



# COIT20268 *Responsive Web Design*

## Term 1 - 2024

Profile information current as at 09/05/2024 11:13 pm

All details in this unit profile for COIT20268 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 create web sites that provide an optimal viewing experience across a wide range of devices. The basics of developing web pages will first be discussed, along with the theory and practice to support this development. Then, using responsive design, you will develop solutions that adapt the layout of the viewing environment by using fluid grids, proportional images and layout rules. A mobile-first approach is taken, where you will learn problem solving and programming skills to provide progressive enhancement, producing innovative and engaging digital content for mobile devices and for desktop systems.

#### 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

Pre-Req: COIT20245 Introduction to Programming, COIT20248 Information Systems Analysis & DesignAnti-Req:

COIS21001 Web Applications for Business

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 - 2024

- Brisbane
- 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 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. **Practical and Written Assessment**

Weighting: 30%

#### 2. **Written Assessment**

Weighting: 30%

#### 3. **Practical and 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 Unit Evaluation

##### **Feedback**

More practical examples should be provided during workshops.

##### **Recommendation**

Tutors will provide extra sets of exercises followed by a top-down solution to demonstrate each concept taught in class to help build understanding.

#### Feedback from Unit Evaluation

##### **Feedback**

The lecturers and tutors were excellent and passionate in delivering the unit.

##### **Recommendation**

The teaching team will continue to commit, improve and work towards maintaining this positive outcome.

#### Feedback from Unit Evaluation

##### **Feedback**

The assessment materials were well organised, providing students to build upon previous concepts as they complete each weekly design requirements, working towards a complete portfolio that accumulates into the final assessment.

##### **Recommendation**

The teaching team will continue to commit, improve and work towards maintaining this positive outcome.

## Unit Learning Outcomes

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

1. Develop web pages tailored for a range of screen resolutions, incorporating text, images, audio and video
2. Apply principles of progressive enhancement to optimise content for the limited memory and processing power of mobile devices, whilst simultaneously delivering a richer experience on non-mobile devices
3. Critically assess given cases and apply problem solving techniques to create mobile-first solutions using web technology
4. Critically review the mobile content industry, mobile technologies and characteristics of mobile devices, and likely future trends.

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 SFIA code is included:

- (1) User experience analysis (UNAN)
- (2) User experience evaluation (USEV)
- (3) Information content publishing (ICPM)
- (4) Program ming/software development (PROG)
- (5) Testing (TEST)

## Alignment of Learning Outcomes, Assessment and Graduate Attributes

 N/A Level	 Introductory Level	 Intermediate Level	 Graduate Level	 Professional Level	 Advanced Level
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### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4
1 - Practical and Written Assessment - 30%	•			
2 - Written Assessment - 30%			•	•
3 - Practical and Written Assessment - 40%		•		

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes			
	1	2	3	4
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 - Practical and Written Assessment - 30%								
2 - Written Assessment - 30%								
3 - Practical and 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)
- Notepad or Notepad ++
- Web browser: FireFox, Microsoft Internet Explorer, Chrome
- Zoom.us

## Referencing Style

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

## Teaching Contacts

**Mahmoud El Khodr** Unit Coordinator  
[m.elkhodr@cqu.edu.au](mailto:m.elkhodr@cqu.edu.au)

## Schedule

### Week 1 - 04 Mar 2024

Module/Topic	Chapter	Events and Submissions/Topic
HCI and Usability Heuristics Principles	Offline and online resources provided	

### Week 2 - 11 Mar 2024

Module/Topic	Chapter	Events and Submissions/Topic
Interaction Design and Personas	Offline and online resources provided	

### Week 3 - 18 Mar 2024

Module/Topic	Chapter	Events and Submissions/Topic
Design and Prototyping & HTML	Offline and online resources provided	

### Week 4 - 25 Mar 2024

Module/Topic	Chapter	Events and Submissions/Topic
HTML Part II	Offline and online resources provided	

### Week 5 - 01 Apr 2024

Module/Topic	Chapter	Events and Submissions/Topic
Getting Started with CSS	Offline and online resources provided	

**Vacation Week - 08 Apr 2024**

Module/Topic	Chapter	Events and Submissions/Topic
Vacation week		

**Week 6 - 15 Apr 2024**

Module/Topic	Chapter	Events and Submissions/Topic
Styling navigation with CSS	Offline and online resources provided	<b>Project Part A</b> Due: Week 6 Friday (19 Apr 2024) 11:59 pm AEST

**Week 7 - 22 Apr 2024**

Module/Topic	Chapter	Events and Submissions/Topic
Advanced CSS and Responsive Design	Offline and online resources provided	

**Week 8 - 29 Apr 2024**

Module/Topic	Chapter	Events and Submissions/Topic
Media Query	Offline and online resources provided	

**Week 9 - 06 May 2024**

Module/Topic	Chapter	Events and Submissions/Topic
Evaluating Interface Designs	Offline and online resources provided	

**Week 10 - 13 May 2024**

Module/Topic	Chapter	Events and Submissions/Topic
JavaScript Intro and Web Forms	Offline and online resources provided	<b>Website Evaluation</b> Due: Week 10 Friday (17 May 2024) 11:59 pm AEST

**Week 11 - 20 May 2024**

Module/Topic	Chapter	Events and Submissions/Topic
JavaScript Part II	Offline and online resources provided	

**Week 12 - 27 May 2024**

Module/Topic	Chapter	Events and Submissions/Topic
JavaScript Part III	Offline and online resources provided	<b>Project Part B</b> Due: Week 12 Friday (31 May 2024) 11:59 pm AEST

**Review/Exam Week - 03 Jun 2024**

Module/Topic	Chapter	Events and Submissions/Topic
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**Exam Week - 10 Jun 2024**

Module/Topic	Chapter	Events and Submissions/Topic
This unit doesn't have a final exam.		

## Term Specific Information

Unit coordinator: Dr. Mahmoud Elkhodr  
Sydney Campus  
Email: m.elkhodr@cqu.edu.au  
Preferred method of contact: via email.

## Assessment Tasks

### 1 Project Part A

#### Assessment Type

Practical and Written Assessment

#### Task Description

Task Description

The aim of the overall project is to design and develop a website prototype, focusing on web design principles. You have the freedom to choose your topic from a list for both Project Part A and Project Part B. The project is to demonstrate the viability and user acceptance of the website's user interface.

The project is divided into two main phases:

#### Project Part A: Assessment 1

- User and Task Analysis: You will conduct research to identify potential users of the website/app. This involves gathering user and system requirements through demographic and psychographic information. The findings from this analysis will inform the design process.
- Preliminary Design: Develop a preliminary, low-fidelity prototype of the user interface. This includes creating two personas representing different user types, each with a name, a photo (optional), and a brief description of their background, goals, and challenges related to the topic. You will also describe three interaction scenarios within the chosen topic, showcasing these scenarios using techniques such as UML use cases, storyboards, or task analysis.
- Digital Prototype: Create a digital prototype of the website using HTML, focusing on the home page or one of the scenarios described. This prototype is used to test initial design concepts and ideas.
- Documentation: Submit a report documenting the prototype, design process, and HTML code of the website. The report should include an introduction with background information and motivation, analysis of previous solutions, user research and personas, scenario design, paper wireframe, digital wireframe, and overall presentation.

#### Assessment Due Date

Week 6 Friday (19 Apr 2024) 11:59 pm AEST

Online via Moodle

#### Return Date to Students

Week 8 Friday (3 May 2024)

Within 2 weeks of submission date.

#### Weighting

30%

#### Assessment Criteria

The assessment for Project Part A will be as follows:

- Report: Introduction and Motivation (10%): This section should provide relevant background information, highlight the advantages of your proposed solution, and discuss the findings from the analysis of previous solutions.
- User Research and Personas (20%): Detailed identification of potential users based on demographic and psychographic information, including the creation of two detailed personas representing different types of users.
- Scenario Design (20%): Description of three interaction scenarios, showcasing each using UML use cases, storyboards, or task analysis. Each scenario must clearly describe the user's goals, the steps to achieve those goals, and any potential challenges.
- Paper Wireframe (10%): Design of a low-fidelity prototype using paper wireframes for the scenarios described. This includes screenshots or photos/scans of your hand-drawn sketches.
- Digital Wireframe (30%): Development of a digital wireframe using HTML for the home page or one of the scenarios. This should include screenshots of the digital wireframe and the HTML code.
- Overall Presentation (10%): Evaluation of the report's structure, clarity, writing quality, formatting, and citation. The submission should include a PDF report with the student's name and ID, along with a zipped folder containing prototype screenshots and HTML code.

#### Referencing Style

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

#### Submission

Online

**Submission Instructions**

Submission instructions will be available on the Moodle unit website.

**Learning Outcomes Assessed**

- Develop web pages tailored for a range of screen resolutions, incorporating text, images, audio and video

**Graduate Attributes**

- Knowledge
- Cognitive, technical and creative skills
- Self-management

## 2 Website Evaluation

**Assessment Type**

Written Assessment

**Task Description**

You will be required to critically analyse a specific website in light of the principles of responsive web design. Your evaluation should address specific questions related to the website's usability and responsiveness.

Check the Moodle site of the unit for the updated marking criteria.

**Assessment Due Date**

Week 10 Friday (17 May 2024) 11:59 pm AEST

Online via Moodle

**Return Date to Students**

Week 12 Friday (31 May 2024)

Within 2 weeks of submission date.

**Weighting**

30%

**Assessment Criteria**

**Assessment 2- Marking Criteria (total marks as shown below will be converted into marks out of 30):**

Research and Analysis (40%)

Evaluation of Website Design and Layout (30%)

Recommendations for Improvement (20%)

Writing and Presentation (10%)

Check the Moodle site of the unit for the updated marking criteria.

**Referencing Style**

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

**Submission**

Online

**Submission Instructions**

Submission instructions will be available on the Moodle unit website.

**Learning Outcomes Assessed**

- Critically assess given cases and apply problem solving techniques to create mobile-first solutions using web technology
- Critically review the mobile content industry, mobile technologies and characteristics of mobile devices, and likely future trends.

**Graduate Attributes**

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

## 3 Project Part B

**Assessment Type**

Practical and Written Assessment



## **Task Description**

### **Project Part B- Assessment 3**

Based on the low-fidelity prototype that you developed in the previous phase (Project Part A- Assessment 1), develop a high-fidelity prototype using HTML, CSS and JavaScript as a proof-of-concept.

Evaluate the prototype and carry out a user acceptance test.

Submit a report documenting the prototype, its code, its design and development process, user acceptance test, and any further work required.

The overall project, encompassing both Project A and Project B, does not necessitate a fully functional system. However, it must adhere to the specified requirements, primarily utilising HTML and CSS, with JavaScript functionalities incorporated as needed. To illustrate the system's capabilities, some limited functionality, like placeholder outputs, is anticipated. It's important to note that backend coding and knowledge of database backends are not required for this unit.

Check the Moodle site of the unit for the updated marking criteria.

### **Assessment Due Date**

Week 12 Friday (31 May 2024) 11:59 pm AEST

Online via Moodle

### **Return Date to Students**

Marked assignments will be returned after the certification date.

### **Weighting**

40%

### **Assessment Criteria**

**Assessment 3- Marking Criteria (total marks as shown below will be converted into marks out of 40)**

Recap of Your Idea (10%)

Prototype: including HTML and CSS (50%)

JavaScript (10%)

Usability Study Results (20%)

Limitations & Overall Presentation (10%)

Details of the marking schedule will be available on the Moodle unit website.

### **Referencing Style**

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

### **Submission**

Online

### **Submission Instructions**

Submission instructions will be available on the Moodle unit website.

### **Learning Outcomes Assessed**

- Apply principles of progressive enhancement to optimise content for the limited memory and processing power of mobile devices, whilst simultaneously delivering a richer experience on non-mobile devices

### **Graduate Attributes**

- Knowledge
- Cognitive, technical and creative skills
- Self-management

## 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