AMERICAN UNIVERSITY
OF CYPRUS

Course Code	Course Name	ECTS Credit
MG471	Smartphone Programming	7.5
Pre-Requisite	**Course Type**	**Language of Instruction**
	Major Elective	English
Year of Study	**Level of Course**	**Mode of Delivery**
4th/8th	BSc/1st Cycle	On Campus

Course Objectives:

The aim of the course is to introduce an introduction to software programming for smart devices. The lesson will focus on the different aspects of smart devices.

Learning Outcomes:

Upon successful completion of the course, students will be able to:

- Use the programming language of the smart device
- Implement interface tools to effectively design and deploy an interface.
- Create and exploit local databases.
- Develop software by combining the multiple features of the device.
- Put applications for sale at so-called application stores.

Teaching Methodology:

Lectures 42 Hours

Labs 30 hours

Course Content

Introduction: The clever device programming platform, architecture, capabilities, installation of programming environment, tools, history and evolution, application development.

Programming language: introduction to programming language, similarities to other languages, libraries description, memory management.

User Interface (UI): Use the tools for UI implementation and UI prototypes for the effective UI design and deployment.

Gestures: built-in gestures, creation of customized gestures.

Sensors: programming the camera, compass, location, accelerometer, and other sensors.

Databases: create SQLite database, use the database, how we show the results.

Communication: create applications with access to the Internet, RSS, XML, peer to peer.

Other: future developments and other issues.

Assessment Method

Final Exam

Mid-Term/Lab Exams

Assignments

Required Textbooks/Reading:

Title	Author(s)	Publisher	Year
Android How to Program	P. Deitel, H. Deitel	Pearson	2016
Programming Android: Java Programming for the New Generation of Mobile Devices	Z. Mednieks, L. Dornin, G.B. Meike, M. Nakamura	O'Reilly Media	2012