



## UNSW Course Outline

# BLDG4024 Business Intelligence & Data Analytics - 2024

Published on the 02 Feb 2024

## General Course Information

**Course Code :** BLDG4024

**Year :** 2024

**Term :** Term 1

**Teaching Period :** T1

**Is a multi-term course? :** No

**Faculty :** Faculty of Arts, Design and Architecture

**Academic Unit :** School of Built Environment

**Delivery Mode :** In Person

**Delivery Format :** Standard

**Delivery Location :** Kensington

**Campus :** Sydney

**Study Level :** Undergraduate

**Units of Credit :** 6

### Useful Links

[Handbook Class Timetable](#)

## Course Details & Outcomes

### Course Description

Business Intelligence & Data Analytics gives an introduction to research, data analytics and business intelligence (BI). BI is of high relevance to the construction and property industries considering the amount of data generated by organisations and their projects. You will learn the

fundamentals of business research and information management and develop your competence to inform strategy formulation and actions.

## Course Learning Outcomes

Course Learning Outcomes
CL01 : Describe connection between data, information and insight for business.
CL02 : Create a business research plan for the construction and property sector.
CL03 : Explain business intelligence and data analytics in the construction and property sector.
CL04 : Apply Excel formulas and functions for managing databases and producing reports.
CL05 : Execute descriptive and predictive analyses of businesses.

Course Learning Outcomes	Assessment Item
CL01 : Describe connection between data, information and insight for business.	<ul style="list-style-type: none"><li>• Business Reports</li><li>• Online Quizzes</li><li>• Business Research Plan</li></ul>
CL02 : Create a business research plan for the construction and property sector.	<ul style="list-style-type: none"><li>• Business Reports</li><li>• Business Research Plan</li></ul>
CL03 : Explain business intelligence and data analytics in the construction and property sector.	<ul style="list-style-type: none"><li>• Business Reports</li><li>• Business Research Plan</li></ul>
CL04 : Apply Excel formulas and functions for managing databases and producing reports.	<ul style="list-style-type: none"><li>• Online Quizzes</li><li>• Business Reports</li><li>• Business Research Plan</li></ul>
CL05 : Execute descriptive and predictive analyses of businesses.	<ul style="list-style-type: none"><li>• Online Quizzes</li><li>• Business Reports</li><li>• Business Research Plan</li></ul>

## Learning and Teaching Technologies

Moodle - Learning Management System

# Assessments

## Assessment Structure

Assessment Item	Weight	Relevant Dates
Business Reports Assessment Format: Individual	50%	
Online Quizzes Assessment Format: Individual	10%	
Business Research Plan Assessment Format: Group	40%	

## Assessment Details

### Business Reports

#### Assessment Overview

You will develop business reports using templates and Excel. Grading will be done against assessment criteria accompanied by written feedback.

#### Course Learning Outcomes

- CL01 : Describe connection between data, information and insight for business.
- CL02 : Create a business research plan for the construction and property sector.
- CL03 : Explain business intelligence and data analytics in the construction and property sector.
- CL04 : Apply Excel formulas and functions for managing databases and producing reports.
- CL05 : Execute descriptive and predictive analyses of businesses.

### Online Quizzes

#### Assessment Overview

You will be quizzed on lecture and tutorial content. Automatic feedback will be provided. Solutions will be discussed in class.

#### Course Learning Outcomes

- CL01 : Describe connection between data, information and insight for business.
- CL04 : Apply Excel formulas and functions for managing databases and producing reports.
- CL05 : Execute descriptive and predictive analyses of businesses.

### Business Research Plan

#### Assessment Overview

In a small group, you will develop a business research plan. Grading will be done against

assessment criteria accompanied by written feedback. Individual contributions will be assessed.

### Course Learning Outcomes

- CL01 : Describe connection between data, information and insight for business.
- CL02 : Create a business research plan for the construction and property sector.
- CL03 : Explain business intelligence and data analytics in the construction and property sector.
- CL04 : Apply Excel formulas and functions for managing databases and producing reports.
- CL05 : Execute descriptive and predictive analyses of businesses.

## General Assessment Information

### Grading Basis

Standard

### Requirements to pass course

You need to achieve a cumulative mark of 50 from all assessment tasks in order to pass this course.

## Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 12 February - 18 February	Lecture	Introduction to business intelligence and data analytics, and various stages of an analytical lifecycle
Week 2 : 19 February - 25 February	Lecture	Discussion and application of basic excel functions and formulas to facilitate data preparation and analytical process (Part 1)
Week 3 : 26 February - 3 March	Lecture	Discussion and application of basic excel functions and formulas to facilitate data preparation and analytical process (Part 2)
Week 4 : 4 March - 10 March	Lecture	Discussion and application of basic excel VBA and Macros
Week 5 : 11 March - 17 March	Lecture	Discussion and application of excel solver and optimisation procedures
Week 6 : 18 March - 24 March	Other	Self learning and flexible week (please consider working on your assessment 1)
Week 7 : 25 March - 31 March	Lecture	Discussion and application of data structure and basic data testing procedures, and descriptive analyses
Week 8 : 1 April - 7 April	Other	Easter Holiday (self learning recommended)
Week 9 : 8 April - 14 April	Lecture	Discussion and application of descriptive analyses
Week 10 : 15 April - 21 April	Lecture	Discussion and application of predictive analyses
Week 11 : 22 April - 28 April	Workshop	Group assignment consultation

## Attendance Requirements

You are expected to be regular and punctual in attendance at all classes for the School of Built Environment courses in which you are enrolled. If and where individual courses have specific attendance requirements, these will be stated in the course outline.

If you do not attend, engage, or participate in scheduled class activities, including lectures,

tutorials, studios, labs, etc, you run the risk of failing a course.

If illness or unexpected and beyond your control circumstances prevent you from completing a task on time, or substantially disturb your assessment performance, you should apply for [Special Consideration](#), as soon as practicable, accompanied by appropriate documentation.

No special consideration will be provided if you miss out on essential course information and materials, or if you miss assessment tasks and deadlines due to unexplained absences or an unapproved lack of attendance.

You may be advised by the Course Convenor to withdraw from the course if significant learning activities are missed.

## General Schedule Information

Please refer to the learning plan and schedule provided in the Course Moodle Webpage.

## Course Resources

### Course Evaluation and Development

We encourage and support students to maintain regular contact with the course convenor to provide informal feedback throughout the course. For specific issues or detailed feedback, please arrange a meeting with the course convenor via email.

In this course there is an option for students to provide anonymous feedback via the course's Moodle page, which is directly sent to the convenor. As a final step, students are invited to share their insights and experiences by completing the MyExperience survey. The feedback gathered each year is integral to the continuous enhancement and development of the course.

## Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
	Benson Lim					No	Yes

# Other Useful Information

## Academic Information

Due to evolving advice by NSW Health, students must check for updated information regarding online learning for all Arts, Design and Architecture courses this term (via Moodle or course information provided).

Please see: <https://www.unsw.edu.au/arts-design-architecture/student-life/resources-support/protocols-guidelines> for essential student information relating to:

- UNSW and Faculty policies and procedures;
- Student Support Services;
- Dean's List;
- review of results;
- credit transfer;
- cross-institutional study and exchange;
- examination information;
- enrolment information;
- Special Consideration in the event of illness or misadventure;
- student equity and disability;

And other essential academic information.

## Academic Honesty and Plagiarism

Plagiarism is using the words or ideas of others and presenting them as your own. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement.

UNSW groups plagiarism into the following categories:

- Copying: Using the same or very similar words to the original text or idea without acknowledging the source or using quotation marks. This includes copying materials, ideas or concepts from a book, article, report or other written document, presentation, composition, artwork, design, drawing, circuitry, computer program or software, website, internet, other electronic resource, or another person's assignment without appropriate acknowledgement.
- Inappropriate paraphrasing: Changing a few words and phrases while mostly retaining the original information, structure and/or progression of ideas of the original without acknowledgement. This also applies in presentations where someone paraphrases another's ideas or words without credit and to piecing together quotes and paraphrases into a new whole, without appropriate referencing.

- Collusion: Working with others but passing off the work as a person's individual work. Collusion also includes providing your work to another student for the purpose of them plagiarising, paying another person to perform an academic task, stealing or acquiring another person's academic work and copying it, offering to complete another person's work or seeking payment for completing academic work.
- Inappropriate citation: Citing sources which have not been read, without acknowledging the "secondary" source from which knowledge of them has been obtained.
- Duplication ("self-plagiarism"): Submitting your own work, in whole or in part, where it has previously been prepared or submitted for another assessment or course at UNSW or another university.

The UNSW Academic Skills support offers resources and individual consultations. Students are also reminded that careful time management is an important part of study. One of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting and proper referencing of sources in preparing all assessment items. UNSW Library has the ELISE tool available to assist you with your study at UNSW. ELISE is designed to introduce new students to studying at UNSW, but it can also be a great refresher during your study.

Completing the ELISE tutorial and quiz will enable you to:

- analyse topics, plan responses and organise research for academic writing and other assessment tasks
- effectively and efficiently find appropriate information sources and evaluate relevance to your needs
- use and manage information effectively to accomplish a specific purpose
- better manage your time
- understand your rights and responsibilities as a student at UNSW
- be aware of plagiarism, copyright, UNSW Student Code of Conduct and Acceptable Use of UNSW ICT Resources Policy
- be aware of the standards of behaviour expected of everyone in the UNSW community
- locate services and information about UNSW and UNSW Library

### **Use of AI for assessments**

As AI applications continue to develop, and technology rapidly progresses around us, we remain committed to our values around academic integrity at UNSW. Where the use of AI tools, such as ChatGPT, has been permitted by your course convener, they must be properly credited and your submissions must be substantially your own work.

In cases where the use of AI has been prohibited, please respect this and be aware that where unauthorised use is detected, penalties will apply.

## Submission of Assessment Tasks

### Turnitin Submission

If you encounter a problem when attempting to submit your assignment through Turnitin, please telephone External Support on 9385 3331 or email them on [externalteltsupport@unsw.edu.au](mailto:externalteltsupport@unsw.edu.au)

Support hours are 8:00am – 10:00pm on weekdays and 9:00am – 5:00pm on weekends (365 days a year). If you are unable to submit your assignment due to a fault with Turnitin, you may apply for an extension, but you must retain your ticket number from External Support (along with any other relevant documents) to include as evidence to support your extension application. If you email External Support, you will automatically receive a ticket number, but if you telephone, you will need to specifically ask for one. Turnitin also provides updates on their system status on Twitter.

Generally, assessment tasks must be submitted electronically via either Turnitin or a Moodle assignment. In instances where this is not possible, alternative submission details will be stated on your course's Moodle site. For information on how to submit assignments online via Moodle: <https://student.unsw.edu.au/how-submit-assignment-moodle>

### Late Submission Penalty

UNSW has a standard late submission penalty of:

- 5% per calendar day,
- for all assessments where a penalty applies,
- capped at five calendar days (120 hours) from the assessment deadline, after which a student cannot submit an assessment, and
- no permitted variation.

Students are expected to manage their time to meet deadlines and to request [Special Consideration](#) as early as possible before the deadline. Support with [Time Management is available here](#).

### School Contact Information

[beadmin@unsw.edu.au](mailto:beadmin@unsw.edu.au)