

COMP 3037 CLOUD SECURITY

Credit Points 10

Description The field of cloud security is rapidly growing providing benefits and challenges in comparison to traditional computing environments. The aim of this subject is to provide students with a foundational knowledge of cloud security theory as well as the concepts of cybersecurity principles and services. This subject incorporates the AWS Academy Cloud Security curriculum to support learning in the areas of security design principles, authentication and access management in the cloud and protecting data and applications for the cloud. In addition, students learn about security threats and best practices for securing the cloud through practical activities.

School Computer, Data & Math Sciences

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 3012 - Introduction to Cloud Computing

Learning Outcomes

After successful completion of this Subject, students will be able to:

- 1.Explain the fundamentals of cloud computing service models and frameworks
- 2.List relevant factors for securing the core infrastructure for cloud computing
- 3.Identify key factors for managing security for cloud computing and the role of lifecycle management in this
- 4.Select appropriate security controls in the cloud environment
- 5.Outline key considerations when evaluating, selecting, and managing cloud computing providers
- 6.Explain the role of security as a service provider and the impact of cloud on incident response
- 7.Demonstrate ethical and professional application of knowledge and skills in cloud security

Subject Content

- Cloud Architecture
- Infrastructure Security for Cloud
- Managing Cloud Security and Risk
- Data Security for Cloud Computing
- Application Security and Identity Management for Cloud Computing
- Logging and monitoring best practices for Cloud Computing
- Cloud Security Operations and managing an incident response

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
Quiz	10 mins (per Quiz)	S/U	Y	Individual
Practical	2 hours (per Practical)	40	N	Individual

Applied Project	5-10 pages	30	N	Individual
Final Exam	2 hours	30	N	Individual

Teaching Periods

Spring (2024)

Campbelltown

On-site

Subject Contact

View timetable (https://classregistration.westernsydney.edu.au/event/timetable/?subject_code=COMP3037_24-SPR_CA_1#subjects)

Penrith (Kingswood)

On-site

Subject Contact

View timetable (https://classregistration.westernsydney.edu.au/event/timetable/?subject_code=COMP3037_24-SPR_KW_1#subjects)

Parramatta - Victoria Rd

On-site

Subject Contact

View timetable (https://classregistration.westernsydney.edu.au/event/timetable/?subject_code=COMP3037_24-SPR_PS_1#subjects)