated	Progress is mostly satisfactory with respect to plan. Some discussions on milestones completed. Some discussions on future project plan Strategy to ensure progress is stated and briefly explained	Progress is highly satisfactory with respect to plan. Detailed discussions on milestones completed. Detailed discussions on future project plan Strategy to ensure progress is stated and explained in detail	Progress is beyond expectations with respect to plan. Highly detailed discussions on Milestones completed. Highly detailed discussions on future project plan Strategy to ensure progress is stated, explained in detail and innovative



Assessment 1: Weekly Participation and Presentation 10%

Criteria	Fail (0 - 49%)	Pass (50 - 64%)	Credit (65 - 74%)	Distinction (75 - 84%)	High Distinction (85 - 100%)
Weekly Participation and Presentation (1 mark)	Students didn't present the work or achieves a minimal number of objectives	Students present the work and achieves some of the objectives	Students present the work and achieves a majority of the original set of objectives	Students present the work and achieves the original set of objectives	Students present the work and achieves beyond the original set of objectives

Assessment 2

Assessment type: Written Assessment Group project report

Purpose: The purpose of this assignment is to submit the requirements and design documentation of the project. This assessment contributes to learning outcomes a, b, c and d

To be able to identify the problems, define the scope of work, conduct the preliminary study, perform analysis and design, and write a technical report as a team

Assessment topic:

Project Planning, Introduction, Literature Review, Technology Review, Requirement Gathering, Requirement Analysis, Use case diagram, Flow chart, Database Design, User Interface, Wireframes, Prototype, Technical writing

Submission requirements: Submit report by the due date on Moodle

Value: Report 40%; Group activity log: 10%, Total value 50%

Due Date: Week 11

Objectives: To be able to identify the problems, define the scope of work, conduct the preliminary study, perform analysis and design, and write a technical report as a team.

Task Details: Submit the technical specification, software requirements and design documentation.

Report contents: Executive summary, introduction, literature and technology review, work breakdown structure, requirements gathering, requirement analysis, detailed design, prototype development, cost estimation, etc., conclusions and recommendations, references, and supporting documents.

Each group will provide a group activity log on how the group has worked together to produce the final report. It should not contain the main deliverable itself in the final report. Each group documents how members discuss, and division of responsibilities and describes how the individual efforts capitalised on strengths of each group member. It will be used as evidence of individual contributions in the group. It is therefore in each member's interest to ensure that their contribution to the final report is complete.

Each group is expected to have at least 12 group meetings for the group assignment. The minutes of group meetings should be documented and attached as an appendix of this report, clearly indicating who was present, issues and actions, agreed timelines, and the like. The group activity log must indicate that a fair and reasonable distribution of work amongst group members was achieved. Periodic information such as emails or diary entries must be inserted into the correct section in chronological order.



If the submitted group activity log suggests that not all contributions were of equivalent standard and effort, differential marks will be awarded to individuals within the same group. It must also document what individual group members understood as their allocated tasks, that individual group members submitted allocated work of acceptable standard and quality by the date that was agreed upon.

Submission requirements details:

1. Team leader need to submit the consolidated final report on Moodle
2. Each student needs to provide the peer-review and individual contribution document on Moodle.

Marking Rubric for Assessment 2. Group Project Technical Report;

Value: 50% (Report 40%; Group activity log: 10%)

Criteria	Fail (0 - 49%)	Pass (50 - 64%)	Credit (65 - 74%)	Distinction (75 - 84%)	High Distinction (85 - 100%)
Introduction section (5 marks)	No introduction section given or most discussion is irrelevant	Introduction section provided with some details and limited cohesion	Introduction section provided with most of the required details in a cohesive manner	Introduction section provided with all of the required details in a comprehensive and cohesive manner	Introduction section provided with all details presented systematically in a comprehensive and cohesive manner
Requirements gathering, analysis and planning (10 marks)	Not given or most discussion is irrelevant	Most required sub sections are included but not well covered	Most subsections are provided with most of the required details in a cohesive manner	All subsections are provided with the required details in a comprehensive and cohesive manner	All subsections are provided with all details presented systematically in a comprehensive and cohesive manner
Design, prototype development, specifications , cost estimation, etc. (10 marks)	Not given or most discussion is irrelevant	Most required sub sections are included but not well covered	Most subsections are provided with most of the required details in a cohesive manner	All subsections are provided with the required details in a comprehensive and cohesive manner	All subsections are provided with all details presented systematically in a comprehensive and cohesive manner
Executive summary, conclusion and recommendation (5 marks)	No conclusion or lack of cohesion with the discussion, no or limited recommendations provided	Conclusion does not link back systematically to most sections, some basic recommendations provided	Conclusion links back to some sections of the report, some detailed recommendations provided	Conclusion links back to all sections of the report, detailed recommendations provided	Conclusion demonstrates a deep understanding of the proposed solution and relates back to all sections of the report, detailed recommendations provided
Format and References (2 marks)	Students did not follow the required format in the report or in referencing	Report includes most of the report sections but not all, referencing incorrect on several occasions	Report includes most of the report format sections but missed at least one section, referencing generally in correct format	Report has used the requested format in an acceptable structure, referencing always in correct format	Report has used the requested format in a well-organized structure, referencing always in correct format



Organization (2 marks)	Poorly organized; no logical progression; beginning and ending are vague	Some organization; points jump around; beginning and ending are unclear	Organized; points are somewhat jumpy; sense of beginning and ending	Good organization; points are logically ordered; sharp sense of beginning and end	Exceptionally good organization; points are logically ordered; sharp sense of beginning and end
Use of Tables & Figures (2 marks)	Limited use of tables and figures effectively to show data and summarize the findings; poor quality	Some use of tables and figures to show data and summarize the findings; poor quality	Good use of tables and figures to show data and summarize the findings; not professional quality shown in refereed journals	Extensive use of tables and figures effectively to show data and summarize the findings; professional looking	Exceptionally good. Extensive use of tables and figures effectively to show data and summarize the findings; professional looking
Grammar, Usage, and Spelling (2 marks)	Numerous errors distract from understanding	More than two errors	Only one or two errors	No errors	Exceptionally good with no errors
Presentation (2 marks)	Poorly organized; no report cover, no table of contents, and no page numbers	Typed; no report cover, and no table of contents; no use of colour	Typed; clean; neatly organized; no report cover, and no table of contents	Typed; clean; neatly organized with a well-designed report cover; effective use of colour	Exceptionally well typed; clean; neatly organized with a well-designed report cover; effective use of colour

Assessment 2 Marking Rubric for Group Activity Log 10%

Criteria	Fail (0 – 49%)	Pass (50 – 64%)	Credit (65 – 74%)	Distinction (75 – 84%)	High Distinction (85 – 100%)
Documentation (4 marks)	No meeting minutes, or with irrelevant details	Less than 5 meeting minutes with relevant details	Less than 7 meeting minutes with relevant details	9 meeting minutes with all relevant details; Other source documents provided	12 meeting minutes with all relevant details; Other source documents provided
Quality of Interaction (3 marks)	No interaction; No evidence of discussion or alternatives	Little interaction; little evidence of discussion or alternatives	Some ability to interact; some evidence of discussion or alternatives	Students show adeptness in interacting; lively discussion centres on the task	Excellent listening and leadership skills exhibited; students reflect awareness of others' views and opinions in their discussions
Roles Within Group (3 marks)	No effort made to assign roles to group members	Little effort made to assign roles to group members	Students assigned roles but roles were not consistently adhered to	Each student assigned a role but roles not clearly defined or consistently adhered to	Each student assigned a clearly defined role; group members perform roles effectively



Assessment 3

Assessment type: Presentation Group Project

Purpose: This assessment will allow students to demonstrate and present the work done towards the completion of the chosen project. This assessment contributes to learning outcomes c and d.

Value: 30%

Due Date: Week 12

Assessment topic:

Project Planning, Introduction, Literature Review, Technology Review, Requirement Gathering, Requirement Analysis, Use case diagram, Flow chart, Database Design, User Interface, Wireframes, Prototype, Technical writing

Task Details: Present the work done towards the completion of the chosen project. Each member of the group are required to contribute towards the completion of the chosen project. Marks are allocated for individual work contribution. (See marking rubric)

Submission requirements details:

Group Presentation needs to be uploaded by the team leader on Moodle.

Marking Rubric for Assessment 3. Group Project Presentation;

Value: 30% (Group Presentation: 20%; Individual Presentation Skills: 10%)

Criteria	Fail (0 – 49%)	Pass (50 – 64%)	Credit (65 – 74%)	Distinction (75 – 84%)	High Distinction (85 – 100%)
Visual appeal (group) (7 marks)	There are many errors in spelling, grammar, and punctuation, the slides are difficult to read and contain too much text, poor choice of fonts and colours, no or little visual appeal	There are errors in spelling, grammar, and punctuation, too much text on many slides, minimal effort made to make slides appealing	There may be some errors in spelling, grammar and punctuation, too much text on two or more slides, significant visual appeal	There are no errors in spelling, grammar, and punctuation, information is clear and concise on each slide, visually appealing and engaging	No errors, engaging and professional looking presentation
Content (group) (7 marks)	The presentation provides a brief look at the topic but many questions are left unanswered, majority of information is irrelevant and significant points left out	The presentation is informative but several elements are unanswered, much of the information irrelevant, coverage of some of major points	The presentation is a good summary of the topic, most important information covered, little irrelevant information	The presentation is a concise summary of the topic with all questions answered, comprehensive and complete coverage of information	Exceptionally good summary of the topic and provides extensive supportive elements to aid the ease of understanding of the audience
Preparedness/ participation/ group dynamics (group) (6 marks)	Unbalanced presentation or tension resulting from over-helping. multiple group members not participating, evident lack of preparation/rehearsal, dependence on slides	Significant controlling by some members with one minimally contributing, primarily prepared but with some dependence on just reading off slides	Slight predominance of One presenter, Members help each other, very well prepared	All presenters know the information, participated equally and help each other as needed, extremely well prepared and rehearsed	Exceptionally good group dynamics, presentation would be considered professional



Assessment 3 Marking Rubric for Individual Presentation skills

Criteria	Fail (0 – 49%)	Pass (50 – 64%)	Credit (65 – 74%)	Distinction (75 – 84%)	High Distinction (85 – 100%)
Presentation skills (individual) (10 marks)	Minimal eye contact focusing on small part of audience, the audience is not engaged, spoke too quickly or quietly making it difficult to understand, poor body language	Focuses on only part of the audience, sporadic eye contact and the audience is distracted, speaker could be heard by only half of the audience, body language is distracting	Speaks to majority of the audience, steady eye contact, the audience is engaged by the presentation, speaks at a suitable volume, minor problems with body language e.g. fidgeting	Regular/constant eye contact, the audience is engaged, and presenter held the audience's attention, appropriate speaking volume and good body language	Professional presentation skills, excellent audience engagement

3.2 General information about assessment

a) Late Penalties and Extensions

An important part of business life and key to achieving KOI's graduate outcome of Professional Skills is the ability to manage workloads and meet deadlines. Completing assessment tasks on time is a good way to master these habits.

Students who miss mid-trimester tests and final exams without a valid and accepted reason may not be granted a deferred exam and will be awarded 0 marks for the assessment item. Assessment items which are missed or submitted after the due date/time will attract a penalty unless there is a compelling reason (see below). These penalties are designed to encourage students to develop good time management practices, and to create equity for all students.

Any penalties applied will only be up to the maximum marks available for the specific piece of assessment attracting the penalty.

Late penalties, granting of extensions and deferred exams are based on the following:

In Class Tests and Quizzes (excluding Mid-Trimester Tests)

- Generally, extensions are not permitted. A make-up test may only be permitted under very special circumstances where acceptable supporting evidence of illness, hardship or unavoidable problems preventing completion of the assessment is provided (see section (b) below). The procedures and timing to apply for a make-up test (only if available) are as shown in the section *Applying for an Extension* (see below).
- Missing a class test will result in 0 marks for that assessment item unless the above applies.

Written Assessments and Video Assessments

- There is a late penalty of *5% of the total available marks* per calendar day unless an extension is approved (see *Applying for an Extension* section below).

Presentations

- Generally, extensions are not permitted. Missing a presentation will result in 0 marks for that assessment item. The rules for make-up presentations are the same as for missing in-class tests (described above).

For group presentations, if serious circumstances prevent some members of the group from participating, the members of the group who are present should make their contributions as agreed. If a make-up presentation is approved, the other members of the group will be able to make their



individual presentation later and will be marked according to the marking rubric. A video presentation may be used to facilitate the process.

Mid-Trimester Tests and Final Exams

If students are unable to attend mid-trimester tests or final exams due to illness, hardship or some other unavoidable problem (acceptable to KOI), they must:

- Complete the Assignment Extension / Exam Deferment Form available by contacting academic@koi.edu.au as soon as possible, *but no later than three (3) working days after the exam date*.
- Provide acceptable documentary evidence (see section (b) below).
- Agree to attend the deferred exam as set by KOI if a deferred exam is approved.

Deferred exam

- There will only be one deferred exam offered.
- Marks obtained for the deferred exam will be the marks awarded for that assessment item.
- If you miss the deferred exam you will be awarded 0 marks for the assessment item. This may mean you are unable to pass the subject.

b) Applying for an Extension

If students are unable to submit or attend an assessment when due, they must

- Complete the Assignment Extension / Exam Deferment Form available by contacting academic@koi.edu.au as soon as possible, *but no later than three (3) working days of the assessment due date*.
- Provide acceptable documentary evidence in the form of a medical certificate, police report or some other appropriate evidence of illness or hardship, or a technician's report on problems with computer or communications technology, or a signed and witnessed statutory declaration explaining the circumstances.
- Students and lecturers / tutors will be advised of the outcome of the extension request as soon as practicable.

Please remember there is no guarantee of an extension being granted, and poor organisation is not a satisfactory reason to be granted an extension.

c) Referencing and Plagiarism

Please remember that all sources used in assessment tasks must be suitably referenced.

Failure to acknowledge sources is plagiarism, and as such is a very serious academic issue. Students plagiarising run the risk of severe penalties ranging from a reduction in marks through to 0 marks for a first offence for a single assessment task, to exclusion from KOI in the most serious repeat cases. Exclusion has serious visa implications. The easiest way to avoid plagiarising is to reference all sources.

Harvard referencing is the required method – in-text referencing using Author's Surname (family name) and year of publication. A Referencing Guide, "Harvard Referencing", and a Referencing Tutorial can be found on the right-hand menu strip in Moodle on all subject pages.

An effective way to reference correctly is to use *Microsoft Word's* referencing function (please note that other versions and programs are likely to be different). To use the referencing function, click on the References Tab in the menu ribbon – students should choose *Harvard*.

Authorship is also an issue under plagiarism – KOI expects students to submit their own original work in both assessment and exams, or the original work of their group in the case of a group project. All students agree to a statement of authorship when submitting assessments online via Moodle, stating that the work submitted is their own original work.

The following are examples of academic misconduct and can attract severe penalties:



- Handing in work created by someone else (without acknowledgement), whether copied from another student, written by someone else, or from any published or electronic source, is fraud, and falls under the general Plagiarism guidelines.
- Copying / cheating in tests and exams is academic misconduct. Such incidents will be treated just as seriously as other forms of plagiarism.
- Students who willingly allow another student to copy their work in any assessment may be considered to assisting in copying/cheating, and similar penalties may be applied.

Where a subject coordinator considers that a student might have engaged in academic misconduct, KOI may require the student to undertake an additional oral exam as a part of the assessment for the subject, as a way of testing the student's understanding of their work.

Further information can be found on the KOI website.

d) Reasonable Adjustment

The Commonwealth Disability Discrimination Act (1992) makes it unlawful to treat people with a disability less fairly than people without a disability. In the context of this subject, the principle of Reasonable Adjustment is applied to ensure that participants with a disability have equitable access to all aspects of the learning for the subject. For assessment, this means that barriers to their demonstrating competence are removed wherever it is reasonably practical to do so.

Examples of reasonable adjustment in assessment may include:

- provision of an oral assessment, rather than a written assessment
- provision of extra time
- use of adaptive technology.

The focus of the adjusted assessment should be on enabling the student to demonstrate achievement of the learning outcomes for the subject, rather than on the method of assessment.

e) Appeals Process

Full details of the KOI *Assessment and Assessment Appeals Policy* may be obtained in hard copy from the Library, and on the KOI website www.koi.edu.au under *Policies and Forms*.

Assessments and Mid-Trimester Exams:

Where students are not satisfied with the results of an assessment, including mid-trimester exams, they have the right to appeal. The process is as follows:

- Discuss the assessment with their tutor or lecturer – students should identify where they feel more marks should have been awarded – students should provide valid reasons based on the marking guide provided for the assessment. Reasons such as “*I worked really hard*” are not considered valid.
- If still not satisfied, students should complete an Application for Review of Assessment Marks form, clearly explaining the reasons for seeking a review. This form is available from the KOI website under *Policies and Forms* and is also available at KOI Reception (Kent St, Market St and O’Connell St). The completed Application for Review of Assessment Marks form should be submitted as explained on the form with supporting evidence attached to academic@koi.edu.au.
- The form must be submitted within *ten (10) working days* of the return of the marked assessment, or within *five (5) working days* after the return of the assessment if the assessment is returned after the end of the trimester.

Review of Grade – whole of subject and final exams:

Where students are not satisfied with the results of the whole subject or with their final exam results, they have the right to request a Review of Grade – see the *Assessment and Assessment Appeals Policy* for more information.

An *Application for Review of Grade/Assessment Form* (available from the KOI Website under *Policies and Forms* and from KOI Reception at Kent St, Market St and O’Connell St) should be completed clearly



explaining the grounds for the application. The completed application should be submitted as explained on the form, with supporting evidence attached to academic@koi.edu.au.

Appendix A

The following list shows all the subjects that provide the technical and professional skills required to undertake the Capstone Project subjects.

Code/Name of the subject	Pre-requisite/Co-requisite
BUS100 – Professional Communication Skills	Pre-requisite
ICT100 – Foundation of Information Systems	Pre-requisite
ICT101 – Discrete Mathematics for IT	Pre-requisite
ICT102 – Introduction to Programming	Pre-requisite
ICT103 – Systems Analysis and Design	Pre-requisite
ICT104 – Program Design and Development	Pre-requisite
ICT106 – Data Communications and Networks	Pre-requisite
ICT200 – Database Design and Development	Pre-requisite
ICT201 – Computer Organisation and Architecture	Pre-requisite
ICT203 – Human Computer Interaction	Pre-requisite
ICT204 – Project Management	Pre-requisite
ICT205 – Cyber Security	Pre-requisite
ICT272 – Web Design and Development	Pre-requisite
ICT303 – Professional Ethics in Computing	Pre-requisite/Co-requisite
ICT370 – Data Analytics	Pre-requisite/Co-requisite

Appendix B

The minimum requirements for the Capstone Project include -

- Backend Database, serverless database "Lambda" and dynamo DB.
- AWS dashboard
- 2-factor authentication, re-authentication
- Registration and authentication functions for user management, set timeouts for the session and account lock-ins etc.,
- Use of Google cloud platform free tier services for hosting and integration (app engine, databases, storage etc)
- Mobile analytics and Data analysis by collecting user data and app behaviour through data visualization
- Accessibility features to make the projects more suitable for a diverse range of users.
- Cross-platform development
- Others