

## 30242 - Warantee and Security

### Información del Plan Docente

Academic Year	2017/18
Faculty / School	110 - Escuela de Ingeniería y Arquitectura
Degree	439 - Bachelor's Degree in Informatics Engineering
ECTS	6.0
Year	4
Semester	Indeterminate
Subject Type	Compulsory
Module	---

### 1.General information

#### 1.1.Introduction

#### 1.2.Recommendations to take this course

#### 1.3.Context and importance of this course in the degree

#### 1.4.Activities and key dates

### 2.Learning goals

#### 2.1.Learning goals

#### 2.2.Importance of learning goals

### 3.Aims of the course and competences

#### 3.1.Aims of the course

#### 3.2.Competences

### 4.Assessment (1st and 2nd call)

#### 4.1.Assessment tasks (description of tasks, marking system and assessment criteria)

### 5.Methodology, learning tasks, syllabus and resources

#### 5.1.Methodological overview

The learning process that is designed for this subject is based on the following:

Tracking of the learning activities for this subject.

## **5.2.Learning tasks**

The program that the student is offered to help you achieve the expected results includes the following activities

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- Lectures
- Problem-solving classes.
- Laboratory sessions.
- Practical work.
- Study and personal work.

## **5.3.Syllabus**

- Mission Critical Facilities and RAS (Reliability, Availability, Serviceability)
- Techniques to increase reliability and fault tolerance in the processor, memory and I/O. Chips and systems oriented server chip. Case Study: IBM, Oracle, Intel, AMD, ARM, etc.
- Role of the operating system in the supply RAS: partitioning, paging and reconfigurable migration. Graduation system failures, preventive diagnosis, hot repair and degraded operation. Protection mechanisms and security policies and user identification security. Case Study: Oracle Solaris, IBM z series (OS, VM, VSE, etc.)
- Virtual machines (VM): VM user and VM system. Performance and architecture supports the execution of MV. Applications and advantages of the MV: administration, security, migration and consolidation. Case Study: VirtualBox, Parallels, VMware, QEMU, Windows Virtual PC, etc.
- System Architecture: e-mail and web

## **5.4.Course planning and calendar**

**Schedule sessions and presentation of works**

It will be published when the academic calendar is approved.

## **5.5.Bibliography and recommended resources**

[BB: Bibliografía básica / BC: Bibliografía complementaria]

- [BB] Smith, James Edward. Virtual machines : versatile platforms for systems and processes / James E. Smith, Ravi Nair . Elsevier, 2005