

# MATH 1031 STATISTICS FOR BUSINESS (WSTC)

**Credit Points** 10

**Legacy Code** 700007

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

**Description** Statistics for Business introduces the basic concepts and techniques of statistics that are particularly relevant to problem solving in business. It also provides a sound base for more advanced study in statistics and forecasting in subsequent sessions. Topics include: presentation of data; descriptive statistics; the role of uncertainty in business decision making; hypothesis testing; and basic forecasting.

**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** Undergraduate Level 1 subject

**Pre-requisite(s)** For students enrolled in courses 71024 and 7177 BUSM 0029 Decision Making for Business  
For students enrolled in courses 7005 7098 71021 71022 and 71023 MATH 0028 Statistics for Academic Purposes (WSTC Prep)

**Equivalent Subjects** MATH 1030 - Statistics for Business MATH 1032 - Statistics for Science ECON 1006 - Introduction to Economic Methods

**Restrictions** Enrolment restricted to College students. Students enrolled in Extended Diploma programs must have passed 40 CPs of preparatory subjects in order to enrol in this subject.

**Assumed Knowledge**

Mathematics, equivalent to the Mathematics subject in the NSW HSC.

## Learning Outcomes

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

1. Organise and summarise data numerically;
2. Recognize the foundation behind inferential statistics;
3. Identify the underlying assumptions associated with each statistical technique and interpret the results;
4. Formulate economic and financial hypotheses into statistically testable forms;
5. Manipulate, analyse and graph data using Excel;
6. Employ the appropriate statistical methods and techniques in given situations.

## Subject Content

1. Data presentation and descriptive statistics
2. Elementary probability
3. Random variables and probability distributions
4. Normal distributions and sampling distributions
5. Parameter estimation and hypothesis testing ? single population
6. Parameter estimation and hypothesis testing ? two populations
7. Simple linear regression analysis and correlation
8. Analysis of categorical data

## 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	30 minutes	10	N	Individual
Intra-session Exam	1 hour	20	N	Individual
Applied Project	Part A: (Approximately 100 words plus tables and graphs) (Individual) (1-3) (10%) Part B (Approximately 500 words plus statistical calculations) (Group) (1-6) (20%)	30	N	Individual
End-of-session Exam	2 hours	40	Y	Individual

Teaching Periods

## Term 1 (2024)

### Bankstown City

#### On-site

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

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=MATH1031\\_24-T1\\_BK\\_1#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=MATH1031_24-T1_BK_1#subjects))

### Nirimba Education Precinct

#### On-site

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

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### Online

#### Online

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

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=MATH1031\\_24-T1\\_ON\\_2#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=MATH1031_24-T1_ON_2#subjects))

### Olympic Park

#### On-site

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

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## Parramatta City - Macquarie St

### On-site

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

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=MATH1031\\_24-T1\\_PC\\_1#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=MATH1031_24-T1_PC_1#subjects))

## Term 2 (2024)

### Bankstown City

#### On-site

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

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=MATH1031\\_24-T2\\_BK\\_1#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=MATH1031_24-T2_BK_1#subjects))

#### Online

##### Online

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

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## Term 3 (2024)

### Bankstown City

#### On-site

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

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=MATH1031\\_24-T3\\_BK\\_1#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=MATH1031_24-T3_BK_1#subjects))

#### Online

##### Online

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

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