

## Contemporary IT & E Issues

Unit code and version	9788.3
Unit offering option	213769
Study level	Level 3 - Undergraduate Advanced Unit
Credit points	3
Faculty	Faculty of Science and Technology
Discipline	Academic Program Area - Technology
Unit offering details	Semester 2, 2023 , ON-CAMPUS , UC - Canberra, Bruce
Unit convener name and contact details	Unit Convener/Lecturer: Dr. Rosetta Romano, email: Rosetta.Romano@canberra.edu.au
Administrative contact details	Student Central, Building 1, Level B  E: <a href="mailto:Student.Centre@canberra.edu.au">Student.Centre@canberra.edu.au</a>  T: 1300 301 727

## Academic content

### Unit description

This unit aims towards developing a solid and high level understanding and appreciation of key contemporary issues and trends of ICT. Particular emphasis will be placed on ICT issues and trends that have a major impact on the organisation. Topics covered under this unit include: 1. Current status and trends of ICT, 2. Business value of ICT - ICT and business alignment, 3. ICT Governance, 4. P3M3 - Portfolio, Program and Project management, 5. Service delivery - issues and approaches, 6. Technological trends: Cloud computing, Big data, 7. Consumerisation of ICT - mobility device and applications, 8. Social media - impact and opportunities and the future of ICT organisations. Guest lectures and group projects with hands-on exercises will be used to enhance student-learning experience. This unit is co-taught with Contemporary IT&E Issues PG, 9787.

### Learning outcomes

On completion of this unit, students will be able to:

1. Appraise the key issues and challenges facing ICT today and relate those issues in a modern organisation;
2. Understand the holistic and integrated nature of ICT trends and opportunities and apply the understanding in a work environment;
3. Establish the business values of ICT, assess and prioritise ICT solutions and formulate strategies and plans to meet business requirements;

4. Evaluate risks of key ICT trends and be able to develop high level approaches and strategies to manage the risks; and
5. Adapt and generalise the lessons learnt and apply knowledge acquired in similar work situations.

## Graduate attributes

1. UC graduates are professional
  - communicate effectively
  - display initiative and drive, and use their organisation skills to plan and manage their workload
  - employ up-to-date and relevant knowledge and skills
  - take pride in their professional and personal integrity
  - use creativity, critical thinking, analysis and research skills to solve theoretical and real-world problems
  - work collaboratively as part of a team, negotiate, and resolve conflict
2. UC graduates are global citizens
  - adopt an informed and balanced approach across professional and international boundaries
  - behave ethically and sustainably in their professional and personal lives
  - communicate effectively in diverse cultural and social settings
  - think globally about issues in their profession
  - understand issues in their profession from the perspective of other cultures
3. UC graduates are lifelong learners
  - adapt to complexity, ambiguity and change by being flexible and keen to engage with new ideas
  - evaluate and adopt new technology
  - reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development
4. UC graduates are able to demonstrate Aboriginal and Torres Strait Islander ways of knowing, being and doing
  - use Indigenous histories and traditional ecological knowledge to develop and augment understanding of their discipline

## Skills development

As students of the University of Canberra, you will develop your critical thinking skills, your ability to solve complex problems, your ability to work with others, your confidence to learn independently, your written communication skills, your spoken communication skills and a number of work-related knowledge and skills.

## Prerequisites

Must have completed 24 credit points including 11519 Professional Practice in Engineering or 7722 Professional Practice in IT.

## Corequisites

None.

## Accreditation Mapping

This unit is a part of courses accredited by the ACS. It meets the following skill categories:

### Skills Framework for the Information Age

This unit meets the following SFIA skills specifications:

BUSA, CIPM, CNSL, DTAN, EMRG, RLMT, RSCH, TECH, VISL

### Seoul Accord:

This unit addresses complex computing problems that have one or more of the following characteristics:

- involves wide-ranging or conflicting technical, computing, and other issues;
- has no obvious solution and requires conceptual thinking and innovative analysis to formulate suitable abstract models;

These complex computing problems are assessed in the following assessment items:

- Tutorials
- Discussion forums
- Final report

## Timetable of activities

Week and Lecture Topic	Indigenous way of learning	Western way of thinking	UG 9788 Assessment item	Tutorial
1 Introduction	Learning maps	Conceptual thinking (big picture)	Discussion Forum 1 of 4 opened. Groups are selected and released on Canvas.	Topic 1 (week 1 of 2) (Topic 1 is offered in Week 1 and is repeated in Week 2. You only need to attend one).
2 Data	Story sharing	Design thinking (design, evaluate, and iterate)	Group contract details released Discussion forum 1 of 4 Closed Sunday 23:59	Topic 1 (week 2 of 2) (Topic 1 is offered in Week 1 and is repeated in Week 2. You only need to attend one).
3 Gartner Top 10	Deconstruct and Reconstruct	Systems Thinking (connections)	None	Topic 2 (week 1 of 2) (Topic 2 is offered in Week 3 and is repeated in Week 4. You only need to attend one).
4 Water	Community Links	Computational thinking (patterns)	Discussion Forum 2 of 4Open Week 4 Mon 00:00	Topic 2 (week 2 of 2) (Topic 2 is offered in Week 3 and is repeated in Week 4. You only need to attend one).

5 Robodebt	Land links	Ethical thinking	Group Report 1 of 3 Discussion Forum 2 of 4 Closes (Sun 23:59)	Topic 3 (week 1 of 2) (Topic 3 is offered in Week 5 and is repeated in Week 6. You only need to attend one).
6 Reflection	None	None	None	Topic 3 (week 2 of 2) (Topic 3 is offered in Week 5 and is repeated in Week 6. You only need to attend one).
7 Cloud Computing	Symbols and Images - Semiotics	All	Discussion Forum 3 of 4 Open (Monday 0:00)	Topic 4 (week 1 of 2) (Topic 4 is offered in Week 7 and is repeated in Week 9. You only need to attend one).
8 Teaching-free period	Class free week	Class free week	Group Report Part 2 of 3 Discussion Forum 3 of 4 Closes (Sun 23:59)	None
9 Gaming and Gamification	Non-verbal	All	None	Topic 4 (week 2 of 2) (Topic 4 is offered in Week 7 and is repeated in Week 9. You only need to attend one).
10 Artificial intelligence	Non-linear	All	Discussion Forum 4 Open (Monday 00:00)	Topic 5 (week 1 of 2) (Topic 5 is offered in Week 10 and is repeated in Week 11. You only need to attend one).
11 Blockchain	All	All	Group Report 3 of 3 Discussion Forum 4 of 4 Closes (Sunday	Topic 5 (week 2 of 2) (Topic 5 is offered in Week 10 and is repeated in Week 11.

23:59)

You only need to attend one).

12 Reflection	All	All	None	Topic 6 (week 1 of 2)  (Topic 6 is offered in Week 12 and is repeated in Week 13. You only need to attend one).
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13. No lecture	All	All	None	Topic 6 (week 2 of 2)  (Topic 6 is offered in Week 12 and is repeated in Week 13. You only need to attend one).
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## Unit resources

### Required texts

There is no textbook for this unit. Students are required to do their own research on the topics using available online resources and any recommended readings on the topics being covered.

Online resources include the Gartner website and the Association for Computing (ACM) website.

### Materials and equipment

Library and web resources will be announced on the unit website.

## Unit website

Each unit you are enrolled in has an online teaching site in the learning management system UCLearn. You access UCLearn through [MyUC](#).

## Assessment

### Assessment item details

#### Discussion forums

#### Due date

There are four graded discussion forums. Students must contribute to the discussion individually. There is an expectation for students to engage with their peers in their comments and responses to their peers' posts over the two weeks. Each discussion forum is open for 2 weeks as follows:

- Discussion forum 1 of 4 (open 0:00 Monday Week 1 - closes 23:59 Sunday Week 2)
- Discussion forum 2 of 4 (open 0:00 Monday Week 4 - closes 23:59 Sunday Week 5)
- Discussion forum 3 of 4 (open 0:00 Monday Week 7 - closes 23:59 Sunday Week 8)
- Discussion forum 4 of 4 (open 0:00 Monday Week 10 - closes 23:59 Sunday Week 11)

#### Weighting

25 marks (4 x 6.25 marks each)

## **Additional information**

Each student must contribute to each of the four discussion forums. Contributing early is recommended in order to see comments from other students, and so is commenting on the posts submitted by other students.

Students are required to provide academic references in their responses. Four separate discussion forums will be opened during the semester. Each discussion has a series of prompts for students to answer individually. Each discussion is open for two weeks. Students are expected to engage with their peers through responses over the two weeks.

## **Assessment details**

Each student must contribute to each of the four discussion forums. Contributing early is recommended in order to see comments from other students, and so is commenting on the posts submitted by other students.

## **Addresses learning outcomes**

On completion of this unit, students will be able to:

- 1. Appraise the key issues and challenges facing ICT today and relate those issues in a modern organisation;
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- 5. Adapt and generalise the lessons learnt and apply knowledge acquired in similar work situations.

## **Related graduate attributes**

1. UC graduates are professional
  - communicate effectively
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2. UC graduates are global citizens
  - adopt an informed and balanced approach across professional and international boundaries
  - behave ethically and sustainably in their professional and personal lives
  - communicate effectively in diverse cultural and social settings
  - think globally about issues in their profession

### **Tutorials**

## **Due date**

### **Tutorials**

- Topic 1 (Week 1 or 2)
- Topic 2 (Week 3 or 4)
- Topic 3 (Week 5 or 6)
- Topic 4 (Week 7 or 9)

- Topic 5 (Week 10 or 11)
- Topic 6 (Week 12 or 13)

## Weighting

20 marks (Best 5 of 6 topic tutorials each worth 4 marks)

Topic 1 of 6 (4 marks)

Topic 2 of 6 (4 marks)

Topic 3 of 6 (4 marks)

Topic 4 of 6 (4 marks)

Topic 5 of 6 (4 marks)

Topic 6 of 6 (4 marks)

## Additional information

Grades for tutorials can only be awarded to students who have participated in the tutorials.

## Assessment details

The lecture and self-study will provide students with thoughts that they share with their peers during the tutorials. Students must draw on their learning and apply it to the weekly topics.

## Addresses learning outcomes

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## Group Report - Thinking and Learning about Contemporary IT Issues

### Due date

Group Report - 'Thinking and Learning about Contemporary IT Issues"

- Individual Pre-group Contract (Week 5 Sun 23:59)
- Part 1 of 3 - Final Group Report Proposal (Week 5 Sun 23:59)
- Part 2 of 3 - Individual reflection (Week 8 Sun 23:59)
- Part 3 of 3 - Final Group Report (Week 11 Sun 23:59)

### Weighting

55 marks in total

- Ungraded (Individual Pre-group Contract)
- 20 marks (Part 1 of 3 - Final Group Report Proposal)
- 5 marks (Part 2 of 3 - Individual reflection)
- 30 marks (Part 3 of 3 - Final Group Report)

### Additional information

This is a group report. Each group must describe a business and a contemporary IT issue it is facing. The group works together to consider the business impact of the contemporary IT issue using both Western ways of thinking, and Indigenous ways of learning. The merits of the different ways of thinking are to be discussed.

Students must work together in groups. The groups will be assigned from week 1. Late enrolments will not be possible as group work needs to start immediately.

Students need to manage the group relationship. Group work may be subjected to peer review by group members. Each person in the group will have an opportunity to assign a weighting to recognize another member's contribution. This may result in a group mark being adjusted (up or down) for group members who may not have met or exceeded the expectations of the group,

Further details will be published on the Canvas site.

### Assessment details

Final report - Different ways to think and learn about contemporary IT issues (55% total)

- Pre-group report (Individual group contract completion) - (ungraded)
- Part 1 – Group report proposal (group) – week 7 (20%)
- Part 2 – Individual written reflection on the group contract, the student's contribution (per their submitted group contract), their peers' contributions, and what next steps are to ensure they and the group are on track for success- week 7 (5%)
- Part 3 – Final Group Report – week 11 (30%)

### Addresses learning outcomes

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4. UC graduates are able to demonstrate Aboriginal and Torres Strait Islander ways of knowing, being and doing
  - use Indigenous histories and traditional ecological knowledge to develop and augment understanding of their discipline

## Submission of assessment items

Discussion forums are open for 14 days. No extensions for discussion forums are possible after the discussion has been closed.

## Extensions

Students can apply for an extension to the submission due date for an assessment item due to extenuating, evidenced circumstances (specific details are found in the [Assessment Procedures](#)). An extension must be applied for before the due date. Documentary evidence (e.g. medical certificate) will be expected for an extension to be granted, however this will not guarantee that the application will be successful. The Unit Convener or relevant Program Director/Course Convener will decide whether to grant an extension and the length of the extension.

An Assignment Extension form is available from the [Student Forms](#) page.

## Late submissions

The following late submission period and penalty is applicable to any teaching period commencing after 1 April 2024.

To support the provision of timely feedback to students within the unit, late penalties will apply for summative assessments where late submission is permitted. Late submissions without an approved extension or reasonable adjustment will result in a penalty of a mark reduction of 10% of the maximum available marks for the assessment item per day (or part thereof) up to and including three calendar days. If a student submits more than three calendar days late without an approved extension or reasonable adjustment, the student will be allocated a mark of zero for that assessment, with no feedback provided.

Approval of extensions based on extenuating circumstances will be dependent upon the production of supporting documentation and at the

discretion of the unit convener.

For teaching periods commencing prior to 1 April 2024, a late penalty of 5 % of the maximum available marks for the assessment item per day (or part thereof) was applied up to and including seven calendar days. An assignment submitted over 7 days late will not be accepted.

## Special assessment requirements

A 50% final grade overall is required to pass this unit.

The final grade of a student is determined according to the following table:

85 <= the overall mark <= 100	Final grade = HD
75 <=the overall mark < 85	Final grade = DI
65 <= the overall mark < 75	Final grade = CR
50 <=the overall mark < 65	Final grade = P
the overall mark < 50	Final grade = FAIL (NX, NC, or NN)

## Supplementary assessment

Refer to the [Assessment Policy](#) and [Assessment Procedures](#)

All work quoted from any source should be appropriately referenced using the UC Referencing Guide that applies "Harvard 6th edition 2021". Use this [link](#) to access the guide.

Students must ensure that they present 'academic' writing, not 'descriptive' writing. Academic writing acknowledges the source of information, while Descriptive writing assumes that no acknowledgement is required.

## Academic integrity

Students have a responsibility to uphold University standards on ethical scholarship. Good scholarship involves building on the work of others and use of others' work must be acknowledged with proper attribution made. Cheating, plagiarism, and falsification of data are dishonest practices that contravene academic values. Refer to the University's [Student Charter](#) for more information.

To enhance understanding of academic integrity, all students are expected to complete the Academic Integrity Module (AIM) at least once during their course of study. You can access this module within [UCLearn \(Canvas\)](#) through the 'Academic Integrity and Avoiding Plagiarism' link in the [Study Help site](#).

## Use of Text-Matching Software

The University of Canberra uses text-matching software to help students and staff reduce plagiarism and improve understanding of academic integrity. The software matches submitted text in student assignments against material from various sources: the internet, published books and journals, and previously submitted student texts.

## Student responsibility

## Learner engagement

Activity	Estimated hours

Weekly lecture: 2 hours per week x 12 weeks	24
Fortnightly tutorials: 2 hours per week x 6 fortnights	12
Review of lectures and teaching materials on Canvas, plus preparation of tutorials	30
study and assignments	84
Total:	150

## Inclusion and engagement

It is strongly recommended that students who need assistance in undertaking the unit because of disability or an ongoing health condition register with the [Inclusion and Engagement Office](#) as soon as possible so that reasonable adjustment arrangements can be made.

## Participation requirements

Your own research about the topics covered in this unit will enhance your understanding of the unit content and therefore the quality of your assessment responses. Lack of participation may result in your inability to satisfactorily pass the unit.

Weekly tutorial grades are only available for participants.

## Withdrawal

If you are planning to withdraw please discuss with your Unit Convener. UC College students must also seek advice from the College.

## Required IT skills

IT skills commensurate with advanced study of information technology are assumed.

The tutorials in this unit are offered in person, face-to-face, or online in the virtual room in UC Learn.

This unit involves online meetings in real-time using the Virtual Room in your UCLearn teaching site. The Virtual Room allows you to communicate with your lecturer and other students in real-time. You will need a microphone to participate verbally rather than just typing. For the best audio quality, we recommend a microphone and speaker headset. For more information and to test your computer, visit the Virtual Room on your UCLearn site and 'Join Course Room.' This will trigger a tutorial to help familiarise you with the functionality of the virtual room.

## In-unit costs

N/A

## Work integrated learning

N/A

## Additional information

Referencing and citations

All work quoted from any source should be appropriately referenced using the UC Referencing Guide that applies "Harvard 2021". Use this [link](#) to access the guide.

Provision of information to the group

Notifications through the unit website are deemed to be made to the whole class. It is the responsibility of the student to ensure that they check for announcements on the unit website regularly. Not checking the unit website and the student email regularly will not excuse the student from following the instructions provided via both means of communication, which may include updates to the unit contents, assignments, and deadlines, among others.

#### Use of student email account

The University Email policy states that “students wishing to contact the University via email regarding administrative or academic matters need to send the email from the University account for identity verification purposes”. Therefore all unit inquiries should be emailed using a student university email account. Students should contact [servicedesk@canberra.edu.au](mailto:servicedesk@canberra.edu.au) if they have any issues accessing their university email account.

In all cases of absence, sickness, or personal problems it is the student's responsibility to ensure that the unit Convener is informed within the appropriate timeframe. The minimum participation requirement must be met in order to pass the unit (regardless of supporting documentation).

## Student feedback

All students enrolled in this unit will have opportunities to provide anonymous feedback on the unit through the InterFace Student Experience Questionnaire (ISEQ). The request for your feedback will be posted on your InterInterface page at least twice during a teaching period. InterInterface can be accessed through MyUC.

## Changes to unit based on student feedback

The content and material prepared for this unit have been reviewed in light of feedback from previous student surveys/evaluations. In particular, the number of assessment items have been reduced, and the peer-reviewing will now be moderated by the teacher.

We strongly encourage students to give feedback by answering UC surveys. In addition, please feel free to contact your Unit Convener at any time should you have any suggestions or comments about this unit.

## Authority of this unit outline

This unit outline must be read in conjunction with the University of Canberra's Policies and Procedures, including the [Assessment Policy](#) and associated [Procedure](#). The Assessment Policy and Assessment Procedure include information on matters such as plagiarism, grade descriptors, moderation, feedback, and deferred exams.

Any change to the information contained in the Academic content and Assessment sections of this document, will only be made by the Unit Convener if the written agreement of the Program Director and a majority of students has been obtained; and if written advice of the change is then provided on the teaching site in UCLearn. If this is not possible, written advice of the change must be then forwarded to each student enrolled in the unit at their registered term address. Any individual student who believes themselves to be disadvantaged by a change is encouraged to discuss the matter with the Unit Convener.

## Authority Text

### Main

Exception – Potential changes to a unit's learning activities and assessment items (Approved Academic Board 2020)

In the event of Australian Government and/or ACT Government directive, such as those requiring physical distancing and restrictions on movement because of a pandemic, learning activities and/or assessment items in some units may change. These changes will not be updated in the published Unit Outline but will be communicated to students via the unit's UCLearn (Canvas) teaching site. The new learning activities and/or assessment items will continue to meet the unit's learning outcomes, as described in the Unit Outline.

New learning activities and/or assessment items will be available on the unit's UCLearn (Canvas) teaching site. Please contact the Unit Convener with any questions.

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CRICOS 00212K

TEQSA Provider ID: PRV12003 (Australian University)

UC acknowledges the Ngunnawal people, traditional custodians of the lands where Bruce campus is situated. We wish to acknowledge and respect their continuing culture and the contribution they make to the life of Canberra and the region. We also acknowledge all other First Nations Peoples on whose lands we gather.