IMMUNE
TECHNOLOGY INSTITUTE

COMPUTER ENTREPRENEURSHIP BACHELOR

BLOCK NAME	**NETWORKING**
BLOCK CODE	**CS-L3B1**

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

DESCRIPTION

This block introduces network usage and its related protocols.
We will face the challenge of creating a client-server solution enabling client-program users to share information that will be stored on a server-program accessible to all of them. This challenge will facilitate the learning of the client-server paradigm and the basic procedures commonly used to communicate programs through the network.

PRE-REQUISITES

Basic programming skills are needed.
CS-L1B1

OBJECTIVES

The goal is for students to understand how networks work in order to make good use of them.

SKILLS TO BE DEVELOPED

1 - Network types.
1.1 - Be able to differentiate and name the most common types of network.
2 - Network equipment.
2.1 - Be able to differentiate and name the most common types of network equipment.
2.2 - Connect and configure a PC to use the network.
3 - Internet Protocol Stack.
3.1 - Understand Internet Protocol (IP).
3.2 - Understand User Datagram Protocol (UDP).
3.2 - Understand Transmission Control Protocol (TCP).
4 - Programs that use networking.
4.1 - Write programs that connect and communicate with others over the network.
5 - Client-Server applications.
5.1 - Write a server program following the Client-Server paradigm.
5.2 - Write a client program following the Client-Server paradigm.

SYLLABUS

1 - Network types.
2 - Network equipment.
3 - Internet Protocol Stack.
4 - Programs that use networking.
5 - Client-Server applications.

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.