

Module Specification

Module Summary Information

1	Module Title	Mobile Application Development
2	Module Credits	20
3	Module Level	6
4	Module Code	CMP6185

5	Module Overview
Smart Mobile devices are now an essential part of modern life. The primary challenge for software developers lies in making the best use of the feature sets of these devices in order to provide easy and context-aware access to data and features for users 'on the move'. This module aims to equip students with the essential design and programming skills to develop their own robust, usable and ubiquitous applications for at least one of the most popular Smart phone and tablet platforms (such as Google's Android or Apple's iOS).	

6	Indicative Content
Mobile Platforms and Toolsets Review of programming skills for Mobile (Swift, Java, etc.) Design considerations for Mobile platforms: - User Interfaces and Guidelines - Architectures and Design Patterns Data Management: - Data Persistence mechanisms (on device) - Data acquisition mechanisms (off device - Web Services, etc.) Mobile Platform Frameworks and APIs Testing, Debugging and Optimisation considerations	

7		Module Learning Outcomes
		On successful completion of the module, students will be able to:
	1	Formulate and present a mobile application design honouring the appropriate technologies, patterns and frameworks for a chosen mobile platform
	2	Appraise and apply general / platform-specific HCI design and development guidelines and techniques for developing highly usable and intuitive mobile applications
	3	Evaluate, select and apply various approaches to data management (acquisition and persistence) on mobile devices, and document in a professional manner
	4	Evaluate, select and apply problem solving skills to implement mobile platform specific frameworks and APIs for enhanced application functionality

8		Module Assessment		
Learning Outcome				
		Coursework	Exam	In-Person
1				X
2, 3, 4		X		

9		Breakdown Learning and Teaching Activities	
Learning Activities		Hours	
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable		48	
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE		52	
Private Study (PS) includes preparation for exams		100	
Total Study Hours:		200	