UAB
Universitat Autònoma de Barcelona

Information and Security Management

Code: 102757
ECTS Credits: 6

Degree	Type	Year	Semester
2502441 Computer Engineering	OB	3	2
2502441 Computer Engineering	OT	4	2

Contact

Name: Guillermo Navarro Arribas

Email: Guillermo.Navarro@uab.cat

Use of languages

Principal working language: catalan (cat)

Some groups entirely in English: No

Some groups entirely in Catalan: Yes

Some groups entirely in Spanish: No

Teachers

Jordi Casas Roma

Prerequisites

There are no official requirements, but it is recommended to have basic knowledge of cryptography, computer networks and programming. This knowledge is achievable with previous courses of the degree: Networking, Information and Security, Information Technology Foundations, and Programming Methodology. It is the student respsibility to adquire these knowledge.

Objectives and Contextualisation

The aim of this course is to provide students with a basic knowledge about the problem of information security and existing mechanisms for the protection of computer systems. Students will be able to develop a critical view of the security in computer systems. Furthermore students will be able to implement some aspects of the subject. Knowing how to perform certain attacks is an important step towards understanding the needs of system security, and to then apply appropriate protection techniques in each case.

Content

Security Mechanisms
- Authentication
- Authorization and access control
- Public Key Infrastructure
- Software security
- Malware detection and Intrusion Detection

Security management and other aspects
- Vulnerability Management
- Threat modeling, pentesting
- Risk Management

- Computer forensic
- Social Engineering

In this course we see specific mechanisms for the design of information protection, access control and integrity. We also study an global overview of information security, vulnerability management, threat modeling, risk management, and we introduce disciplines such as computer forensic. Note that the order of topics may vary during the curse due to teaching planning.