



COIT20250 *Emerging Technologies in E-Business*

Term 2 - 2022

Profile information current as at 06/05/2024 05:02 am

All details in this unit profile for COIT20250 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview

The business world has been witnessing the digital revolution since the beginning of the 1990s. The latest developments in digital technologies are going to result in another wave of transformations which will change how a business is operated and managed. Business organisations that fail to undergo digital transformation will not be able to keep pace with changing customer expectations and remain competitive. The objective of this unit is to provide you with an overview of emerging digital technologies such as IoT, Blockchain, and Artificial Intelligence that would impact business organisations. The unit will help you obtain a better understanding of these emerging digital technologies with underlying designs, working principles, functions, and capabilities. You will also have an opportunity to critically analyse the emerging technologies, their utilities, impacts, advantages and disadvantages, and current and future applications in e-business.

Details

Career Level: *Postgraduate*

Unit Level: *Level 9*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Prerequisite: COIT20248 Information Systems Analysis and Design

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

Offerings For Term 2 - 2022

- Brisbane
- Melbourne
- Online
- Sydney

Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

Class and Assessment Overview

Recommended Student Time Commitment

Each 6-credit Postgraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

[Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

[Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Group Discussion**

Weighting: 40%

2. **Presentation**

Weighting: 20%

3. **Written Assessment**

Weighting: 40%

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the [CQUniversity Policy site](#).

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from In class

Feedback

Students showed interest in discussing the real world examples of emerging technologies.

Recommendation

Continue discussing different real-world examples related to each week's topic.

Unit Learning Outcomes

On successful completion of this unit, you will be able to:

1. Illustrate recent developments in disruptive digital technologies that will transform future businesses
2. Evaluate underlying designs, working principles, functions, and capabilities of the emerging digital technologies
3. Apply technical research skills to critically evaluate future impact of emerging digital technologies on e-business
4. Use emerging digital technologies to solve current and forthcoming e-business problems
5. Work independently and contribute as a member of a team employing appropriate interpersonal, professional and technical communication skills.

The Australian Computer Society (ACS) recognises the Skills Framework for the Information Age (SFIA). SFIA is adopted by organisations, governments and individuals in many countries and provides a widely used and consistent definition of ICT skills. SFIA is increasingly being used when developing job descriptions and role profiles. ACS members can use the MYSFIA tool (<https://www.acs.org.au/professionalrecognition/mysfia-b2c.html>) to build a skills profile.

This unit contributes to the following workplace skills as defined by SFIA 7:

- Emerging Technology Monitoring (EMRG)

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

| Assessment Tasks | Learning Outcomes | | | | |
|------------------------------|-------------------|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| 1 - Group Discussion - 40% | • | • | • | | • |
| 2 - Presentation - 20% | | | | • | • |
| 3 - Written Assessment - 40% | | • | • | • | |

Alignment of Graduate Attributes to Learning Outcomes

| Graduate Attributes | Learning Outcomes | | | | |
|--|-------------------|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| 1 - Knowledge | ○ | ○ | ○ | ○ | |
| 2 - Communication | ○ | ○ | ○ | ○ | ○ |
| 3 - Cognitive, technical and creative skills | ○ | ○ | ○ | ○ | ○ |
| 4 - Research | ○ | ○ | ○ | ○ | |
| 5 - Self-management | ○ | ○ | ○ | ○ | ○ |
| 6 - Ethical and Professional Responsibility | | | ○ | ○ | ○ |
| 7 - Leadership | | | | | ○ |
| 8 - Aboriginal and Torres Strait Islander Cultures | | | | | |

Alignment of Assessment Tasks to Graduate Attributes

| Assessment Tasks | Graduate Attributes | | | | | | | |
|------------------------------|---------------------|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 - Group Discussion - 40% | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |
| 2 - Presentation - 20% | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |
| 3 - Written Assessment - 40% | ○ | ○ | ○ | ○ | ○ | ○ | | |

Textbooks and Resources

Textbooks

There are no required textbooks.

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- MS Office
- Zoom Capacity (microphone required, webcam preferred if possible)

Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)
For further information, see the Assessment Tasks.

Teaching Contacts

Ergun Gide Unit Coordinator
e.gide1@cqu.edu.au

Schedule

Week 1 - 11 Jul 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|-------------------------|------------------------------|
| Introduction to e-Business and Emerging Technologies | Supplementary Resources | |

Week 2 - 18 Jul 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------------------|-------------------------|------------------------------|
| Overview of Industry 4.0 | Supplementary Resources | |

Week 3 - 25 Jul 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|-------------------------|------------------------------|
| Introduction to Internet of Things (IoT) and Edge Computing | Supplementary Resources | |

Week 4 - 01 Aug 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|-------------------------|--------------------------------|
| Introduction to Blockchain Technologies | Supplementary Resources | Group Discussions Begin |

Week 5 - 08 Aug 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|-------------------------|------------------------------|
| Introduction to Artificial Intelligence (AI) and Deep Learning (DL) | Supplementary Resources | Group Discussions |

Vacation Week - 15 Aug 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|------------------|---------|------------------------------|
| Enjoy the break! | | |

Week 6 - 22 Aug 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|-------------------------|------------------------------|
| Applications of IoT and Edge Computing in e-Business | Supplementary Resources | Group Discussions |

Week 7 - 29 Aug 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|-------------------------|------------------------------|
| Applications of Blockchain in e-Business | Supplementary Resources | Group Discussions |

Week 8 - 05 Sep 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|-------------------------|------------------------------|
| Applications of Artificial Intelligence (AI) and Deep Learning (DL) in e-Business | Supplementary Resources | Group Discussions End |

Week 9 - 12 Sep 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------------------|-------------------------|------------------------------|
| Cognitive Security Techniques | Supplementary Resources | |

Week 10 - 19 Sep 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|-------------------------|---|
| Conversational Computing | Supplementary Resources | Group Presentation Due: Week 10 Friday (23 Sept 2022) 11:45 pm AEST |
| Week 11 - 26 Sep 2022 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Everything-as-a-Service (XaaS) | Supplementary Resources | |
| Week 12 - 03 Oct 2022 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Special Topics in Emerging E-Business Technologies | Supplementary Resources | Individual Case Study Due: Week 12 Friday (7 Oct 2022) 11:45 pm AEST |
| Review/Exam Week - 10 Oct 2022 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Exam Week - 17 Oct 2022 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |

Term Specific Information

Unit Coordinator: A/Professor Ergun Gide

E-mail: e.gide1@cqu.edu.au

Telephone: (02) 9324 5782

Office Location: 400 Kent Street, Level 2, Sydney, NSW 2000

Please note: If you have any individual queries, kindly e-mail me and I will get back to you within one business day or so. You may also post questions about the unit through the 'Q&A' discussion forum in Moodle so everyone can benefit from the questions and answers.

Assessment Tasks

1 Group Discussions

Assessment Type

Group Discussion

Task Description

Group discussions will take place in the Week 4-8 tutorials. You will form groups (of three to four members) and conduct a brief research on a given emerging technology and illustrate how the technology has evolved, its underlying designs, working principles, functions, capabilities, utilities, impacts, advantages and disadvantages, and current and future applications in e-business. Each group will present their findings at the end of the corresponding week's tutorial session. Each group will also have to submit a brief report on their findings as a Microsoft Word file to the Moodle unit website by Friday 11:45 PM of the same week. Hence, for this assessment, each group will produce five reports, one for each week from teaching Week 4-8.

The detailed assessment specification will be made available on the Moodle unit website.

Group formation and management Guideline (it is related to Assessment 1 & 2):

- This assessment requires teamwork in a group size of 3-4 students.
- As this is a group-based assessment, you must be in a group as individual assessment completion and submission will not be accepted.
- You are required to form your own teams in Week-1 and finalise it until Friday of Week-2.
- A time will be allocated in class for team formation activities and getting started on tasks.
- You will be given a chance to form your own group. However, when required the tutor may allocate you to a team as well.
- Re-arrangement of teams during the term (e.g. if a team member is sick or any other important reasons) will be

- at the discretion of the tutor (via Unit Coordinator).
- In most cases all members of a team will receive the same mark. However, if the tutor detects significant differences in contribution across team members, interviews may be held to determine individual contributions and appropriate individual marks will be allocated based on those contributions.
- You should make an attempt to resolve conflicts in the team as early as possible, and report to the tutor and/or Unit Coordinator in cases where conflicts cannot be resolved. The tutor (via Unit Coordinator) has the discretion to re-arrange individual tasks in a team or the team itself if necessary.

Assessment Due Date

As per schedule

Return Date to Students

Week 10 Friday (23 Sept 2022)

Within two weeks of submission

Weighting

40%

Assessment Criteria

You will be assessed based on your ability to demonstrate understanding of the emerging digital technologies, critically evaluate their future impacts and work as a team member.

The detailed marking criteria will be made available on the Moodle unit website.

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online Group

Submission Instructions

As per schedule, only one member of each group should submit the Group Discussion reports as MS Word files to the Moodle unit website.

Learning Outcomes Assessed

- Illustrate recent developments in disruptive digital technologies that will transform future businesses
- Evaluate underlying designs, working principles, functions, and capabilities of the emerging digital technologies
- Apply technical research skills to critically evaluate future impact of emerging digital technologies on e-business
- Work independently and contribute as a member of a team employing appropriate interpersonal, professional and technical communication skills.

Graduate Attributes

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Research
- Self-management
- Ethical and Professional Responsibility
- Leadership

2 Group Presentation

Assessment Type

Presentation

Task Description

You will work in the same groups (of three to four members) that were formed for Assessment 1. Each group will discuss amongst themselves and select an e-business use case for this assessment. You will then choose as many emerging technologies as appropriate to address the selected use case. You will describe how the chosen emerging technologies fit into the use case and include details of how the technologies would address the requirements of the use case. You will also evaluate the benefits and ramifications (if any) of using these technologies.

The detailed assessment specification will be made available on the Moodle unit website.

Assessment Due Date

Week 10 Friday (23 Sept 2022) 11:45 pm AEST

The MS PowerPoint file must be submitted to the Moodle unit website by the due date and time.

Return Date to Students

Week 12 Friday (7 Oct 2022)

Within two weeks of submission

Weighting

20%

Assessment Criteria

You will be assessed based on your ability to use emerging digital technologies to solve current and forthcoming e-business problems, and work as a team member.

The detailed marking criteria will be made available on the Moodle unit website.

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online Group

Submission Instructions

Only one member of each group should submit the Group Presentation as an MS PowerPoint file to the Moodle unit website.

Learning Outcomes Assessed

- Use emerging digital technologies to solve current and forthcoming e-business problems
- Work independently and contribute as a member of a team employing appropriate interpersonal, professional and technical communication skills.

Graduate Attributes

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Research
- Self-management
- Ethical and Professional Responsibility
- Leadership

3 Individual Case Study

Assessment Type

Written Assessment

Task Description

This assessment must be prepared and submitted by all of you as it is the only individual assessment in this unit. Each student will analyse a given case study and identify the issues arising from the case study. Based on the issues found in the case study, you will identify three e-business use cases. You will then choose as many emerging technologies as appropriate to address those use cases. You will write a report illustrating how the chosen emerging technologies would fit into and address the requirements of the identified e-business use cases.

In the main body of the report, you will include the following topics:

1. A list of identified three e-business use cases and chosen emerging technologies including a brief background study of those emerging technologies
2. A brief description and examples of the future potentials of the chosen emerging technologies in e-business
3. An illustration of how the chosen emerging technologies would fit into the identified e-business use cases
4. Details of how the chosen emerging technologies would address the requirements of the identified e-business use cases

The detailed assessment specification will be made available on the Moodle unit website.

Assessment Due Date

Week 12 Friday (7 Oct 2022) 11:45 pm AEST

The MS Word file must be submitted to the Moodle unit website by the due date and time.

Return Date to Students

On the day of Certification of Grades

Weighting

40%

Assessment Criteria

You will be assessed based on your ability to demonstrate understanding of the emerging digital technologies, critically evaluate their future impacts, and use those technologies to solve current and forthcoming e-business problems.

The detailed marking criteria will be made available on the Moodle unit website.

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Submission Instructions

You should submit the Case Study report as an MS Word file to the Moodle unit website.

Learning Outcomes Assessed

- Evaluate underlying designs, working principles, functions, and capabilities of the emerging digital technologies
- Apply technical research skills to critically evaluate future impact of emerging digital technologies on e-business
- Use emerging digital technologies to solve current and forthcoming e-business problems

Graduate Attributes

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Research
- Self-management
- Ethical and Professional Responsibility

Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?



Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem