



Universitat de Lleida

DEGREE CURRICULUM  
**COMPUTER SYSTEMS  
SECURITY**

Coordination: FERNANDEZ CAMON, CESAR

Academic year 2017-18

## Subject's general information

<b>Subject name</b>	COMPUTER SYSTEMS SECURITY			
<b>Code</b>	103061			
<b>Semester</b>	2nd Q(SEMESTER) CONTINUED EVALUATION			
<b>Typology</b>	Degree	Course	Typology	Modality
	Master's Degree in Computer Engineering	1	COMPULSORY	Attendance-based
<b>ECTS credits</b>	6			
<b>Groups</b>	GG			
<b>Theoretical credits</b>	0			
<b>Practical credits</b>	0			
<b>Coordination</b>	FERNANDEZ CAMON, CESAR			
<b>Department</b>	INFORMATICA I ENGINYERIA INDUSTRIAL			
<b>Important information on data processing</b>	Consult <a href="#">this link</a> for more information.			
<b>Distribution of credits</b>	Carles Mateu Piñol 3 Ramon Bejar Torres 3			
<b>Office and hour of attention</b>	Send an email to the teachers to get an appointment			

Carles Mateu Piñol  
Ramón Béjar Torres

## Learning objectives

### Strategic competences of the UdL:

Mastering of a foreign language.

Objectives:

- To know how to prepare a short oral presentation in English on a topic related to ISS.
- To work with different information sources written in English

Mastering of information and communication technologies.

Objectives:

- To know how to prepare documents with different tools for preparing digital documents

### Cross-disciplinary Competences:

Capacity to conceive, design and implement projects and/or contribute to new solutions, using engineering tools.

Objectives:

- To design a proposal for a complete security model for a scenario of network / servers.

### Specific Competences:

Capacity to design, develop, manage and evaluate mechanisms to certificate and guarantee the security in the treatment and access to the information in a processing or distributed local system.

Objectives:

- To design a proposal for a complete security model for a scenario of network / servers.

## Competences

### University of Lleida strategic competences

- **UdL2.** Mastering of a foreign language.
- **UdL3.** Mastering of Information and Communication Technologies.

### Degree-transversal competences

- **EPS4.** Capacity to conceive, design and implement projects and/or contribute to new solutions, using engineering tools.

### Degree-specific competences

- **MI17.** Capacity to design, develop, manage and evaluate mechanisms to certificate and guarantee the security in the treatment and access to the information in a processing or distributed local system.

## Subject contents

1. Security in networks.
2. Security in Servers
3. Forensic analysis and audits
4. Design of policies and security plans
5. Risk Analysis.
6. Legal aspects of information systems security

## Methodology

There will be three types of activities:

- 1) Lectures.
- 2) Laboratory classes.
- 3) Independent work outside the classroom.

## Development plan

Week	Contents
1	Introduction
2	Security in servers
3	Security in servers
4	Security in networks
5	Security in networks
6	Audits and forensic analysis
7	Audits and forensic analysis
8	Wifi Security
9	Security management through security plans
10	Security management with ISO27001
11	ISO27001 y ISO27002
12	Risk Analysis - Asset modelization and valuation
13	Risk Analysis - Threat modelization and valuation
14	Risk Analysis - legal aspects

## Evaluation

Three individual assignments:  
(35% A1, A2 35%, 30% A3)

A1: Discussion of a paper on the Virtual Campus.

A2: Security Analysis on servers.

A3: Risk analysis

## Bibliography

All learning material for this part will be provided during the course in the form of slides, notes and manuals of the different programs to be used.