Cybersecurity and Privacy

Academic Year: (2022 / 2023) **Review date: 18-05-2022**

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: PERIS LOPEZ, PEDRO

Type: Compulsory ECTS Credits : 3.0

Year : 1 Semester : 1

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

We recommend that the student has previously studied a subject related to cybersecurity in information and communication technologies.

OBJECTIVES

The student acquires the ability to model and evaluate distributed and parallel systems.
The student acquires the ability to design distributed and parallel applications.
The student acquires knowledge of the main design aspects of a distributed and parallel system.
The student learns and applies simulation techniques to simulate distributed and parallel systems.
The student acquires the ability to analyse a technical document or scientific publication critically.
The student can transmit the results of scientific research.

DESCRIPTION OF CONTENTS: PROGRAMME

Introduction to cybersecurity
State of the art of privacy
Cryptography: capabilities and limitations
Data collection and analysis: personal data and privacy
Anonymisation and de-anonymisation
Privacy technologies

LEARNING ACTIVITIES AND METHODOLOGY

AF1: Theoretical and practical classes
AF3: Tutorials
AF5: Individual work
AF4: Teamwork
AF6: Assessment tests (exam)

ASSESSMENT SYSTEM

Individual or group work carried out during the course (80%).

Final exam (20%).

% end-of-term-examination:	20
% of continuous assessment (assigments, laboratory, practicals…):	80

BASIC BIBLIOGRAPHY

- David Wright, Paul De Hert Enforcing Privacy, Springer , 2016
- Denny Cherry The Basics of Digital Privacy, Syngress, 2013
- Safeguarding Privacy, Liberty and Security Privacy-Invading Technologies and Privacy by Design, Springer , 2014
- Sophie Stalla-Bourdillon Joshua Phillips Mark D. Ryan Privacy vs. Security, Springer-Verlag London, 2014