

# COMP 3037 CLOUD SECURITY

**Credit Points** 10

**Coordinator** Kanaka Sai Jagarlamudi ([https://directory.westernsydney.edu.au/search/name/Kanaka Sai Jagarlamudi/](https://directory.westernsydney.edu.au/search/name/Kanaka%20Sai%20Jagarlamudi/))

**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

**Discipline** Networks and Communications

**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 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. Practice relevant factors for securing the core infrastructure for cloud computing.
3. Assess key factors for managing security for cloud computing and the role of lifecycle management.
4. Select appropriate security controls in the cloud environment.
5. Recommend security solutions by evaluating, selecting, and managing cloud computing services.
6. Assess 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/<br>Group Task | Mandatory |
|--------------------|------------------------------|---------|-----------|---------------------------|-----------|
| Quiz               | 10 mins<br>(per Quiz)        | S/U     | Y         | Individual                | Y         |
| Practical          | 2 hours<br>(per<br>Practical | 40      | N         | Individual                | N         |
| Applied<br>Project | 5-10 pages                   | 30      | N         | Individual                | N         |
| Final Exam         | 2 hours                      | 30      | N         | Individual                | Y         |

Teaching Periods

## Sydney City Campus - Term 1 (2025)

### Sydney City

#### On-site

**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/odd/timetable/?subject\\_code=COMP3037\\_25-SC1\\_SC\\_1#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=COMP3037_25-SC1_SC_1#subjects))

## Spring (2025)

### Parramatta - Victoria Rd

#### Hybrid

**Subject Contact** Kanaka Sai Jagarlamudi ([https://directory.westernsydney.edu.au/search/name/Kanaka Sai Jagarlamudi/](https://directory.westernsydney.edu.au/search/name/Kanaka%20Sai%20Jagarlamudi/))

View timetable ([https://classregistration.westernsydney.edu.au/odd/timetable/?subject\\_code=COMP3037\\_25-SPR\\_PS\\_3#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=COMP3037_25-SPR_PS_3#subjects))