

# INFO 7015 APPLIED CYBERSECURITY

**Credit Points** 10

**Legacy Code** 301235

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

**Description** This unit covers the current approaches, technologies, and applied practices pertinent to cybersecurity and helps the student to understand important related protocols and standards. It describes the features needed for the mitigation of cyber vulnerabilities for improving the reliability of the underlying systems, privacy preservation, and achieving protections against cybercrime and internet fraud. It also examines the basics of ethical hacking, network assurance, cyber risk management, and incident analysis. The unit discusses the trends in applied cybersecurity and introduces some of the relevant current key research issues and features of the field.

**School** Computer, Data & Math Sciences

**Discipline** Security Science

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

**Level** Postgraduate Coursework Level 7 subject

**Pre-requisite(s)** COMP 7013

## Restrictions

Students must be enrolled in a postgraduate program.

## Learning Outcomes

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

1. Describe the fundamental concepts of applied cybersecurity
2. Identify cybersecurity threats and the services applied to combat them
3. Explain cybersecurity technologies and practices
4. Analyse and describe the advantages and shortcomings of the more commonly applied cybersecurity approaches
5. Discuss the trends in cybersecurity
6. Explain key research issues in applied cybersecurity

## Subject Content

- Applied Cybersecurity: Overview
- Applied Cybersecurity: Concepts, Threats, and Fundamental Solutions
- Cybercrime and Digital Forensics
- Cyber Incident Detection, Analysis, and Recovery
- Ethical Hacking
- Cyber Identification and Authentication
- Applied Software and Web Security
- Cybersecurity: Cloud, Mobile, and Wireless Environments
- Cyber Assurance and Risk 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.

Item	Length	Percent	Threshold	Individual/Group Task
Practical	2 hours	20	N	Individual
Intra-session Exam	2 hours	50	N	Individual
Applied Project: Report (20%) and Presentation (10%)	4,000 words and 10 minutes	30	N	Group

Teaching Periods

## Spring

### Parramatta - Victoria Rd

#### Day

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

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=INFO7015\\_22-SPR\\_PS\\_D#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=INFO7015_22-SPR_PS_D#subjects))