

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 unit 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

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.

Item	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 2

Parramatta City - Macquarie St

Evening

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=MATH7003_22-Q2_PC_E#subjects)

Quarter 4

Parramatta City - Macquarie St

Evening

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