# COMP 3013 MOBILE APPLICATIONS DEVELOPMENT

**Credit Points** 10

Legacy Code 300960

**Coordinator** Quang Vinh Nguyen (https://directory.westernsydney.edu.au/search/name/Quang Vinh Nguyen/)

**Description** This subject teaches technologies and programming languages for developing applications on common mobile platforms, such as Android and iOS. Students will learn skills for developing programs on the above platforms, along with in-class sample applications that highlight platform-specific implementation details.

School Computer, Data & Math Sciences

**Discipline** Programming

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) For students enrolled in 3687 Bachelor of Information Systems 3688 Bachelor of Information Systems Advanced 3744 Bachelor of Information SystemsBachelor of Business 3745 Bachelor of Information Systems AdvancedBachelor of Busines 6036 Diploma in Information and Communications TechnologyBachelor of Information Systemss or 6040 Diploma in Information and Communications TechnologyBachelor of Information Systems - COMP 2020 Technologies for Web Applications
For students enrolled in 3639 Bachelor of Information and Communications Technology - COMP 2015 Programming Techniques For students enrolled in 3684 Bachelor of Information and Communications Technology (Advanced)- COMP 2016 Programming Techniques (Advanced)

For students enrolled in 3506 Bachelor of Computer Science - COMP 2014 Object Oriented Programming OR COMP 2020 Technologies for Web Applications

## **Learning Outcomes**

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

- 1. Explain the theoretical fundamental of mobile technologies
- 2. Identify strengths, opportunity and limitation of platforms, development tools and programming languages for mobile applications
- 3. Apply common user interface elements into applications
- 4. Install mobile development tools, such as Android and iOS
- 5. Develop programs for mobile platforms
- 6. Implement input and interaction
- 7. Manipulate files and databases
- 8. Employ advanced user interface methods to produce graphical applications
- 9. Apply data management and security in mobile applications

# **Subject Content**

Data management and security

Advanced topics for mobile platforms, including file, database and advanced user interface

Input and Interaction for mobile platforms

Introduction to mobile technologies, including strengths, opportunity and limitation of development for mobile devices

Basic programming for mobile platforms, including variables, data types, arithmetic, control, function, arrays and objects

Overview, architecture and installation of programming languages for mobile platforms

Software development frameworks, tools and mobile applications Mobile platform overview and common User Interface Elements

#### **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.

Туре	Length	Percent	Threshold	Individual/ Group Task	,
Practical	2 hours each session	20	N	Individual	Υ
Applied Project	20-25 hours	25	N	Individual	Υ
Applied Project	20-25 hours	25	N	Individual	Υ
Quiz	90 minutes	30	N	Individual	Υ

**Prescribed Texts** 

· Not required

**Teaching Periods** 

# Spring (2024) Penrith (Kingswood)

#### On-site

Subject Contact Quang Vinh Nguyen (https://directory.westernsydney.edu.au/search/name/Quang Vinh Nguyen/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=COMP3013\_24-SPR\_KW\_1#subjects)

#### Parramatta - Victoria Rd

#### On-site

Subject Contact Quang Vinh Nguyen (https://directory.westernsydney.edu.au/search/name/Quang Vinh Nguyen/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=COMP3013\_24-SPR\_PS\_1#subjects)

# Sydney City Campus - Term 1 (2025) Sydney City

#### On-site

Subject Contact Mahsa Razavi (https://directory.westernsydney.edu.au/search/name/Mahsa Razavi/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject\_code=COMP3013\_25-SC1\_SC\_1#subjects)

# **Spring (2025)**

### Penrith (Kingswood)

#### On-site

**Subject Contact** Quang Vinh Nguyen (https://directory.westernsydney.edu.au/search/name/Quang Vinh Nguyen/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject\_code=COMP3013\_25-SPR\_KW\_1#subjects)

#### Parramatta - Victoria Rd

#### On-site

Subject Contact Quang Vinh Nguyen (https://directory.westernsydney.edu.au/search/name/Quang Vinh Nguyen/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject\_code=COMP3013\_25-SPR\_PS\_1#subjects)

## **Summer (2025)**

#### Parramatta - Victoria Rd

#### On-site

**Subject Contact** Quang Vinh Nguyen (https://directory.westernsydney.edu.au/search/name/Quang Vinh Nguyen/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject\_code=COMP3013\_25-SUM\_PS\_1#subjects)