



COIT11226 Systems Analysis

Term 1 - 2023

Profile information current as at 27/04/2024 12:39 am

All details in this unit profile for COIT11226 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

In this unit, you will explore problems that require technological solutions as systems analysis involves determining what a system needs to accomplish. This unit covers concepts such as systems feasibility, user requirements elicitation, and systems modelling. You will learn how to analyse systems requirements, select and plan how to take the system through all stages of the system development life cycle.

Details

Career Level: *Undergraduate*

Unit Level: *Level 1*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

There are no requisites for this unit.

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 1 - 2023

- Brisbane
- Cairns
- Melbourne
- Online
- Rockhampton
- 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 Undergraduate 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. **Online Quiz(zes)**

Weighting: 10%

2. **Written Assessment**

Weighting: 20%

3. **Written Assessment**

Weighting: 30%

4. **Project (applied)**

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 From Unit Coordinator and/or other teaching team members.

Feedback

Some students did not contribute equally to the group work.

Recommendation

Revise the marking scheme and assess the possibility of including requirements such as submitting a presentation video detailing individual contributions.

Feedback from From Turnitin checking.

Feedback

The problem of having some students' submissions with high Turnitin similarity indices.

Recommendation

In the beginning of the term, the Unit Coordinator and all teaching team members should emphasise to students that Turnitin is an effective plagiarism checking tool and there will be disciplinary actions for those students involving in plagiarism. To some extent, this will deter the number of academic misconduct cases.

Unit Learning Outcomes

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

1. Explain systems analysis concepts, terminologies, system analysis tasks, models, tools, techniques, and methodologies
2. Select and plan appropriate models, tools, techniques, and methodologies in the systems analysis phase of a systems development project
3. Apply information gathering techniques to derive system functionalities
4. Construct modelling diagrams to depict system functionalities for users' requirements.

Australian Computer Society (ACS) recognises the Skills Framework for the Information Age (SFIA). SFIA is in use in over 100 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 tool MySFIA to build a skills profile at <https://www.acs.org.au/professionalrecognition/mysfia-b2c.html>

This unit contributes to the following workplace skills as defined by SFIA. The SFIA7 code is included:

- Business Analysis (BUAN)
- Requirements Definition and Management (REQM)
- Business Modelling (BSMO)
- Data Modelling and Design (DTAN)

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

| Assessment Tasks | Learning Outcomes | | | |
|---|-------------------|---|---|---|
| | 1 | 2 | 3 | 4 |
| 1 - Communication | • | • | • | • |
| 2 - Problem Solving | • | • | • | • |
| 3 - Critical Thinking | • | • | • | • |
| 4 - Information Literacy | | • | • | • |
| 5 - Team Work | | | | |
| 6 - Information Technology Competence | | • | | |
| 7 - Cross Cultural Competence | | | | |
| 8 - Ethical practice | • | • | | |
| 9 - Social Innovation | | | | |
| 10 - 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 | 9 | 10 |
| 1 - Online Quiz(zes) - 10% | • | • | | • | | • | | | | |
| 2 - Written Assessment - 20% | • | • | • | • | | • | | • | | |
| 3 - Written Assessment - 30% | • | • | • | | | • | | | | |
| 4 - Project (applied) - 40% | • | • | • | | | | | • | | |

Textbooks and Resources

Textbooks

COIT11226

Prescribed

Systems Analysis and Design in a Changing World

Edition: 7th (2016)

Authors: John Satzinger, Robert Jackson, Stephen Burd

Cengage

Australia

ISBN: 978-1-305-11720-4

Binding: Paperback

Additional Textbook Information

Textbooks can be accessed online at the CQUniversity Library website. If you prefer your own copy, you can purchase either paper or eBook versions at the CQUni Bookshop here: <http://bookshop.cqu.edu.au> (search on the Unit code)

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- MS Office
- MS Project
- MS Visio

Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Farzad Sanati Unit Coordinator

f.sanati@cqu.edu.au

Schedule

Week 1 - 06 Mar 2023

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|---------------------------------|------------------------------|
| An Overview of Systems Analysis & Design | Chapter 1 (Prescribed textbook) | |

Week 2 - 13 Mar 2023

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|----------------------------------|------------------------------|
| Different Approaches to System Development | Chapter 10 (Prescribed textbook) | |

Week 3 - 20 Mar 2023

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|--|------------------------------|
| Business Analysis Techniques; Role of Systems Analyst | Online Chapter A (Prescribed textbook) | |

| Week 4 - 27 Mar 2023 | | |
|--|---|---|
| Module/Topic | Chapter | Events and Submissions/Topic |
| Problem Identification; Project Management | Chapter 11 & Online Chapter C (Prescribed textbook) | |
| Week 5 - 03 Apr 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Identifying (or Determining) Requirements | Chapter 2 (Prescribed textbook) | Individual Assignment 1: Systems Development Planning Due: Week 5 Monday (3 Apr 2023) 11:45 pm AEST |
| Vacation Week - 10 Apr 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| | | |
| Week 6 - 17 Apr 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Identifying User Stores & Use Cases | Chapter 3 (Prescribed textbook) | |
| Week 7 - 24 Apr 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Process Design: Use Case Modeling | Chapter 5 (Prescribed textbook) | |
| Week 8 - 01 May 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Designing the User Interface | Chapter 8 (Prescribed textbook) | |
| Week 9 - 08 May 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Software Quality & Testing | Not applicable | Group Assignment 2: Systems Analysis and Modeling Due: Week 9 Monday (8 May 2023) 11:45 pm AEST |
| Week 10 - 15 May 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Defining the System Architecture | Chapter 7 (Prescribed textbook) | |
| Week 11 - 22 May 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Deployment of the New System | Chapter 14 (Prescribed textbook) | |
| Week 12 - 29 May 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Revision | All previously covered chapters (prescribed textbook) | Individual Assignment 3: Software Testing and Deployment Due: Week 12 Monday (29 May 2023) 11:45 pm AEST |
| Review/Exam Week - 05 Jun 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| | | |
| Exam Week - 12 Jun 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| | | |

Term Specific Information

Dr Farzad Sanati (Unit Coordinator)
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Assessment Tasks

1 Online Quizzes

Assessment Type

Online Quiz(zes)

Task Description

There will be **two** quizzes to assess your understanding of the unit materials. Each quiz accounts for 5% of the total assessment. Students can attend the quizzes any time from Friday noon to Sunday noon in Weeks 4 & 9.

Number of Quizzes

2

Frequency of Quizzes

Other

Assessment Due Date

Late submissions are not acceptable for quizzes. Supplementary quizzes will only be arranged under exceptional circumstances (e.g., illness supported by a medical certificate)

Return Date to Students

Within 2 weeks from the quiz date

Weighting

10%

Assessment Criteria

This assessment will cover the following unit learning outcome:

1-Explain systems analysis concepts, terminologies, system analysis tasks, models, tools, techniques, and methodologies

The assessment consists of multiple-choice questions. Each question will be marked according to its correctness.

Referencing Style

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

Submission

Online

Submission Instructions

Online

Learning Outcomes Assessed

- Explain systems analysis concepts, terminologies, system analysis tasks, models, tools, techniques, and methodologies
- Select and plan appropriate models, tools, techniques, and methodologies in the systems analysis phase of a systems development project

Graduate Attributes

- Communication
- Problem Solving
- Information Literacy
- Information Technology Competence

2 Individual Assignment 1: Systems Development Planning

Assessment Type

Written Assessment

Task Description

You will be provided with a Business Project Case (this case will also be used in Assignments 2 & 3 later). Suppose that you are a systems analyst in a commercial firm, and you are responsible for leading an Information Systems Development Project. You are required to identify critical elements of the project, undertake analysis tasks & prepare a report. Your report will document aspects such as:

- The rationale behind your selected systems development methodology
- A comparison between predictive and adaptive systems development methodologies
- A cost-benefit analysis for a project

Assessment Due Date

Week 5 Monday (3 Apr 2023) 11:45 pm AEST

Late submissions are subject to the university's late submission penalty policies

Return Date to Students

Week 7 Monday (24 Apr 2023)

Marks & feedback comments will be returned to students via Moodle online

Weighting

20%

Assessment Criteria

This assessment will cover the following unit learning outcome:

2-Select and plan appropriate models, tools, techniques, and methodologies in the systems analysis phase of a systems development project

The assessment criteria will cover the contents & the presentation/format of the submission. In addition, all the different parts of the assessment should be written in a professional & coherent manner. A detailed marking template will be made available when this assignment is released on Moodle.

Referencing Style

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

Submission

Online

Submission Instructions

Online submission via Moodle

Learning Outcomes Assessed

- Select and plan appropriate models, tools, techniques, and methodologies in the systems analysis phase of a systems development project
- Apply information gathering techniques to derive system functionalities

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Ethical practice

3 Group Assignment 2: Systems Analysis and Modeling

Assessment Type

Written Assessment

Task Description

This assignment follows Assignment 1 & uses the same Project Case Study. Assignment 2 requires you to apply the relevant analysis & modelling techniques. You will select, justify & use information-gathering techniques to identify,

analyze & specify the requirements of an information system. You will then design an information system using techniques such as a use case diagram, activity diagram & system sequence diagram. You will need to use software tools such as MS Visio to develop the required modelling diagrams.

This is a group assignment. Each group should contain about 4 to 5 members. However, the actual group size will depend on the total number of students enrolled in this unit.

Assessment Due Date

Week 9 Monday (8 May 2023) 11:45 pm AEST

Late submissions are subject to the university's late submission penalty policies

Return Date to Students

Week 11 Monday (22 May 2023)

Marks & feedback comments will be returned to students via Moodle online

Weighting

30%

Assessment Criteria

This assessment will cover the following unit learning outcomes:

3-Apply information-gathering techniques to derive system functionalities

4-Construct modelling diagrams to depict system functionalities for users' requirements.

The assessment criteria will cover the contents & the presentation/format of the submission. In addition, all the different parts of the assessment should be written in a professional and coherent manner. A detailed marking template will be available when this assignment is released on Moodle.

Referencing Style

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

Submission

Online Group

Submission Instructions

Online submission via Moodle

Learning Outcomes Assessed

- Apply information gathering techniques to derive system functionalities
- Construct modelling diagrams to depict system functionalities for users' requirements.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Technology Competence

4 Individual Assignment 3: Software Testing and Deployment

Assessment Type

Project (applied)

Task Description

This individual project follows Assignments 1 & 2. It focuses on system implementation, testing, training, deployment & other related issues. Your answers must be justified based on the situation of the given Project Case Study.

Assessment Due Date

Week 12 Monday (29 May 2023) 11:45 pm AEST

Late submissions are subject to the university's late submission penalty policies

Return Date to Students

Marks will be released to students on the certification date as this is the final assessment

Weighting

40%

Assessment Criteria

This assessment will cover the following unit learning outcomes:

4-Construct modelling diagrams to depict system functionalities for users' requirements.

The assessment criteria will cover the contents & the presentation/format of the submission. In addition, all the different parts of the assessment should be written in a professional and coherent manner. A detailed marking template will be

available when this assignment is released on Moodle.

Referencing Style

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

Submission

Online

Submission Instructions

Online submission via Moodle

Learning Outcomes Assessed

- Explain systems analysis concepts, terminologies, system analysis tasks, models, tools, techniques, and methodologies
- Construct modelling diagrams to depict system functionalities for users' requirements.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Ethical practice

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