

ICT200

Systems Analysis and Design

School: School of Science, Technology and Engineering

2025 | Semester 1

 UniSC Sunshine Coast
 UniSC Moreton Bay

**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 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 | | | |
| Learning materials – Asynchronous learning material | 1hr | Week 1 | 12 times |
| Tutorial/Workshop 1 – on-campus | 2hrs | Week 1 | 12 times |
| ONLINE | | | |
| Learning materials – Asynchronous learning material | 1hr | Week 1 | 12 times |
| Tutorial/Workshop 1 – Online workshop | 2hrs | Week 1 | 12 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 |
| Object Oriented design principles Continued |
| Implementing the system |

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 | GRADUATE QUALITIES |
|---|--|
| On successful completion of this course, you should be able to... | Completing these tasks successfully will contribute to you becoming... |
| 1 Apply system analysis and design skills using structured and object-oriented approaches. | Empowered |
| 2 Analyse and justify the selection of the most appropriate system development approach for the project | Creative and critical thinker |
| 3 Communicate systems analysis and design problem solutions in an organisational context | Engaged |

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

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

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% | 60 Minutes (800 words) | Week 5 | Online Assignment Submission with plagiarism check |
| All | 2 | Report | Individual | 35% | 1500 words | Week 10 | Online Assignment Submission with plagiarism check |
| All | 3 | Examination - Centrally Scheduled | Individual | 50% | 2 Hours (2000 words) | Week 12 | Online Assignment Submission with plagiarism check |

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 | | | | | | | |
| FORMAT: | A sixty-minute examination, comprising questions from the information obtained during the computer workshop activities, learning material and additional readings specified. | | | | | | | |
| CRITERIA: | <table border="1"> <thead> <tr> <th>No.</th> <th></th> <th>Learning Outcome assessed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Fifty-minute closed book examination comprising questions from the information obtained during the computer workshop activities, learning material and additional readings specified.</td> <td>1 2 3</td> </tr> </tbody> </table> | No. | | Learning Outcome assessed | 1 | Fifty-minute closed book examination comprising questions from the information obtained during the computer workshop activities, learning material and additional readings specified. | 1 2 3 | |
| No. | | Learning Outcome assessed | | | | | | |
| 1 | Fifty-minute closed book examination comprising questions from the information obtained during the computer workshop activities, learning material and additional readings specified. | 1 2 3 | | | | | | |
| GENERIC SKILLS: | Communication, Problem solving, Applying technologies | | | | | | | |

All - Assessment Task 2: Report

| | | |
|------------------------|--|--|
| GOAL: | You will demonstrate your cognitive and technical skills in object-oriented analysis and design of system in response to a case study. | |
| PRODUCT: | Report | |
| 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 1 |
| | 2 | Demonstrate an understanding of the decision-making process and recognise any cognitive biases that may occur when making decisions 2 |
| | 3 | Identify and critically analyse pertinent issues in a business context 1 |
| | 4 | Utilise creative, reflective and critical thinking to develop, evaluate and justify innovative solutions to business case study 3 |
| GENERIC SKILLS: | Communication, Problem solving, Applying technologies | |

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 | |
| FORMAT: | The final two (2) hour exam will be conducted at the end of the semester at a time to be announced by Student Administration. | |
| CRITERIA: | No. | Learning Outcome assessed |
| | 1 | Two hour examination comprising questions from the information obtained during the computer workshop activities, learning materials and additional readings specified. 1 2 3 |
| GENERIC SKILLS: | Communication, Problem solving, Applying technologies | |

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 | John W. Satzinger, Robert B. Jackson, Stephen D. Burd | 2015 | Systems Analysis and Design in a Changing World | n/a | 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](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