KING'S OWN INSTITUTE*
Success in Higher Education

ICT728 CAPSTONE PROJECT 1 T320 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
Master of Information Technology (MIT)	1 trimester	Postgraduate	Dr Lin Yue lin.yue@koi.edu.au P: 92833583 L: Level 1-2, 17 O'Connell St. Consultation: via Moodle or by appointment.

1.2 Core/Elective
This is a core subject for the Master of Information Technology (MIT)

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	MIT (64 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***
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, completing assignments, etc.
***   Combination of timetable hours and personal study

1.5 Mode of Delivery   Blended, that is face-to-face/online

1.6 Pre-requisites   Satisfactory completion of eight subjects including ICT712 Information Technology Project Management

   Co-requisites   ICT713 Advanced Database Design and Development

1.7   General Study and Resource Requirements

o   Students are expected to attend classes with the weekly worksheets and subject support material provided in Moodle. Students should read this material before coming to class to improve their ability to participate in the weekly activities.
o   Students will require access to the internet and their KOI email and should have basic skills in word processing software such as MS Word, spreadsheet software such as MS Excel and visual presentation software such as MS PowerPoint.
o   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.

Software resource requirements specific to this subject: MS Imagine, Office 365, MS Visio, MS Project, Wireshark

2. Academic Details

2.1 Overview of the Subject

This subject gives students the opportunity to apply the theoretical knowledge and practical skills acquired during their course of study in the Master of Technology (MIT) program. Students undertake a real world industry based project integrated across the two subjects ICT728 Capstone Project 1 and ICT729 Capstone Project 2. Academic and industry experts provide workshops for students each week on aspects related to IT projects.

Students are encouraged to identify and select their project according to their interests prior to the start of the trimester. Subject coordinators will provide support and assist students in this process if students experience difficulty in finding an appropriate industry project.

For their capstone project, students engage in the entire process of solving a real world information technology project in terms of systems proposal, design, implementation, evaluation, and report writing. Work in each assessment builds towards the final report which is to be completed at the end of ICT729. In ICT728 students are required to finalise the project topic, scope, proposal, literature review, and design method for their capstone project.

2.2 Graduate Attributes for Postgraduate Courses

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

King's Own Institute's key generic graduate attributes for a postgraduate degree are summarised below:

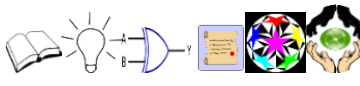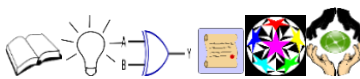|	KOI Postgraduate Degree Graduate Attributes	Detailed Description
	Knowledge	Current, comprehensive and coherent knowledge, including recent developments and applied research methods
	Critical Thinking	Critical thinking skills to identify and analyse current theories and developments and emerging trends in professional practice
	Communication	Communication and technical skills to analyse and theorise, contribute to professional practice or scholarship, and present ideas to a variety of audiences
	Research and Information Literacy	Cognitive and technical skills to access and evaluate information resources, justify research approaches and interpret theoretical propositions
	Creative Problem Solving Skills	Cognitive, technical and creative skills to investigate, analyse and synthesise complex information, concepts and theories, solve complex problems and apply established theories to situations in professional practice
	Ethical and Cultural Sensitivity	Appreciation and accountability for ethical principles, cultural sensitivity and social responsibility, both personally and professionally
	Leadership and Strategy	Initiative, leadership skills and ability to work professionally and collaboratively to achieve team objectives across a range of team roles. Expertise in strategic thinking, developing and implementing business plans and decision making under uncertainty
	Professional Skills	High level personal autonomy, judgement, decision-making and accountability required to begin professional practice

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

o **Level 1 Foundation –** Students learn the skills, theories and techniques of the subject and apply them in stand-alone contexts
o **Level 2 Intermediate –** Students further develop skills, theories and techniques of the subject and apply them in more complex contexts, beginning to integrate the application with other subjects
o **Level 3 Advanced** – Students have a demonstrated 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

Generally, skills gained from subjects in the Graduate Certificate and Graduate Diploma are at levels 1 and 2 while other subjects in the Master's degree are at level 3.

2.3 Subject Learning Outcomes

Listed below, are key knowledge and skills students are expected to attain by successfully completing this subject:

Subject Learning Outcomes	Contribution to Graduate Attributes
a) Apply the process of research and design in the development of a project proposal	
b) Evaluate effective and emerging technology options in the design of an IT project	
c) Develop sustainable solutions that can be applied which incorporate the latest IT theories, trends, tools and opportunities	
d) Demonstrate an ability to handle a real world problem in IT from the point of problem definition through to the design of a solution	
e) Assess and manage ethical and management issues in an IT team project	

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.

From Trimester 3 2020, KOI partners with Practera, an experiential learning technology and programs provider, to facilitate students' engagement with authentic industry projects as part of the ICT 301 and ICT 302 capstone project units. Practera platform will be employed to support collaboration between students and industry clients, client provision of feedback to student project teams, and structured record-keeping of student-client interactions via meeting agendas, progress status updates and meeting minutes. Practera will also support students in reflecting and honing their global (professional) skills required for successful industry project collaborations. Students will use Practera to complete a self-audit of global (professional) skills, provide and receive Team360 feedback from their peers and access supportive content on skill development strategies and effective teamwork, collaboration and communication tools. Student will not be charged any additional fees for using Practera as a platform for the assessments in this subject.

Please see the Appendix A at the end of the subject outline for Practera and the submission timelines on Practera platform.

Weekly Planner:

Week (beginning)	Topic covered in each week's lecture	Reading(s)	Expected work as listed in Moodle
1 02 Nov	Requirements and specifications of the capstone project are discussed; project topics discussed	No prescribed textbook. Students are encouraged to read journal articles	Projects introduced during the class and groups created; Academic supervisor selected and weekly meeting schedule with supervisor and team members finalised
2 09 Nov	Workshop: team and time management. Selecting and designing your capstone project	Show weekly progress	Weekly meetings with the academic supervisor
3 16 Nov	Discussion on project proposal and literature review	Show weekly progress	Weekly meetings with the academic supervisor **Assessment 1 due: Project proposal**
4 23 Nov	Workshop: how to do research for your project	Show weekly progress	Weekly meetings with the academic supervisor
5 30 Nov	Workshop: finding relevant titles and research articles	Show weekly progress	Weekly meetings with the academic supervisor
6 07 Dec	Workshop: summarising technical papers and providing supportive arguments for the proposal.	Show weekly progress	Weekly meetings with the academic supervisor
7 14 Dec	Workshop: design methodologies for projects	Show weekly progress	Weekly meetings with the academic supervisor **Assessment 2 due: Literature and technology review**
20 Dec 2020 – 03 Jan 2021	**Mid trimester break**		
8 04 Jan	Workshop: evaluating and comparing design options	Show weekly progress	Weekly meetings with the academic supervisor
9 11 Jan	Workshop: ethical issues in IT projects	Show weekly progress	Weekly meetings with the academic supervisor
10 18 Jan	Workshop: project requirements and UML diagrams	Show weekly progress	Weekly meetings with the academic supervisor
11 25 Jan	Workshop: implementation requirements	Show weekly progress	Project presentation **Assessment 3 due: Project design and planning**
12 01 Feb	Workshop: managing projects		**Assessment 4 due: Project presentation**
13 07 Feb	Study review week		

14 15 Feb	Final Examination	
15 21 Feb	Student Vacation begins Enrolments for T121 open	
16 02 Mar	Results Released 02 Mar 2021 Certification of Grades 05 Mar 2021	
T121 begins 09 Mar 2021		
1 08 Mar	Week 1 of classes for T121 **Friday 05 Mar 2021 – Review of Grade Day for T320** – see Sections 2.6 and 3.2 below for more information.	

2.7 Teaching Methods/Strategies

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

- o *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.
- o *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.
- o *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
- o *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 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 are:

- o *HD High distinction* (85-100%): an outstanding level of achievement in relation to the assessment process.
- o *D Distinction* (75-84%): a high level of achievement in relation to the assessment process.
- o *C Credit* (65-74%): a better than satisfactory level of achievement in relation to the assessment process.
- o *P Pass* (50-64%): a satisfactory level of achievement in relation to the assessment process.
- o *F Fail* (0-49%): an unsatisfactory level of achievement in relation to the assessment process.
- o *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: Project proposal (report: 500 words each student, group task)	Week 3	10%	a
Assessment 2: Literature and technology review (1,750 word report, individual task)	Week 7	25%	a, b
Assessment 3: Project design and planning (report: 800 words each student, group and individual task)	Week 11	Group Work: 30% Individual Contribution: 10%	a, b, c, d, e
Assessment 4: Presentation (group and individual task)	Weeks 11-12	Group Work: 15% Individual Contribution 10%	a, b, c, d, e

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 Readings

Prescribed Texts:

There is no prescribed text book for this subject. Students are to conduct a literature review of published journal articles and peer-reviewed conference papers.

Appendix A
(ICT 728 CAPSTONE PROJECT 1)

KOI partners with Practera, an experiential learning technology and programs provider, to facilitate students' engagement with authentic industry projects as part of the ICT 728 and ICT 729 capstone units. Practera platform will be employed to support collaboration between students and industry clients, client provision of feedback to student project teams, and structured record-keeping of student-client interactions via meeting agendas, progress status updates and meeting minutes. Practera will also support students in reflecting and honing their global (professional) skills required for successful industry project collaborations. Students will use Practera to complete a self-audit of global (professional) skills, provide and receive Team360 feedback from their peers and access supportive content on skill development strategies, effective teamwork, collaboration and communication tools.

Practera is a web-based experiential learning app. At the beginning of the trimester, students will be added onto the Practera app and receive a Welcome & Register email to their student email addresses, inviting them to register on the app. The first time students use the app, they will need to accept Practera's Terms & Conditions and set a password. After registering on the app, students will be able to access it on their phone, tablet or computer by going to KOI.practera.app on their preferred device. For any questions related to the use of the Practera app, emails can be sent to help@practera.com

Once students join the Practera app, they will be put in teams according to their projects and matched with industry clients on Practera. Students will be required to participate in a project briefing meeting with their client at the beginning of the trimester (Week 2), arrange and attend progress meetings with the client

(Week 4 and Weeks 8/9) and deliver a final presentation to the client (Week 11). All the client meetings will be held via a video conferencing software (Zoom). The students will be supported with preparation and planning for the client meetings.

Throughout the trimester, the student teams will complete activities and submissions via the Practera app as per the table below. They will also read their clients' feedback on their submissions via the app. Practera will send email notifications to students' email addresses whenever there is a submission to complete or client feedback to review.

Timeline for submissions via Practera
ICT 728 CAPSTONE PROJECT 1

The following submissions and activities are to be completed via the Practera app by students (individually or as a team)

Title	Tasks to submit	Due	Individual or team-based submission?
KOI Industry Agreement	Students submit the signed agreement via Practera	week 2	Individual
Global (professional) skill self-audit	Professional skill self-audit: *Students complete self-audit of their global (professional) skills and set goals for skill development* *Throughout the project, students review supportive content on skill development strategies, teamwork, collaboration and communication tools.*	week 2, week 12	Individual
	Team360 Peer Assessment *Students evaluate professional skills and contribution to teamwork of other team members and provide ~100 words written peer-feedback.*	week 5, week 11	Individual
Progress status updates/meeting agendas to Client	Progress status updates/meeting agendas to Client	Prior to each client meeting	Team-based
Meeting minutes	Client meeting minutes	After each client meeting	Team-based
Project deliverables to	Project Proposal to Client	Week 3 (the same time as Moodle submission)	Team-based

Client				
	Final Project Report to Client	Week 11 (the same time as Moodle submission)	Team-based	

Client				
	Final Project Report to Client	Week 11 (the same time as Moodle submission)	Team-based	