COURSE OUTLINE

ICT211 Database Design

School: School of Science, Technology and Engineering

2026 | Trimester 1

UniSC Sunshine Coast UniSC Moreton Bay 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, unless your program has specified a mandatory onsite requirement.

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

This course introduces you to the major concepts, methodologies, tools and techniques that are required to analyse, design, and develop well-structured databases for modern organisations. Data modelling using entity-relationship diagrams is taught and applied. You will then use a DBMS to gain an appreciation of the concepts and practical application of database management systems. SQL is covered to complete the cycle of professional practice.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Learning materials – Pre-recorded concept videos and associated activity	1hr	Week 1	12 times
Tutorial/Workshop 1 – In-class tutorial	2hrs	Week 1	12 times
Seminar – On campus Seminar	1hr	Week 2	3 times
ONLINE			
Learning materials – Pre-recorded concept videos and associated activity	1hr	Week 1	12 times
Tutorial/Workshop 1 – Interactive zoom tutorial	2hrs	Week 1	12 times
Seminar – Online seminar	1hr	Week 2	3 times

1.3. Course Topics

Introduction to databases and database modelling
Entity Relationship Modelling - concepts and application
Relational Schema methodology
Normalisation
Introduction to SQL and translating Relational Schema to SQL
SQL – DDL
SQL – DML
SQL – Joins, Views & Transactions
SQL Stored Procedures – Procedures and functions
SQL Stored Procedures – Triggers & Cursors
Distributed databases
Client/server systems

2. What level is this course?

200 Level (Developing)

Building on and expanding the scope of introductory knowledge and skills, developing breadth or depth and applying knowledge and skills in a new context. May require pre-requisites where discipline specific introductory knowledge or skills is necessary. Normally, undertaken in the second or third full-time year of an undergraduate programs.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES On successful completion of this course, you should be able to...		GRADUATE QUALITIES Completing these tasks successfully will contribute to you becoming...
1	Creation of systems.	Creative and critical thinker
2	Apply initiative to solving problems competently in the discipline.	Empowered
3	Apply communication skills to specific problems.	Engaged
4	Apply discipline specific knowledge and skills to problems.	Knowledgeable
5	Understand sustainability issues within the discipline.	Sustainability-focussed

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

Not applicable

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 provided in weekly workshop exercises and in class discussions.

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	Case Study	Individual	35%	1000 words equivalent	Week 6	Online Assignment Submission with plagiarism check
All	2	Artefact - Technical and Scientific, and Written Piece	Individual	30%	1000 Words	Week 10	Online Assignment Submission with plagiarism check
All	3	Examination - not Centrally Scheduled	Individual	35%	2 hours	Week 12	Online Submission

All - Assessment Task 1: Database design case

GOAL:	Evaluate and solve a business data problem.
PRODUCT:	Case Study
FORMAT:	Report submitted via Canvas. More details to be provided via Canvas.
CRITERIA:	

No.		Learning Outcome assessed
1	Application of Relational Database modelling knowledge and understanding	2
2	Correctness of output in relation to the provided case study	4
3	Design of a functional relational database	1

GENERIC SKILLS:	

All - Assessment Task 2: Database Creation

GOAL:	Demonstrate ability to create and manipulate a database using SQL.
PRODUCT:	Artefact - Technical and Scientific, and Written Piece
FORMAT:	This is an individual assessment with scaffolded submissions - including during tutorial task submission.
CRITERIA:	

No.		Learning Outcome assessed
1	Development of a functional relational database	1 2
2	Correct application and use of syntax in relation to the provided case study	4 5
3	Appropriate documentation and comments within code and other relevant requirements	3

GENERIC SKILLS:	

All - Assessment Task 3: Database Exam

GOAL:	Demonstrate course content understanding.
PRODUCT:	Examination - not Centrally Scheduled
FORMAT:	This is an individual exam held during your Week 12 tutorial class. See Canvas for more detailed information about this assessment.
CRITERIA:	**No.** / **Learning Outcome assessed** 1 Understanding and application of relational database system design and problem solving — 4
GENERIC SKILLS:	

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
Required	Carlos Coronel,Steven Morris	2018	Database Systems: Design, Implementation, & Management	13th ed	Cengage Learning

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:
(a) The final mark is in the percentage range 47% to 49.4%; and
(b) The course is graded using the Standard Grading scale

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 or using the SafeZone app. For general enquires contact the SafeUniSC team by phone 07 5456 3864 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 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