IMMUNE TECHNOLOGY INSTITUTE

COMPUTER ENTREPRENEURSHIP BACHELOR

BLOCK NAME	**MOBILE PROGRAMMING II**
BLOCK CODE	**CS-L3B5**

COURSE	**2**
LEVEL	**3**
CREDITS	**4**
CLASS HOURS	**40**
HOMEWORK	**60**
TOTAL HOURS	**100**

DESCRIPTION

This block delves into Android mobile programming.
We will face the challenge of creating an advanced Android App that will be able to act as a multimedia store for showing/playing and recording/capturing audio, images and video. Such App will access a local database in order to take a record of the information it is managing, and will also be able to connect to external servers to exchange complementary information.

PRE-REQUISITES

Basic general programming and mobile programming skills are needed. Knowledge about networking is desirable.
CS-L1B1, CS-L3B1, CS-L3B4

OBJECTIVES

The goal is for students to be able to write Android applications that use local databases and can also connect to servers.

SKILLS TO BE DEVELOPED

1 - Audio.
1.1 - Be able to add audio playback to an Android App.
1.2 - Be able to record audio from an Android App.
2 - Image.
2.1 - Be able to display images at an Android App.
2.2 - Be able to capture images from an Android App.
3 - Video.
3.1 - Be able to play video at an Android App.
3.2 - Be able to capture video from an Android App.
4 - Local database access.
4.1 - Be able to create a local database for an Android App.
4.2 - Be able to access a local database from an Android App.
5 - Connecting with servers.
5.1 - Be able to perform http requests to external web servers.
5.2 - Be able to use data in JSON format.

SYLLABUS

1 - Audio.
2 - Image.
3 - Video.
4 - Local database access.
5 - Connecting with servers.

METHODOLOGY

Resolution of practical activities supervised by the mentor. Compulsory attendance.

DEDICATION AND EVALUATION

The student must pass the mandatory activities (challenges/projects) that are covered in the block.
Each challenge/project produces its own score and has been designed to cover certain block percentages.
Such score is 80% objective (the program that solves the challenge/project works without errors and producing the expected results) and 20% subjective (solution elegance, how clean the code is, documentation).
Block scores are finally calculated by prorating individual activities with respect to their block coverage percentages.