COURSE OUTLINE

ICT310 Systems Analysis and Design

School: School of Science, Technology and Engineering

2026 | Semester 1

UniSC Sunshine Coast	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 unisc.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 advanced course introduces you to a range of concepts used in the analysis and design of complex information systems. You will gain practical skills in modelling systems from the process and object perspectives as well as an understanding of the approaches that can be used when undertaking a holistic analysis and design project.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Online – Pre-recorded concept videos and associated activity	1hr	Week 1	12 times
Tutorial/Workshop 1 – In-class tutorial	2hrs	Week 2	11 times
ONLINE			
Online – Pre-recorded concept videos and associated activity	1hr	Week 1	12 times
Tutorial/Workshop 1 – Interactive zoom tutorial	2hrs	Week 2	11 times

1.3. Course Topics

System Modelling

Requirements Gathering Use Cases

Use Cases

Domain modelling

Extending the requirements model

Design and design activities

Designing the graphical user interface

Approaches to System analysis and Design

Object Oriented design principles

Implementing the system

2. What level is this course?

300 Level (Graduate)

Demonstrating coherence and breadth or depth of knowledge and skills. Independent application of knowledge and skills in unfamiliar contexts. Meeting professional requirements and AQF descriptors for the degree. May require pre-requisites where discipline specific introductory or developing knowledge or skills is necessary. Normally undertaken in the third or fourth full-time study year of an undergraduate program.

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	Demonstrate advanced system analysis and design using structured and object-oriented approaches.	Knowledgeable Engaged
2	Test, analyse and justify the selection of the most appropriate system development approach for the project.	Creative and critical thinker
3	Communicate a clear, coherent and independent exposition of systems analysis and design.	Empowered

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

ICT115 or ICT221

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

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

Not applicable

5.5. Microcredential Information

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

The Task 1 mid semester exam (and preparation leading up to the exam) is designed to help students develop skills they will require to complete Tasks 2 and 3.

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	Examination - not Centrally Scheduled	Individual	15%	50 minutes	Week 5	In Class
All	2	Report	Individual	35%	2,000 words	Week 12	Online Assignment Submission with plagiarism check
All	3	Examination - Centrally Scheduled	Individual	50%	2 hours	Exam Period	Exam Venue

All - Assessment Task 1: Mid semester examination

GOAL:	You will demonstrate your cognitive and technical skills in systems analysis and design.
PRODUCT:	Examination - not Centrally Scheduled
AUTHORSHIP STATEMENT:	
FORMAT:	A fifty-minute closed book examination held in week 5, comprising questions from the information obtained during the computer workshop activities, lecture material and additional readings specified during the lecture series.
CRITERIA:	

No.		Learning Outcome assessed
1	Fifty-minute closed book examination comprising questions from the information obtained during the computer workshop activities, lecture material and additional readings specified during the lecture series.	
2	Assessment criteria are mapped to the course learning outcomes.	1 2 3

GENERIC SKILLS:	

All - Assessment Task 2: Written report

GOAL:	You will demonstrate your cognitive and technical skills in object-oriented analysis and design of systemsThis task is being used for measuring assurance of learning towards Association to Advance Collegiate Schools of Business (AACSB) accreditation. The following Program Learning Objectives will be assessed:Program Learning Objective 3.1 - Demonstrate critical and creative thinking to identify and solve business problems and arrive at innovative solutions.
PRODUCT:	Report
AUTHORSHIP STATEMENT:	
FORMAT:	You are to write a report that includes an outline of systems requirements for an information systems solution to a business case study. This report will discuss methodologies and include models of the solution using Unified Modelling Language (UML).
CRITERIA:	

No.		Learning Outcome assessed
1	Demonstrate knowledge of problem-solving and/or analytical processes appropriate to systems analysis and design	
2	Demonstrate an understanding of the decision-making process and recognise any cognitive biases that may occur when making decisions	
3	Identify and critically analyse pertinent issues in a business context	
4	Critically analyse existing sources of secondary data and literature in the field	
5	Utilise creative, reflective and critical thinking to develop, evaluate and justify innovative solutions to business case study	

GENERIC SKILLS:	

All - Assessment Task 3: Final examination

GOAL:	You will reflect on what you have learned from assessment tasks 1 and 2
PRODUCT:	Examination - Centrally Scheduled
AUTHORSHIP STATEMENT:	
FORMAT:	The final two (2) hour exam will be conducted at the end of the semester at a time and place to be announced by Student Administration.
CRITERIA:	

No.		Learning Outcome assessed
1	Two hour closed book examination comprising questions from the information obtained during the computer workshop activities, lecture material and additional readings specified during the lecture series.	

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

You need regular access to the resource(s) below. Many texts are available as ebooks through the Library at no additional cost.

REQUIRED?	AUTHOR	YEAR	TITLE	EDITION	PUBLISHER
Required	Summers, J & Smith, B.	2009	Communication Skills Handbook: How to succeed in written and oral communication	*Later editions are acceptable	Wiley, Singapore*
Required	Satzinger, JW, Jackson, RB & Burd SD	2016	Systems Analysis and Design: in a changing world	7th edn	Course Technology

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

10.3. Assessment: Submission penalties

Late submission of assessment tasks may be penalised at the following maximum rate: - 5% (of the assessment task's identified value) per day for the first two days from the date identified as the due date for the assessment task. - 10% (of the assessment task's identified value) for the third day - 20% (of the assessment task's identified value) for the fourth day and subsequent days up to and including seven days from the date identified as the due date for the assessment task. - A result of zero is awarded for an assessment task submitted after seven days from the date identified as the due date for the assessment task. Weekdays and weekends are included in the calculation of days late. To request an extension you must contact your course coordinator to negotiate an outcome.

10.4. 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

10.5. 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.

10.6. 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

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