



Course Outline (Higher Education)

Institute / School:	Institute of Innovation, Science & Sustainability
Course Title:	BUSINESS STATISTICS
Course ID:	BUGEN1502
Credit Points:	15.00
Prerequisite(s):	(Nil)
Co-requisite(s):	Nil
Exclusion(s):	Nil
ASCED:	010103

Description of the Course:

This course enables students to develop an understanding of the role of statistics in business and research and develop foundational knowledge and skills in the appropriate use of a range of statistical techniques. The course introduces spreadsheeting with an emphasis on the use of Excel as a statistical tool. Students develop core knowledge and applied skills in the following areas: descriptive statistics, elementary probability, discrete and continuous probability distributions, statistical inference, simple linear regression and correlation, forecasting and time series and index numbers.

Grade Scheme: Graded (HD, D, C, P, MF, F, XF)

Placement Component: No

Supplementary Assessment: Yes

Where supplementary assessment is available a student must have failed overall in the course but gained a final mark of 45 per cent or above and submitted all major assessment tasks.

Program Level:

Level of course in Program	AQF Level of Program					
	5	6	7	8	9	10
Introductory			✓			
Intermediate						
Advanced						

Learning Outcomes:**Knowledge:**

- K1.** Describe a set of data using appropriate statistical measures and identify commonly used techniques for data collection and analysis.
- K2.** Describe the role of statistical analysis and probability for decision making.
- K3.** Recognise the role of hypothesis tests in statistics.
- K4.** Describe relationships between two variables using linear and time series regression equations.
- K5.** Define index numbers and time value of money.

Skills:

- S1.** Use Excel to perform routine data management tasks and statistical analyses.
- S2.** Present data in a clear and informative way in both tabular and graphical form.
- S3.** Perform hypothesis tests & construct confidence intervals for single means.
- S4.** Model the relationship between two variables using linear regression equations and time series techniques.
- S5.** Interpret and communicate the results from statistical analysis using appropriate statistical language and conventions.

Application of knowledge and skills:

- A1.** Interpret computer output in terms that relate to the particular problem situation.
- A2.** Select and perform appropriate statistical tests for given data sets and problem situations.

Course Content:

Topics may include:

- Data classification and terminology.
- Descriptive statistics.
- Computer analysis of data.
- Probability and probability distributions.
- Estimation and hypothesis testing.
- Linear regression and correlation.
- Index numbers and time series.

FEDTASKS

Federation University Federation recognises that students require key transferable employability skills to

prepare them for their future workplace and society. FEDTASKS (**T**ransferable **A**tttributes **S**kills and **K**nowledge) provide a targeted focus on five key transferable Attributes, Skills, and Knowledge that are embedded within curriculum, developed gradually towards successful measures and interlinked with cross-discipline and Co-operative Learning opportunities. *One or more FEDTASK, transferable Attributes, Skills or Knowledge must be evident in the specified learning outcomes and assessment for each FedUni course, and all must be directly assessed in each program.*

FEDTASK attribute and descriptor		Development and acquisition of FEDTASKS in the course	
		Learning Outcomes (KSA)	Assessment task (AT#)
FEDTASK 1 Interpersonal	Students will demonstrate the ability to effectively communicate, interact and work with others both individually and in groups. Students will be required to display skills in-person and/or online in: <ul style="list-style-type: none"> • Using effective verbal and non-verbal communication • Listening for meaning and influencing via active listening • Showing empathy for others • Negotiating and demonstrating conflict resolution skills • Working respectfully in cross-cultural and diverse teams. 	Not applicable	Not applicable
FEDTASK 2 Leadership	Students will demonstrate the ability to apply professional skills and behaviours in leading others. Students will be required to display skills in: <ul style="list-style-type: none"> • Creating a collegial environment • Showing self-awareness and the ability to self-reflect • Inspiring and convincing others • Making informed decisions • Displaying initiative 	Not applicable	Not applicable
FEDTASK 3 Critical Thinking and Creativity	Students will demonstrate an ability to work in complexity and ambiguity using the imagination to create new ideas. Students will be required to display skills in: <ul style="list-style-type: none"> • Reflecting critically • Evaluating ideas, concepts and information • Considering alternative perspectives to refine ideas • Challenging conventional thinking to clarify concepts • Forming creative solutions in problem solving 	K1, K2, A2	AT1, AT2
FEDTASK 4 Digital Literacy	Students will demonstrate the ability to work fluently across a range of tools, platforms and applications to achieve a range of tasks. Students will be required to display skills in: <ul style="list-style-type: none"> • Finding, evaluating, managing, curating, organising and sharing digital information • Collating, managing, accessing and using digital data securely • Receiving and responding to messages in a range of digital media • Contributing actively to digital teams and working groups • Participating in and benefiting from digital learning opportunities 	K1	AT1, AT2, AT3

FEDTASK attribute and descriptor		Development and acquisition of FEDTASKS in the course	
		Learning Outcomes (KSA)	Assessment task (AT#)
FEDTASK 5 Sustainable and Ethical Mindset	Students will demonstrate the ability to consider and assess the consequences and impact of ideas and actions in enacting ethical and sustainable decisions. Students will be required to display skills in: <ul style="list-style-type: none"> • Making informed judgments that consider the impact of devising solutions in global economic environmental and societal contexts • Committing to social responsibility as a professional and a citizen • Evaluating ethical, socially responsible and/or sustainable challenges and generating and articulating responses • Embracing lifelong, life-wide and life-deep learning to be open to diverse others • Implementing required actions to foster sustainability in their professional and personal life. 	Not applicable	Not applicable

Learning Task and Assessment:

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1, K2, K4, S1, S2, S4, S5, A1, A2	Apply appropriate statistical analysis and produce professional presentation and interpretation of qualitative and quantitative data based on a relevant business context.	Assignment	20-30%
K1, K2, K3, S1, S3, A1, A2	Students demonstrate conceptual basis of a statistical technique, perform appropriate calculations or apply an appropriate statistical technique using computer software and interpret the results obtained in context.	Quizzes	20-30%
K1, K2, K5, S1, S5, A1, A2	Final test/assessment	Final summative assessment	40-50%

Adopted Reference Style:

APA

 Refer to the [library website](#) for more information

 Fed Cite - [referencing tool](#)