

# MATH 7003 APPLIED BUSINESS STATISTICS

**Credit Points** 10

**Legacy Code** 300962

**Coordinator** Kenan Matawie ([https://directory.westernsydney.edu.au/search/name/Kenan Matawie/](https://directory.westernsydney.edu.au/search/name/Kenan%20Matawie/))

**Description** This subject introduces the basic statistical concepts and techniques for descriptive and inferential data analysis. It will aid and improve business decision-making, especially when faced with uncertain outcomes.

**School** Computer, Data & Math Sciences

**Discipline** Statistics

**Student Contribution Band** HECS Band 1 10cp

Check your fees via the Fees ([https://www.westernsydney.edu.au/currentstudents/current\\_students/fees/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Postgraduate Coursework Level 7 subject

**Restrictions**

Students must be enrolled in a postgraduate program.

**Assumed Knowledge**

Mathematics to the HSC level.

## Learning Outcomes

On successful completion of this subject, students should be able to:

1. Organise, tabulate, present, summarise and graph data appropriately;
2. Apply probability to solve business decision making problems;
3. Define and distinguish between discrete and continuous probability distributions;
4. Estimate population means and proportions using confidence intervals;
5. Test hypotheses about population means and proportions;
6. Understand and apply correlation and linear regression to describe and analyse relationships between variables;
7. Use the Chi-square test for goodness of fit and test for independence to analyse categorical type data;
8. Use the necessary computing skills required in Excel to solve and analyse statistical data.

## Subject Content

Data type and collection, graphical and tabular techniques  
 Numerical descriptive measures, and basic Probability  
 Discrete and continuous probability distributions  
 Sampling distribution  
 Statistical inferences - hypothesis testing  
 Correlation and Linear regression analysis  
 Statistical inferences -estimation  
 Analysis of Categorical data  
 Index Numbers

## Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/ Group Task
Quiz	50 minutes	15	N	Individual
Quiz	50 minutes	15	N	Individual
Practical	One week	20	N	Individual
Final Exam	2 hours	50	N	Individual

Prescribed Texts

- Selvanathan, E. A. a. (2013). Business statistics: Australia and New Zealand (6th ed.). South Melbourne, Vic.: Cengage Learning.

Teaching Periods

## Quarter 4 (2023)

**Parramatta City - Macquarie St**

**On-site**

**Subject Contact** Kenan Matawie ([https://directory.westernsydney.edu.au/search/name/Kenan Matawie/](https://directory.westernsydney.edu.au/search/name/Kenan%20Matawie/))

View timetable ([https://classregistration.westernsydney.edu.au/odd/timetable/?subject\\_code=MATH7003\\_23-Q4\\_PC\\_1#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=MATH7003_23-Q4_PC_1#subjects))

## Quarter 2 (2024)

**Parramatta City - Macquarie St**

**On-site**

**Subject Contact** Kenan Matawie ([https://directory.westernsydney.edu.au/search/name/Kenan Matawie/](https://directory.westernsydney.edu.au/search/name/Kenan%20Matawie/))

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=MATH7003\\_24-Q2\\_PC\\_1#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=MATH7003_24-Q2_PC_1#subjects))

## Quarter 4 (2024)

**Parramatta City - Macquarie St**

**On-site**

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