INFO 3007 NETWORK SECURITY

Credit Points 10

Legacy Code 300143

Coordinator Zhigang Lu (https://directory.westernsydney.edu.au/search/name/Zhigang Lu/)

Description This subject is concerned with the protection of information transferred over computer networks. It includes discussion of techniques for securing data transported over local and wide area networks. At the conclusion of the subject students will have a good understanding of the practical aspects of securing a computer network against internal and external attacks.

School Computer, Data & Math Sciences

Discipline Security Science

Student Contribution Band HECS Band 2 10cp

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 3 subject

Pre-requisite(s) COMP 2007 OR
COMP 2004 OR
COMP 2005

Assumed Knowledge

Good understanding of the principles of information security, and computer networks and internets.

Learning Outcomes

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

1. Identify security threats in LAN and WAN environments;
2. Identify current network security protocols and where they should be implemented;
3. Explain how popular operating systems handle secure communications;
4. Analyse and describe the security services provided by internetworking protocols;
5. Explain the purpose and basic configuration requirements of an internet firewall;
6. Describe the major components needed for secure electronic commerce;
7. Describe techniques for detecting and mitigating security threats to a networked system.

Subject Content

Network Security concepts
Network Security Protocols
Operating System Security
LAN Security
Internet Security
Firewalls
Secure Electronic Commerce
Mobile Security
Secure Network Management

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
Practical	2 hours * 12 weeks	30	N	Individual	N
Quiz	30 minutes * 12 weeks	15	N	Individual	Y
Final Exam	2 hours	55	N	Individual	Y

Prescribed Texts

- N/A

Teaching Periods

Spring (2025)
Penrith (Kingswood)
On-site
Subject Contact Zhigang Lu (https://directory.westernsydney.edu.au/search/name/Zhigang Lu/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=INFO3007_25-SPR_KW_1#subjects)

Sydney City Campus - Term 3 (2025)
Sydney City
On-site
Subject Contact Antoinette Cevenini (https://directory.westernsydney.edu.au/search/name/Antoinette Cevenini/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=INFO3007_25-SC3_SC_1#subjects)