30167 - Computer Assisted Design

Información del Plan Docente

Academic Year	2017/18
Faculty / School	175 - Escuela Universitaria Politécnica de La Almunia
Degree	425 - Bachelor's Degree in Industrial Organisational Engineering
ECTS	6.0
Year	4
Semester	Second semester
Subject Type	Optional
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:

- **Theoretical-Practical classes** : Theoretical activities conducted by the teacher, so that the theoretical support of the subject is given, highlighting the major issues, structuring them on chapters and / or sections and connecting them to each other. Theoretical discussion activities or practice work preferably performed in the classroom and requiring high student participation

30167 - Computer Assisted Design

- **Individual and/or group tutorials:** These are made on a one-to-one basis, at the department. They aim to help solving problems that are the students might have, particularly those which for several reasons cannot attend group tutorials or need a more personalized attention. These tutorials may be face-to-face or virtual (Moodle or e-mail) in a timetable published on the EUPLA website

5.2.Learning tasks

The program that the students are offered to help them achieve the expected results involves the following activities...

... which involve the active participation of the students, so that, to achieve the learning outcomes, the following activities will be developed

- **Theoretical-Practical classes (30h)** : The concepts and procedures of the subject will be developed and practical examples as support will be developed. Also, problems and case studies will be done to complement the theoretical concepts studied
- **Lab practice work (30h)** : Students will be divided into several groups being monitored by the teacher and they will develop the concepts and procedures, particularly those of CAD-CAE
- **Tutorials:** Monitored autonomous activities: Although they will rather have a mixed nature between face-to-face and non-class tuition they have been considered separately and will be focused mainly to seminars and tutorials under the supervision of the teacher.
- **Personal Study** : Assimilation of the concepts and procedures for a proper learning process

5.3.Syllabus

Essential Contents of the subject for the achievement of learning outcomes

INTRODUCTION AND BASIC ARCHITECTURE

- Program and presentation of the course
- Factory design tools
- Architecture principles
- Creating the "continent"
- Interior features

MODELING COMPONENTS AND ASSEMBLIES

- Introduction to modeling. Basic drawing techniques
- Shape design. Characteristics

FACTORY DESIGN. LAYOUT AND ASSET

- Factory design utilities. Asset traces and location
- Factory asset publication
- Workflow

DOCUMENTATION-NAVIGATION AND SIMULATION

- Factory design utilities. Asset traces and location
- Naviswork
- Displaying. The digital prototype
- Collisions and collaboration

5.4.Course planning and calendar

The lectures and practical sessions in the laboratory are given according to the schedule set up by the School and it is

published, prior to the start date of the course, on the EUPLA website, as well as the tutorial schedule.

The rest of activities (handing-in of tasks, assessment tests, etc.) will be planned according to the planning of the Subject and will be communicated to the students at the beginning of the course.

5.5.Bibliography and recommended resources

RESOURCES:

- Access to the subject documentation using the Moodle platform

BIBLIOGRAPHY:

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30167 - Computer Assisted Design

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BC	Autodesk Naviswork. (Manual básico)

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Manual electrotécnico Telesquemario Schneider Electric España, S.A. - [http://www.schneider-electric.com.co/documents/soporte/telesquemario.pdf]