

BUS714 Applied Business Analytics

School: School of Business and Creative Industries

2026 | Session 3

UniSC Sunshine Coast
UniSC Adelaide

**BLENDED
LEARNING**

Most of your course is on campus but you may be able to do some components of this course online.

Online

ONLINE

You can do this course without coming onto campus.

Please go to usc.edu.au for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?

1.1. Description

In this course, you will learn applied business analytics with a focus on predictive and prescriptive methods. You'll explore how to use advanced analytics techniques to forecast outcomes, optimise decision-making, and solve complex business problems. By applying these methods to real-world scenarios, you'll develop the skills to drive strategic decisions and create value within an organisation.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Learning materials – Interactive online learning activities.	2hrs	Week 1	6 times
Tutorial/Workshop 1 – Scheduled face to face workshops.	3hrs	Week 1	6 times
Information session – Additional Information Sessions	1hr	Week 1	2 times
ONLINE			
Learning materials – Interactive online learning activities.	2hrs	Week 1	6 times
Tutorial/Workshop 1 – Scheduled online workshops (Recorded).	3hrs	Week 1	6 times
Information session – Additional Information Sessions	1hr	Week 1	2 times

1.3. Course Topics

- Time Series Analysis and Forecasting.
- Predictive Data Mining
- Simulation and Optimisation
- Spreadsheet modelling
- Decision Analysis
- Clustering and Market Analysis

2. What level is this course?

700 Level (Specialised)

Demonstrating a specialised body of knowledge and set of skills for professional practice or further learning. Advanced application of knowledge and skills in unfamiliar contexts.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES	GRADUATE QUALITIES MAPPING	PROFESSIONAL STANDARD MAPPING *
On successful completion of this course, you should be able to...	Completing these tasks successfully will contribute to you becoming...	Association to Advance Collegiate Schools of Business
1 Describe the the theoretical foundations and empirical applications of predictive and prescriptive business analytics in various business contexts.	Knowledgeable	PC6, PC6.2
2 Apply predictive and prescriptive analytics methods to support solving complex business problems and improve decision-making processes.	Creative and critical thinker Problem solving	PC3, PC3.1
3 Utilise advanced digital tools and techniques for predictive and prescriptive analysis of complex data to generate insights and support decision making in various contexts.	Empowered Applying technologies	PC6, PC6.2
4 Communicate business insights effectively using data visualisation and reporting techniques to engage stakeholders and inform strategic decisions.	Engaged Communication Information literacy	PC1, PC1.3

* Competencies by Professional Body

CODE	COMPETENCY
ASSOCIATION TO ADVANCE COLLEGIATE SCHOOLS OF BUSINESS	
PC1	Communication
PC1.3	Digital Literacy
PC3	Creative and Critical Thinking
PC3.1	Problem Solving
PC6	Career-adaptive
PC6.2	Discipline Knowledge

5. Am I eligible to enrol in this course?

Refer to the [UniSC Glossary of terms](#) for definitions of “pre-requisites, co-requisites and anti-requisites”.

5.1. Pre-requisites

Enrolled in any PGRD program.

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

5.4. Specific assumed prior knowledge and skills (where applicable)

Not applicable

6. How am I going to be assessed?

6.1. Grading Scale

Standard Grading (GRD)

High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL).

6.2. Details of early feedback on progress

Formative feedback will be provided using various methods in the first few weeks of the session.

6.3. Assessment tasks

DELIVERY MODE	TASK NO.	ASSESSMENT PRODUCT	INDIVIDUAL OR GROUP	WEIGHTING %	WHAT IS THE DURATION / LENGTH?	WHEN SHOULD I SUBMIT?	WHERE SHOULD I SUBMIT IT?
All	1	Artefact - Professional	Individual	50%	One infographic including up to 10 visuals and up to 500 words.	Week 4	Online Assignment Submission with plagiarism check
All	2	Report	Individual	50%	A business report including up to 10 tables, 10 figures, 1,500 words and accompanying data analysis files.	Week 8	Online Assignment Submission with plagiarism check

All - Assessment Task 1: Business Forecasting Infographic

GOAL:	To demonstrate your ability to apply predictive analytics methods to forecast future outcomes.		
PRODUCT:	Artefact - Professional		
FORMAT:	In this task, you will apply your understanding predictive analytics to apply predictive analytics methods to forecast future outcomes based on case data and communicate these insights effectively through an engaging visual format.		
CRITERIA:	No.		Learning Outcome assessed
	1	Accurate application of predictive analytics methods to analyse case data.	1 2 3
	2	Effective generation of forecasted insights to support complex business problem solving.	2
	3	Effective visual communication of insights.	4
GENERIC SKILLS:	Communication, Applying technologies, Information literacy		

All - Assessment Task 2: Prescriptive Analytics for Decision-Making

GOAL:	To demonstrate your ability to apply prescriptive analytics methods to identify the best course of action for a business problem and effectively communicate these recommendations in a written report.																
PRODUCT:	Report																
FORMAT:	In this task, you will apply your understanding predictive analytics to apply predictive analytics methods to forecast future outcomes based on case data and communicate these insights effectively through an engaging visual format.																
CRITERIA:	<table border="1"> <thead> <tr> <th>No.</th> <th></th> <th>Learning Outcome assessed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Appropriate choice of analytics techniques, with well-explained rationale for the choice of methods and their appropriateness for addressing the problem.</td> <td>1</td> </tr> <tr> <td>2</td> <td>Precise application of prescriptive analytics techniques using digital tools.</td> <td>2 3</td> </tr> <tr> <td>3</td> <td>Provides well-reasoned and clearly justified recommendations for the best course of action.</td> <td>2 4</td> </tr> <tr> <td>4</td> <td>Communicates the analysis and recommendations effectively, using clear visualizations and a structured report format to facilitate stakeholder understanding and decision-making.</td> <td>4</td> </tr> </tbody> </table>	No.		Learning Outcome assessed	1	Appropriate choice of analytics techniques, with well-explained rationale for the choice of methods and their appropriateness for addressing the problem.	1	2	Precise application of prescriptive analytics techniques using digital tools.	2 3	3	Provides well-reasoned and clearly justified recommendations for the best course of action.	2 4	4	Communicates the analysis and recommendations effectively, using clear visualizations and a structured report format to facilitate stakeholder understanding and decision-making.	4	
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GENERIC SKILLS:	Communication, Problem solving, Applying technologies, Information literacy																

7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Student workload is calculated at 12.5 learning hours per one unit.

8. What resources do I need to undertake this course?

Please note: Course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Canvas site– Please log in as soon as possible.

8.1. Prescribed text(s) or course reader

Please note that you need to have regular access to the resource(s) listed below. Resources may be required or recommended.

REQUIRED?	AUTHOR	YEAR	TITLE	EDITION	PUBLISHER
Recommended	Jeffrey D. Camm, James J. Cochran, Michael J. Fry, Jeffrey W. Ohlmann	2024	Business Analytics	5th	Cengage

8.2. Specific requirements

Not applicable

9. How are risks managed in this course?

Health and safety risks for this course have been assessed as low. It is your responsibility to review course material, search online, discuss with lecturers and peers and understand the health and safety risks associated with your specific course of study and to familiarise yourself with the University's general health and safety principles by reviewing the [online induction training for students](#), and following the instructions of the University staff.

10. What administrative information is relevant to this course?

10.1. Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Canvas, are electronically checked through Turnitin. This software allows for text comparisons to be made between your submitted assessment item and all other work to which Turnitin has access.

10.2. Assessment: Additional Requirements

Eligibility for Supplementary Assessment

Your eligibility for supplementary assessment in a course is dependent of the following conditions applying:

1. The final mark is in the percentage range 47% to 49.4%
2. The course is graded using the Standard Grading scale
3. You have not failed an assessment task in the course due to academic misconduct

10.3. Assessment: Submission penalties

Late submissions may be penalised up to and including the following maximum percentage of the assessment task's identified value, with weekdays and weekends included in the calculation of days late:

- (a) One day: deduct 5%;
- (b) Two days: deduct 10%;
- (c) Three days: deduct 20%;
- (d) Four days: deduct 40%;
- (e) Five days: deduct 60%;
- (f) Six days: deduct 80%;
- (g) Seven days: A result of zero is awarded for the assessment task.

The following penalties will apply for a late submission for an online examination:

- Less than 15 minutes: No penalty
From 15 minutes to 30 minutes: 20% penalty
More than 30 minutes: 100% penalty

10.4. SafeUniSC

UniSC is committed to a culture of respect and providing a safe and supportive environment for all members of our community. For immediate assistance on campus contact SafeUniSC by phone: [07 5430 1168](tel:0754301168) or using the [SafeZone](#) app. For general enquires contact the SafeUniSC team by phone [07 5456 3864](tel:0754563864) or email safe@usc.edu.au.

The SafeUniSC Specialist Service is a Student Wellbeing service that provides free and confidential support to students who may have experienced or observed behaviour that could cause fear, offence or trauma. To contact the service call [07 5430 1226](tel:0754301226) or email studentwellbeing@usc.edu.au.

10.5. Study help

For help with course-specific advice, for example what information to include in your assessment, you should first contact your tutor, then your course coordinator, if needed.

If you require additional assistance, the Learning Advisers are trained professionals who are ready to help you develop a wide range of academic skills. Visit the [Learning Advisers](#) web page for more information, or contact Student Central for further assistance: +61 7 5430 2890 or studentcentral@usc.edu.au.

10.6. Wellbeing Services

Student Wellbeing provide free and confidential counselling on a wide range of personal, academic, social and psychological matters, to foster positive mental health and wellbeing for your academic success.

To book a confidential appointment go to [Student Hub](#), email studentwellbeing@usc.edu.au or call 07 5430 1226.

10.7. AccessAbility Services

Ability Advisers ensure equal access to all aspects of university life. If your studies are affected by a disability, learning disorder mental health issue, injury or illness, or you are a primary carer for someone with a disability or who is considered frail and aged, [AccessAbility Services](#) can provide access to appropriate reasonable adjustments and practical advice about the support and facilities available to you throughout the University.

To book a confidential appointment go to [Student Hub](#), email AccessAbility@usc.edu.au or call 07 5430 2890.

10.8. Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Central Examinations
- Deferred Examinations
- Student Conduct
- Students with a Disability

For more information, visit <https://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

10.9. Student Charter

UniSC is committed to excellence in teaching, research and engagement in an environment that is inclusive, inspiring, safe and respectful. The [Student Charter](#) sets out what students can expect from the University, and what in turn is expected of students, to achieve these outcomes.

10.10. General Enquiries

In person:

- **UniSC Sunshine Coast** - Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- **UniSC Moreton Bay** - Service Centre, Ground Floor, Foundation Building, Gympie Road, Petrie
- **UniSC SouthBank** - Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- **UniSC Gympie** - Student Central, 71 Cartwright Road, Gympie
- **UniSC Fraser Coast** - Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- **UniSC Caboolture** - Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au