

# INFS 1007 SYSTEMS ANALYSIS AND DESIGN (WSTC)

**Credit Points** 10

**Legacy Code** 700013

**Coordinator** Frank Gutierrez ([https://directory.westernsydney.edu.au/search/name/Frank Gutierrez/](https://directory.westernsydney.edu.au/search/name/Frank%20Gutierrez/))

**Description** This subject introduces the concepts of System Analysis and Design. The study of methodologies and techniques for problem recognition, requirement analysis, process modelling and/or data modelling are essential elements of this subject. The Systems Development Life Cycle model is employed as the prime approach to teach the subject, providing students with the basic skills required for analysis and design of logical solutions to information systems problems. The use of Computer Aided System Engineering 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 fees 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

**Pre-requisite(s)** Students enrolled in 7067 Diploma in Information and Communications Technology Extended must pass LANG 0002 Academic Communication 2 (WSTC Prep) or LANG 0032 English for Tertiary Study 2 (WSTC Prep) or LANG 0039 Introduction to Academic Communication 2 (WSTC Prep) and must pass INFO 0008 Computer Studies (WSTC Prep) before enrolling in this unit

Students enrolled in 7138 Diploma in Information and Communications Technology Extended-ICT 7139 Diploma in Information and Communications Technology Extended-7140 Diploma in Information and Communications Technology Extended-IS and 7141 Diploma in Information and Communications Technology Extended-HIM must pass LANG 0012 Academic Professional Communication (WSTC Prep) and must pass INFO 0001 Academic Skills for ICT (WSTC Prep) and must pass INFO 0010 Information Technology in Business (WSTC Prep) before enrolling in this unit

**Equivalent Subjects** LGYA 5776 - Introduction to Analysis and Design  
INFS 1006 - System Analysis and Design  
INFS 1006 - Systems Analysis and Design

**Restrictions** Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diploma programs must have passed 40 credit points of preparatory subjects in order to enrol in this subject. Students enrolled in the combined Diploma/Bachelor programs listed below must pass all College Preparatory subjects listed in the program structure before progressing to the Year 2 subjects.

## 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 purpose of producing abstract models based on real business problems.
5. Explain the use and application of Computer Aided Software Engineering (CASE) Tool 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

1. Introduction to systems and information.
2. Concepts of systems analysis and design.
3. The Systems Development Lifecycle (SDLC).
4. Problem definition, statement and documentation.
5. Introduction to requirements gathering and analysis using business process, data and object oriented modelling.
6. Implementation issues.
7. Human computer interaction.
8. Project Management.
9. Information systems governance, consumer and information security and professional ethics.
10. 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.

Type	Length	Percent	Threshold	Individual/ Group Task	Mandatory
Portfolio	A total of 9 hrs mostly during tutorials	30	N	Individual	N
Quiz	90 min each	20	N	Individual	N
Participation	5-10 min each week	10	N	Individual	N
Report	Approx 2 hours	40	N	Individual	N

### Prescribed Texts

- Scott, R.T., & Rosenblatt, H.J. (2017). Systems analysis and design, (11th ed.). Boston, MA: Course Technology Cengage Learning.

### Teaching Periods

## Term 2 (2024)

### Nirimba Education Precinct

#### On-site

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

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=INFS1007\\_24-T2\\_BL\\_1#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=INFS1007_24-T2_BL_1#subjects))

## Term 3 (2024)

### Nirimba Education Precinct

#### On-site

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

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## Term 2 (2025)

### Penrith (Kingswood)

#### On-site

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

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### Parramatta City - George St

#### On-site

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

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