30043 - Simulation and Analysis of Mechanical Systems in Mechatronics

Información del Plan Docente

Academic Year	2018/19
Subject	30043 - Simulation and Analysis of Mechanical Systems in Mechatronics
Faculty / School	110 - Escuela de Ingeniería y Arquitectura
Degree	436 - Bachelor's Degree in Industrial Engineering Technology
ECTS	6.0
Year	4
Semester	First semester
Subject Type	Optional
Module	---

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

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

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

4.2.Learning tasks

4.3.Syllabus

* Conventional and parametric design and modeling of mechanical systems
* Conventional or serial, parallel and Flexible Kinematics
* Kinematic analysis of mechanical systems
* Dynamic analysis of mechanical systems and components
* 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

4.4.Course planning and calendar

4.5.Bibliography and recommended resources