



COURSE OUTLINE

ICT115 Introduction to Systems Design

Course Coordinator: Anne Ozdowska (aozdowsk@usc.edu.au) **School:** School of Science, Technology and Engineering

2021 | Semester 2

USC Sunshine Coast
USC Moreton Bay

ON CAMPUS

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 the USC website 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

Modern businesses are based on a collection of systems. The design and interaction of these systems is paramount for the business to be successful in the global world. This course introduces the foundation concepts of systems analysis and design, including the collection, understanding and analysis of the requirements for the system through to various options in the design of the system and integrating it into the system architecture of the business.

1.2. How will this course be delivered?

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

1.3. Course Topics

- Introduction to systems analysis and design
- Analysing the business case
- Managing systems projects
- Requirements engineering
- Data and process modeling
- Object modeling
- Development strategies
- User interface design
- Data design
- System architecture
- Managing system implementation
- System support and security

2. What level is this course?

100 Level (Introductory)

Engaging with discipline knowledge and skills at foundational level, broad application of knowledge and skills in familiar contexts and with support. Limited or no prerequisites. Normally, associated with the first 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	GRADUATE QUALITIES
On successful completion of this course, you should be able to...	Completing these tasks successfully will contribute to you becoming...
1 Use the foundational concepts of Systems Analysis & Design	Knowledgeable
2 Discuss and demonstrate fundamental Systems Analysis & Design concepts	Creative and critical thinker Engaged
3 Demonstrate knowledge and the utilisation of modern Systems Analysis & Design strategies and techniques.	Knowledgeable Creative and critical thinker Engaged

5. Am I eligible to enrol in this course?

Refer to the [USC 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

Weekly online kahoot quizzes will be used over 11 weeks to cement learnings from the week's online content and to provide formative feedback. Immediate feedback from the quizzes will enable students to understand how well they are grasping content and keeping up with the course. An online test will be run in week 5 so that students have early summative feedback about their progress.

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	Individual	25%	1 hour	Week 5	Online Test (Quiz)
All	2	Oral and Written Piece	Group	30%	1,500 words plus 250-500 word individual reflection.	Week 10	Online Assignment Submission with plagiarism check
All	3	Examination - Centrally Scheduled	Individual	45%	2 hours	Exam Period	Online Test (Quiz)

All - Assessment Task 1: Online test

GOAL:	The purpose of this task is for you to demonstrate your knowledge of the fundamental concepts of systems planning, analysis and design.	
PRODUCT:	Examination	
FORMAT:	Online test with a combination of multiple-choice and short answer questions.	
CRITERIA:	No.	Learning Outcome assessed
	1	Comprehension and knowledge of requisite course material. 1 3

All - Assessment Task 2: Systems Design Case Study Presentation and Report

GOAL:	The purpose of this task is to build on the skills developed in Task 1 in applying systems planning, analysis and design concepts to a case study. This task will help to further develop your understanding of foundational Systems Analysis and Design concepts and practices in business environments. This is a group assessment in which you will write a report and produce a 5 minute group video. The individual component in this assessment will be to write a reflection on your experience working as a member in your group.	
PRODUCT:	Oral and Written Piece	
FORMAT:	Group case study report and diagrams (~1,500 words). This group report will follow a standard business report format. You will be investigating how you might advise an organisation, whose details are given in a case study, on how you might design a system that will fit with an organisation's requirements. You will produce a 5 minute video that captures the main elements of the report. The video should be pitched at presenting the plan to an executive team. Further details will be available on Blackboard in the assignment specification	
CRITERIA:	No.	Learning Outcome assessed
	1	To demonstrate applied understanding of Systems Analysis, Design and Architecture. 1
	2	Presentation and organisation of presentation and report 3
	3	Analysis of what systems analysis and design are applicable to this case study. 2
	4	Application of systems analysis and design concepts to the case study. 3
	5	Recommendation for future use of systems analysis 2
	6	Clear summary of relevant information 1 2

All - Assessment Task 3: Final Examination

GOAL:	Building on Task 1 and Task 2, the purpose of this task is to obtain a comprehensive view of systems design in terms of definitions and concepts, techniques, and solving business problems.		
PRODUCT:	Examination - Centrally Scheduled		
FORMAT:	A final examination will be held in the examination period. This two-hour examination will consist of a set of multiple-choice questions, diagrams and short answer questions to test understanding and application of concepts. This is an individual assessment.		
CRITERIA:	No.		Learning Outcome assessed
	1	Comprehend, apply and communicate definitions and concepts used in systems design.	1
	2	Comprehend and discuss the position of system design in organisations	2
	3	Define a business problem and present the systems design to solve the problem	3

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. Directed study hours may vary by location. 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 Blackboard 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	PUBLISHER
Required	Scott Tilley	2019	Systems Analysis and Design	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 Blackboard, are electronically checked through SafeAssign. This software allows for text comparisons to be made between your submitted assessment item and all other work that SafeAssign has access to.

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. 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.

10.5. 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.

10.6. 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.

10.7. 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
- Administration of Central Examinations
- Deferred Examinations
- Student Academic Misconduct
- Students with a Disability

Visit the USC website: <http://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

10.8. General Enquiries

In person:

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

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au