

# INFS 1006 SYSTEMS ANALYSIS AND DESIGN

**Credit Points** 10

**Legacy Code** 300585

**Coordinator** Simi Kamini Bajaj ([https://directory.westernsydney.edu.au/search/name/Simi Kamini Bajaj/](https://directory.westernsydney.edu.au/search/name/Simi%20Kamini%20Bajaj/))

**Description** This unit introduces the concepts of System Analysis and Design. The study of methodologies and techniques for problem recognition, requirement analysis, process modelling, solution design and data modelling are essential elements of this unit. The Systems Development Life Cycle model is employed as the prime approach to teach the unit, equipping students with the basic skills required for developing models for analysis, design, implementation and solving information systems problems. This unit introduces students to approaches of system development including structured, object oriented and agile. Students are exposed well to system design activities including UI, data, basic system architecture and system processing. The use of drawing tools will be discussed in practical sessions.

**School** Computer, Data & Math Sciences

**Discipline** Systems Analysis and Design

**Student Contribution Band** HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees ([https://www.westernsydney.edu.au/currentstudents/current\\_students/fees/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Undergraduate Level 1 subject

**Equivalent Subjects** LGYA 5776 Introduction to Analysis and Design  
INFS 1007 Systems Analysis and Design (WSTC)

## Assumed Knowledge

Students should have knowledge of the fundamentals of information systems, computer systems, computer applications and information processing.

## Learning Outcomes

On successful completion of this subject, students should be able to:

1. Recognise the key role of a systems analyst and describe the generic roles and responsibilities of users, developers and managers within the context of business information systems.
2. Recall the fundamental building blocks and architecture of information systems.
3. Describe and apply the various phases of the System Development Life Cycle, including related documentation and appropriate project management approaches.
4. Analyse user and system requirements for the purposes of producing abstract models based on real business problems.
5. Explain the use and application of Computer Aided Software Engineering (CASE) Tools in the creation of systems development artefacts.
6. Explain the issues around information systems governance, consumer and information security and professional ethics in regards to their impact on information systems design and operation.

## Subject Content

- introduction to systems and information.
- concepts of systems analysis and design.
- The Systems Development Lifecycle (SDLC).
- Problem Definition, statement and documentation.
- introduction to requirements gathering and analysis using business process, data and object oriented modelling
- implementation issues.
- human computer interaction
- Project management.
- information systems Governance, Consumer and information security and professional ethics
- systems development documentation.

## Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/ Group Task
Portfolio	Short answer descriptions + diagrams + workshop participation	30	N	Individual
Quiz	1 hour	20	N	Individual
Final Exam	2 hours	50	N	Individual

## Prescribed Texts

- Tilley, S. R. (2020). Systems analysis and design (12th ed.). Boston, MA, USA: Cengage Learning.

## Teaching Periods

### Autumn Campbelltown

#### Day

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View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=INFS1006\\_22-AUT\\_CA\\_D#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=INFS1006_22-AUT_CA_D#subjects))

### Penrith (Kingswood)

#### Day

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### Parramatta - Victoria Rd

#### Day

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View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=INFS1006\\_22-AUT\\_PS\\_D#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=INFS1006_22-AUT_PS_D#subjects))

## Sydney City Campus - Term 1

### Sydney City

#### Day

**Subject Contact** Antoinette Cevenini ([https://directory.westernsydney.edu.au/search/name/Antoinette Cevenini/](https://directory.westernsydney.edu.au/search/name/Antoinette%20Cevenini/))

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=INFS1006\\_22-SC1\\_SC\\_D#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=INFS1006_22-SC1_SC_D#subjects))

## Sydney City Campus - Term 3

### Sydney City

#### Day

**Subject Contact** Antoinette Cevenini ([https://directory.westernsydney.edu.au/search/name/Antoinette Cevenini/](https://directory.westernsydney.edu.au/search/name/Antoinette%20Cevenini/))

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=INFS1006\\_22-SC3\\_SC\\_D#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=INFS1006_22-SC3_SC_D#subjects))