

## In Progress

Please note that this Unit Profile is still in progress. The content below is subject to change.



# COIT20247 Database Design and Development

## Term 2 - 2024

Profile information current as at 13/05/2024 03:21 am

All details in this unit profile for COIT20247 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 learn how to model, design, and build relational databases and manipulate them using Structured Query Language (SQL) in a modern database management system (DBMS) such as MySQL Server. You will build a practical database that typically meets the requirement of a large-scale commercial-level DBMS. In this unit, you will also learn the features of the latest developments including data integrity, security, distributed system databases, data warehousing, and concurrency control in multi-user database systems.

### Details

Career Level: *Postgraduate*

Unit Level: *Level 8*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

### Pre-requisites or Co-requisites

Antirequisite: COIS20026

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 - 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

#### 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 Student Unit Teaching Evaluations

**Feedback**

Provide more MySQL demonstrations.

**Recommendation**

Incorporate instructional videos on Moodle that demonstrate the installation and use of MySQL.

#### Feedback from Student Unit Teaching Evaluations

**Feedback**

Requirements of the assessment 2 were complicated.

**Recommendation**

Include videos to explain the assessment requirements and include a weekly discussion during lectures.

#### Feedback from Teaching Team

**Feedback**

Some students were not able to explain their assignment contributions.

**Recommendation**

Include an in-class oral presentation and demo of Assignment 2 as part of the assignment components.

## Unit Learning Outcomes

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

1. Explain the purpose of and technical foundations related to database technology
2. Utilise the processes undertaken during the identification of functional dependencies and normalisation
3. Design and develop a database application using a Relational Database Management System (DBMS)
4. Identify issues related to data integrity, security, and concurrency control in a multi-user database environment
5. Explain the fundamental concepts of distributed databases and data warehousing
6. Evaluate and execute administration decisions for DBMS support and maintenance.

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 tool [MySFIA](#) to build a skills profile.

This unit contributes to the following workplace skills as defined by [SFIA 7](#) (the SFIA code is included)

- Data Modelling and Design (DTAN)
- Systems Design (DESN)
- Database Design (DBDS)
- Testing (TEST)
- Release and Deployment (RELM)
- Applications Support (ASUP)
- Systems Integration (SINT)
- Database Administration (DBAD)

## 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	5	6
1 - Written Assessment - 25%	•	•				
2 - Practical and Written Assessment - 35%			•			•
3 - Online Test - 40%	•	•	•	•	•	

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes					
	1	2	3	4	5	6
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 - Written Assessment - 25%	○	○	○					
2 - Practical and Written Assessment - 35%	○	○	○		○			
3 - Online Test - 40%	○	○	○					

## Textbooks and Resources

Information for Textbooks and Resources has not been released yet.

This information will be available on Monday 17 June 2024

## Academic Integrity Statement

Information for Academic Integrity Statement has not been released yet.

This unit profile has not yet been finalised.