Module Title **Programming Mobile Devices** **Keywords** programming resource constrained devices	Reference CM3019 SCQF Level SCQF 9 SCQF Points 15 ECTS Points 7.5 Created May 2003 Approved April 2005 Amended November 2011 Version No. 4

This Version is No Longer Current

The latest version of this module is available here

Prerequisites for Module

CM2015 Object Oriented Software Design or equivalent

Corequisite Modules

None.

Precluded Modules

None.

Aims of Module

To enable the student to develop effective mobile computing applications using appropriate software tools.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

Indicative Student Workload

Contact Hours	Full Time
Assessment	20
Laboratories	20
Lectures	20
Directed Study	
Directed Study	40
Private Study	
Private Study	50

Mode of Delivery

Key concepts are introduced and illustrated through lectures. Practical skills are devloped through a series of laboratory assignments which develop the student's problem solving skills and illustrate the practical application of the lecture content.

Assessment Plan

1. Describe how mobile devices can work with fixed network computers in implementing various types of application.
2. Select and make effective use of software tools to implement, simulate/test applications for mobile phones and other resource constrained computing devices.
3. Design and develop effective mobile computing applications based on a considered choice of system architecture and integrating appropriate software tools and technologies.

Indicative Module Content

The module will focus on developing competence in the Java programming language for developing mobile applications under the Android operating system. Key topics will include: application fundamentals; application components i.e activities, services, content providers, broadcast receivers;component activation by intent; user interface design (UI) and implementation: declaring layouts and handling UI events;data storage on the mobile device; communication via the internet.

	Learning Outcomes Assessed
Component 1	1,2,3

Component 1 - Coursework

Indicative Bibliography

1. ANNUZZI J., DARCY L., CONDER S.. 2015. Introduction to Android Application Development, 5th Edition. Addison Wesley.