

Advanced Programming for Mobile Devices

Module Code:	COS7033-B
Academic Year:	2018-19
Credit Rating:	20
School:	Department of Computer Science
Subject Area:	Computer Science
FHEQ Level:	FHEQ Level 7 (Masters)

Pre-requisites:

Co-requisites:

Contact Hours

Type	Hours
Lectures	24
Laboratory	24
Directed Study	152
Examinations DO NOT USE	2

Availability Periods

Occurrence	Location/Period
BDA	University of Bradford / Semester 2 (Feb - May)

Module Aims

To enhance students programming skills for mobile devices running on different platforms.

Outline Syllabus

Advanced topics in programming mobile devices: An overview of device-specific frameworks, e.g. Android SDK, iOS Framework, Windows Phone; memory and thread management, design principles for applications to run on multiple mobile device platforms; development tools and techniques for building mobile systems and their understanding for multitude of platforms; REST services, internationalisation and localization; privacy and security issues for mobile computing; use of emulators for development, debugging and user interface testing.

Module Learning Outcomes

On successful completion of this module, students will be able to...

- 1 Demonstrate an advanced understanding of design, development and distribution of mobile applications for iOS, Android and Widows based devices.
- 2 Analyse and effectively use Integrated Development Environment (IDE) for mobile application programming. Understand and apply human factors and human computer interaction elements in developing applications for mobile devices.
- 3 Demonstrate the ability to transfer theoretical concepts to practical mobile applications.

Learning, Teaching and Assessment Strategy

Lectures and lab sessions make up the contact time. The lectures will present the relevant theory underpinning the subject and the practicals will enable students to apply the theory to practical situations. Assessment is by coursework.

Mode of Assessment

Type	Method	Description	Length	Weighting	Final Assess'
Summative	Coursework	Design and Development of a mobile application		100%	Yes

Legacy Code (if applicable)

CM-1078D

Reading List

To view Reading List, please go to [rebus:list](#).