28830 - Technical Office

Información del Plan Docente

Academic Year	2017/18
Faculty / School	175 - Escuela Universitaria Politécnica de La Almunia
Degree	424 - Bachelor's Degree in Mechatronic Engineering
ECTS	6.0
Year	4
Semester	First semester
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:

- **Lectures** : 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.
- **Classroom practice work/seminars/workshops:** Theoretical discussion activities or practice work preferably performed in the classroom and requiring high student participation

- **Lab Practice work** : The total group of master classes will be divided into several groups according to the number of students enrolled, but never more than 20 students, so that smaller groups are formed. CAD-CAE Practical Activities with the relevant software will be made in the Technical Office classroom.
- **Individual/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 (Considering the experimental level is high,which means a 2h a week for Theory, 2h for practice work and 6 for other activities),no redundancy intended with the above mentioned, 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 not bigger than 20 students / being monitored by the teacher and they will develop the concepts and procedures in 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

Part 1.- Theory on Methodology, Planning and Project Regulations

1 THE TECHNICAL OFFICE

- Technical role in the company
- T.O. Functions: Demand forecast and upon request
- T.O Organization
- T.O. Relation with Departments.
- T.O. Role in the client-company relationship

2 THE PROJECT

- The project: Concepts and Classification
- Project Factors
- Project Stages
- Methodology

3 PROJECT DOCUMENTS

- UNE Standards
- Project Documents: Memory, Plans, P.C., Budget Annexes, and Planning

4 DRAWING IN THE PROJECTS

- General Plans

- Systems and Subsystems
- Group Drawings (UF). Lists
- S ubgroup Drawings. Lists
- Workshop Drawings. Lists
- Welded Parts. Lists
- Information and Basic Engineering

5 PROJECT MANAGEMENT

- General Issues
- Tasks and Dependencies. Reports
- Resources and Workloads. Reports
- Monitoring and Control. Reports

6 QUALITY AND LEGAL ISSUES

Part 2: Theory-Practice Knowledge and Application of Computer Tools for the Design Drawings

- Application in the development of CAD / CAE (I) (Plans)
- Application in the development of CAD / CAE (II) (Solid Modeling)
- Application in the development of CAD / CAE (III) (Schemes)

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:

THE UPDATED BIBLIOGRAPHY OF THE SUBJECT CAN BE CONSULTED THROUGH THE LIBRARY WEB PAGE http://psfunizar7.unizar.es/br13/eBuscar.php?tipo=a

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