

## In Progress

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



# COIT20253 *Business Intelligence using Big Data*

## Term 2 - 2022

Profile information current as at 18/05/2022 07:57 am

All details in this unit profile for COIT20253 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

Big data is a popular term used to describe the exponential growth and availability of structured and unstructured data. In this unit, you will explore big data within the context of business intelligence. In this unit, you will learn concepts of business intelligence, alignment of big data to business intelligence and how big data technologies can be used in building organisational business intelligence. You will learn how big data is changing businesses and how organisations can take advantage of big data in decision making. You will learn how organisations are integrating non-traditional unstructured data with the traditional structured enterprise data to do the business intelligence analysis. In order to understand these, you will learn big data analytical tools and technologies to help solve authentic business problems and make effective business decisions.

### 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

Prerequisites: COIT20250 e-Business Systems, COIT20245 Introduction to Programming and COIT20247 Database Design and Development. Anti-Requisites: If you have completed unit COIT20236 then you cannot take 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 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

#### 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 evaluation

**Feedback**

Learning resources on big data technologies were insufficient.

**Recommendation**

Provide additional resources to support student learning.

#### Feedback from Student evaluation

**Feedback**

Industrial case studies were inadequate.

**Recommendation**

Provide more real-life examples (industry cases) to enhance the student learning capability.

## Unit Learning Outcomes

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

1. Apply concepts and principles of big data to evaluate and explain how large volume of structured and unstructured data are managed in an organisation
2. Analyse critically and reflect on how organisations are including non-traditional valuable data with the traditional enterprise data to do the business intelligence analysis
3. Critically analyse and evaluate different big data technologies used for decision making in an organisation
4. Develop big data strategy for data-centric organisations to meet client requirements
5. Apply big data architecture, tools, and technologies for decision making and problem solving in the organisational context.

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:

- Research(RSCH)
- Data Management (DATM)
- Emerging Technology Monitoring (EMRG)
- Data Analysis (DTAN)
- Application Support (ASUP)
- Analytics (INAN)

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes



## Textbooks and Resources

### Textbooks

COIT20253

#### Prescribed

##### **Big Data: Understanding How Data Powers Big Business (2013)**

Edition: latest (2013)

Authors: Schmarzo, Bill

Wiley

Indianapolis , Indiana , USA

ISBN: 978-1-118-73957-0

Binding: Paperback

COIT20253

#### Prescribed

##### **Business Intelligence and Analytics: Systems for Decision Support 10th Global (2015)**

Edition: 10th (2015)

Authors: Turban , Sharda & Delen

Pearson

Upper Saddle River , NJ , USA

ISBN: 9781292009209

Binding: Paperback

COIT20253

#### Supplementary

##### **Next Generation Databases: NoSQL, NewSQL, and Big Data (2015)**

Authors: Harrison, Guy

Apress Media

New York City , New York , USA

ISBN: 978-1-4842-1330-8

Binding: Paperback

COIT20253

#### Supplementary

##### **Scalable Big Data Architecture: A practitioner's guide to choosing relevant big data architecture (2016)**

Authors: Azarmi, Bahaaldine

Apress Media

New York City, , New York, , USA

ISBN: 978-1-4842-1327-8

Binding: Paperback

[View textbooks at the CQUniversity Bookshop](#)

### IT Resources

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

## Academic Integrity Statement

Information for Academic Integrity Statement has not been released yet.

This unit profile has not yet been finalised.