# COMP 7009 MOBILE COMPUTING

**Credit Points 10** 

Legacy Code 301043

**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

Level Postgraduate Coursework Level 7 subject

Pre-requisite(s) Students enrolled in 2761 Master of Business Administration Information and Communication Technology specialisation must have successfully completed COMP 7015 Programming Proficiency and INFS 7007 Systems Analysis and Database Management Systems

Students enrolled in all other courses must have successfully completed INFS 7009 Web Technologies

#### Restrictions

Successful completion of 40 credit points.

### **Learning Outcomes**

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

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

## **Subject Content**

- 1. Data management and security
- 2. Advanced topics for mobile platforms, including file, database and advanced user interface
- 3. Input and Interaction for mobile platforms
- 4. Introduction to mobile technologies, including strengths, opportunity and limitation of development for mobile devices
- 5. Basic programming for mobile platforms, including variables, data types, arithmetic, control, function, arrays and objects
- 6. Overview, architecture and installation of programming languages for mobile platforms
- 7. Software development frameworks, tools and mobile applications

8. 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	20	N	Individual
Applied Project	20-25 hours	25	N	Individual
Applied Project	20-25 hours	25	N	Individual
Short Answer	90 minutes	30	N	Individual

**Teaching Periods** 

## Sydney City Campus - Term 1 (2022) Sydney City

Dav

Subject Contact Mahsa Razavi (https://

directory.westernsydney.edu.au/search/name/Mahsa Razavi/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=COMP7009\_22-SC1\_SC\_D#subjects)

### **Spring (2022)**

#### Parramatta - Victoria Rd

#### **Evening**

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=COMP7009\_22-SPR\_PS\_E#subjects)

## Sydney City Campus - Term 2 (2023) 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=COMP7009\_23-SC2\_SC\_1#subjects)

### **Spring (2023)**

#### 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=COMP7009\_23-SPR\_PS\_1#subjects)

## Sydney City Campus - Term 3 (2023) Sydney City

On-site

Subject Contact Mahsa Razavi (https://

directory.westernsydney.edu.au/search/name/Mahsa Razavi/)

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