

COURSE SPECIFICATION DOCUMENT

Academic Department:	Science, Innovation & Technology
Programme:	Software Engineering (AI)
FHEQ Level:	6
Course Title:	Mobile App Development
Course Code:	SENG 6103
Total Hours	160
Timetabled Hours:	45
Guided Learning Hours:	15
Independent Learning Hours:	100
Credits:	16 UK CATS credits 8 ECTS credits 4 US credits

Course Description:

Enterprises regularly use mobile applications for focused activities that exploit features of smart phones. This course introduces how mobile applications can be designed and developed for different operating systems using different OS development frameworks.

Prerequisites:

70 credits, COMP 5104 Human Computer Interaction or DATA 5102 Data Analysis & Visualisation

Aims and Objectives:

By the end of this course, students will have gained an understanding of mobile applications, their frameworks and design processes. Students will also learn how enterprises use mobile technology and how effective monetization of apps is executed.

Programme Outcomes:

L6: AI, AII, BI, BIII, CII, DIII

A detailed list of the programme outcomes are found in the Programme Specification. This is located at the archive maintained by Registry and found at:

<https://www.richmond.ac.uk/programme-and-course-specifications/>

Learning Outcomes:

By the end of this course, successful students should be able to:

- Evaluate the capabilities and limitations of mobile platforms
- Critically analyse a range of mobile frameworks and programming platforms
- Design and develop a mobile application
- Test and debug mobile applications

Indicative Content:

- Overview of mobile applications
- Mobile development lifecycle
- Input and output
- Mobile operating systems and architecture
- Choosing implementation technology
- Building mobile Apps
- Testing
- App distribution and monetization

Assessment:

This course conforms to the University Assessment Norms approved at Academic Board and located at: <https://www.richmond.ac.uk/university-policies/>

Teaching Methodology:

This course will be delivered face to face through a combination of lectures and interactive sessions. In addition to classroom activities, there are guided learning elements that are tutor led and arranged through Blackboard. These activities can be asynchronous online sessions, flipped classrooms, set readings with discussion boards or set guest lectures for example. Set activities are monitored by the instructor to ascertain student engagement. Students are encouraged to prepare for class and to play an active part, to raise questions, following-up ideas and interact with a wide range of provided material.

Indicative Text(s):

Callaghan, M (2020) *Developing a Mobile Application UI with Ionic and React: How to Build Your First Mobile Application with Common Web Technologies: 2 (Mobile App Development with Ionic Framework: Idea to App Store)*. Independent Publisher

Online resources:

Amazon. Available at: <https://aws.amazon.com/mobile/mobile-application-development/> (Accessed: November 2024).

Create your first Android App. Available at: <https://developer.android.com/codelabs/basic-android-kotlin-compose-first-app#0> (Accessed: November 2024).

Apple Developer. Available at: <https://developer.apple.com/ios/planning/> (Accessed: November 2024).

See syllabus for complete reading list.

Change Log for this CSD:

Nature of Change	Date Approved & Approval Body (School or AB)	Change Actioned by Registry Services
First Edition	Nov 2024	