

## 30043 - Simulation and Analysis of Mechanical Systems in Mechatronics

### Información del Plan Docente

Academic Year	2016/17
Academic center	110 - Escuela de Ingeniería y Arquitectura
Degree	436 - Bachelor's Degree in Industrial Engineering Technology
ECTS	6.0
Course	4
Period	First semester
Subject Type	Optional
Module	---

### 1. Basic info

#### 1.1. Recommendations to take this course

#### 1.2. Activities and key dates for the course

### 2. Initiation

#### 2.1. Learning outcomes that define the subject

#### 2.2. Introduction

### 3. Context and competences

#### 3.1. Goals

#### 3.2. Context and meaning of the subject in the degree

#### 3.3. Competences

#### 3.4. Importance of learning outcomes

### 4. Evaluation

### 5. Activities and resources

#### 5.1. General methodological presentation

#### 5.2. Learning activities

#### 5.3. Program

\* C onventional and parametric design and modeling of mechanical systems

\* C onventional or serial, parallel and Flexible Kinematics

\* K inematic analysis of mechanical systems

\* D ynamic analysis of mechanical systems and components

## **30043 - Simulation and Analysis of Mechanical Systems in Mechatronics**

- \* CAE Systems for analysis and simulation of mechanical systems
- \* Dynamic and resilient MEF analysis of mechanical systems and their elements
- \* Analysis of robots, space mechanisms

### **5.4.Planning and scheduling**

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