



# MMST12009 Web Application Development

## Term 1 - 2024

Profile information current as at 29/04/2024 10:40 pm

All details in this unit profile for MMST12009 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

This unit will teach you how to create dynamic, database-driven web applications using leading open-source technologies: the Apache web server, the PHP scripting language, the MySQL database system, and the WordPress content management system.

#### Details

Career Level: *Undergraduate*

Unit Level: *Level 2*

Credit Points: 6

Student Contribution Band: 10

Fraction of Full-Time Student Load: 0.125

#### Pre-requisites or Co-requisites

Prerequisite: DGTL11006 Coding Fundamentals OR MMST11002 Web 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 1 - 2024

- Brisbane
- Bundaberg
- Cairns
- Mackay
- Online
- Rockhampton

#### 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. **Practical Assessment**

Weighting: 30%

#### 2. **Practical Assessment**

Weighting: 30%

#### 3. **Practical 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 SUTE unit comment report

##### Feedback

Provide clear guidelines in the assessment task about what constitutes "efficient and elegant coding."

##### Recommendation

To include clear guidelines in the assessment task about what constitutes "efficient and elegant coding,"

## Unit Learning Outcomes

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

1. install and configure the Apache web server, the PHP scripting language, the MySQL database system and the WordPress content management system
2. build and maintain web sites with the WordPress content management system
3. understand fundamental programming principles and write PHP scripts
4. understand fundamental database concepts and build databases with MySQL
5. access and manipulate the contents of a database using the Structured Query Language (SQL)
6. use Apache, PHP and MySQL together to create dynamic, database-driven web applications

Not applicable

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes					
	1	2	3	4	5	6
1 - Practical Assessment - 30%	•	•		•		
2 - Practical Assessment - 30%	•		•			
3 - Practical Assessment - 40%	•		•	•	•	•

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes					
	1	2	3	4	5	6
1 - Communication	•	•	•	•	•	•
2 - Problem Solving	•	•	•	•	•	•

Graduate Attributes	Learning Outcomes					
	1	2	3	4	5	6
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 - Practical Assessment - 30%		•	•	•		•	•	•		
2 - Practical Assessment - 30%		•	•	•		•	•	•		
3 - Practical Assessment - 40%		•	•	•		•	•	•		

## Textbooks and Resources

### Textbooks

**There are no required textbooks.**

#### Additional Textbook Information

A Study Guide will be provided through the unit website.

### IT Resources

**You will need access to the following IT resources:**

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Adobe Acrobat Reader (free browser plug-in)
- Adobe Dreamweaver or Notepad++ (optional)
- Google Chrome
- Microsoft Word
- Mozilla Firefox
- WordPress
- XAMPP (includes Apache, MariaDB/MySQL, PHP and phpMyAdmin)
- Plain text editor such as Notepad (Windows) or TextEdit (MacOS)

## Referencing Style

All submissions for this unit must use the referencing style: [American Psychological Association 7th Edition \(APA 7th edition\)](#)

For further information, see the Assessment Tasks.

## Teaching Contacts

**Regina John Luan** Unit Coordinator  
[r.johnluan@cqu.edu.au](mailto:r.johnluan@cqu.edu.au)

## Schedule

### Week 1 - 04 Mar 2024

Module/Topic	Chapter	Events and Submissions/Topic
1. Getting started with XAMPP	Study Guide chapter 1	

### Week 2 - 11 Mar 2024

Module/Topic	Chapter	Events and Submissions/Topic
2. Introduction to WordPress	Study Guide chapter 2	

### Week 3 - 18 Mar 2024

Module/Topic	Chapter	Events and Submissions/Topic
3. Using WordPress	Study Guide chapter 3	

### Week 4 - 25 Mar 2024

Module/Topic	Chapter	Events and Submissions/Topic
4. PHP basics	Study Guide chapter 4	<b>WordPress Assignment</b> Due: Week 4 Friday (29 Mar 2024) 9:00 pm AEST

### Week 5 - 01 Apr 2024

Module/Topic	Chapter	Events and Submissions/Topic
5. PHP statements	Study Guide chapter 5	

### Vacation Week - 08 Apr 2024

Module/Topic	Chapter	Events and Submissions/Topic
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### Week 6 - 15 Apr 2024

Module/Topic	Chapter	Events and Submissions/Topic
6. Predefined PHP variables and code	Study Guide chapter 6	

### Week 7 - 22 Apr 2024

Module/Topic	Chapter	Events and Submissions/Topic
7. Handling forms	Study Guide chapter 7	

### Week 8 - 29 Apr 2024

Module/Topic	Chapter	Events and Submissions/Topic
8. Database fundamentals	Study Guide chapter 8	<b>PHP Assignment</b> Due: Week 8 Friday (3 May 2024) 9:00 pm AEST

### Week 9 - 06 May 2024

Module/Topic	Chapter	Events and Submissions/Topic
9. Structured Query Language (SQL)	Study Guide chapter 9	

### Week 10 - 13 May 2024

Module/Topic	Chapter	Events and Submissions/Topic
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10. Using PHP with MariaDB/MySQL Study Guide chapter 10

#### Week 11 - 20 May 2024

Module/Topic	Chapter	Events and Submissions/Topic
11. Search interfaces	Study Guide chapter 11	

#### Week 12 - 27 May 2024

Module/Topic	Chapter	Events and Submissions/Topic
12. Review		<b>Database-Driven Website Assignment</b> Due: Week 12 Friday (31 May 2024) 9:00 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
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## Term Specific Information

### REQUIRED RESOURCES

You must have access to the following resources for this unit.

### UNIT WEBSITE

The unit website provides essential resources for the unit such as a Study Guide and an online discussion forum. It can be accessed at <https://moodle.cqu.edu.au>

### STUDY GUIDE

The online Study Guide will direct you to all of the essential readings and activities for each module of the unit. The Study Guide is available in Adobe Portable Document format (PDF) from the unit website.

### DISCUSSION FORUM

An online discussion forum will be provided through the unit website for discussing matters that relate to the unit. The discussion forum is the primary means of support for off-campus students who want assistance with tutorial activities and assignments. If you seek help with the assignments through the discussion forum, do not post fragments of your code there because that could encourage plagiarism.

### XAMPP

XAMPP is a free software package containing four of the tools that you need for this unit: Apache, MariaDB/MySQL, PHP and phpMyAdmin. Instructions for downloading and installing XAMPP are provided in Study Guide chapter 1.

### WORDPRESS

WordPress is a free blogging platform and content management system that you need for this unit. Instructions for downloading and installing WordPress are provided in Study Guide chapter 2.

### TEXT EDITOR

You will need a plain text editor such as Notepad or TextEdit for composing PHP, HTML and CSS files. Notepad is distributed with the Microsoft Windows operating system. TextEdit is distributed with the macOS operating system. If you have a copy of Adobe Dreamweaver you might prefer to edit your files with it rather than Notepad or TextEdit. One of the advantages of using Dreamweaver is that it provides special features such as PHP syntax checking, syntax highlighting and line numbering. Alternatively you might like to use a free open source editor such as Notepad++, which also provides special features for PHP coding. Notepad++ can be downloaded from the Notepad++ website (<https://notepad-plus-plus.org>).

### WEB BROWSERS

You will need a recent version of Google Chrome (<https://www.google.com/chrome>) and Mozilla Firefox (<https://www.mozilla.org/firefox>) to explore the Web and test the pages that you create. Off-campus students are encouraged to install the latest versions of these browsers. On-campus students may use whichever versions are installed in their local computer lab.

### ADOBE ACROBAT READER

You will need Adobe Acrobat Reader, which is a free program that lets you view, navigate and print PDF documents like the MMST12009 Study Guide. Adobe Acrobat Reader can be downloaded from the Adobe website (<https://www.adobe.com>).

## Assessment Tasks

### 1 WordPress Assignment

**Assessment Type**

Practical Assessment

**Task Description**

This assignment requires you to create a WordPress website that satisfies some supplied requirements. Please refer to the unit website for the assignment details.

**Assessment Due Date**

Week 4 Friday (29 Mar 2024) 9:00 pm AEST

**Return Date to Students**

2 weeks after submission

**Weighting**

30%

**Assessment Criteria**

Please refer to the unit website for the detailed assessment criteria.

**Referencing Style**

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

**Submission**

Online

**Submission Instructions**

Please refer to the unit website for assignment submission instructions.

**Learning Outcomes Assessed**

- install and configure the Apache web server, the PHP scripting language, the MySQL database system and the WordPress content management system
- build and maintain web sites with the WordPress content management system
- understand fundamental database concepts and build databases with MySQL

**Graduate Attributes**

- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

### 2 PHP Assignment

**Assessment Type**

Practical Assessment

**Task Description**

This assignment requires you to create an HTML form page and a PHP results page that function together to solve a supplied scripting problem. The web pages must be implemented using PHP, HTML and CSS code. Please refer to the unit website for the assignment details.

**Assessment Due Date**

Week 8 Friday (3 May 2024) 9:00 pm AEST

**Return Date to Students**

2 weeks after submission

**Weighting**

30%

**Assessment Criteria**

Please refer to the unit website for the detailed assessment criteria.

**Referencing Style**

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

**Submission**

Online

**Submission Instructions**

Please refer to the unit website for assignment submission instructions.

**Learning Outcomes Assessed**

- install and configure the Apache web server, the PHP scripting language, the MySQL database system and the WordPress content management system
- understand fundamental programming principles and write PHP scripts

**Graduate Attributes**

- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

## 3 Database-Driven Website Assignment

**Assessment Type**

Practical Assessment

**Task Description**

This assignment requires you to create a MariaDB/MySQL database, a PHP search page and a PHP results page that function together to solve a supplied scripting problem. The web pages must be implemented using PHP, HTML and CSS code. Please refer to the unit website for the assignment details.

**Assessment Due Date**

Week 12 Friday (31 May 2024) 9:00 pm AEST

**Return Date to Students**

2 weeks after submission

**Weighting**

40%

**Assessment Criteria**

Please refer to the unit website for the detailed assessment criteria.

**Referencing Style**

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

**Submission**

Online

**Submission Instructions**

Please refer to the unit website for assignment submission instructions.

**Learning Outcomes Assessed**

- install and configure the Apache web server, the PHP scripting language, the MySQL database system and the WordPress content management system
- understand fundamental programming principles and write PHP scripts
- understand fundamental database concepts and build databases with MySQL
- access and manipulate the contents of a database using the Structured Query Language (SQL)
- use Apache, PHP and MySQL together to create dynamic, database-driven web applications

**Graduate Attributes**

- Problem Solving



- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence
- 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