30131 - Project Office

Información del Plan Docente

Academic Year 2017/18

Faculty / School
175 - Escuela Universitaria Politécnica de La Almunia
179 - Centro Universitario de la Defensa - Zaragoza

Degree
425 - Bachelor's Degree in Industrial Organisational Engineering
457 - Bachelor's Degree in Industrial Organisational Engineering
563 - Bachelor's Degree in Industrial Organisational 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:

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The focus of the subject is primary practical and oriented to enable the student with the necessary professional engineering skills.

The subject consist of 6 ECTS representing 150 working hours of the student during the semester (15 weeks). The teaching activities of the subject are structured into the following main points:

- Theory
- Case studies and practical work in class
- Experts seminars
- Group and individual office hours

5.2. Learning tasks

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

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... which involve the active participation of the students, so that, to achieve the learning outcomes (Considering the experimental level is high, which means 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.
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The final practical project of the Project Management subject consists of the realization of a practical work applied to the
degree context, showing the skills and knowledge acquired by the student in the subject. The project will be a written as
an academic report (Pdf format) and an oral presentation explaining the key facts of the project should be done in class
(PowerPoint).

The final project will be carried out in groups of 3 or 4 people maximum who will undertake the specific roles of the
project. Practical work sessions will be carried out in class with the supervision of the professor after the corresponding
project management theory explanation. The remaining work will be self done by the group.

Several control points of the final project will be established by the professor as a continuous assessment during the
semester. Soft and hard copies of the final project will be sent to the corresponding professor in the requested dates of
presentation.

The oral presentation will be done to an advisory board integrated by multidisciplinary professors of the Centro
Universitario de la Defensa. The presentation will take 15 minutes maximum per group and it will finished with a 5 minute
round of questions to be carried out by the board. The presentation could make use of a PowerPoint file and additional
material such as videos or documents. The language of the presentation will be English.

5.3.Syllabus

Essential Contents of the subject for the achievement of learning outcomes

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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
4 DRAWING IN THE PROJECTS

- General Plans
- Systems and Subsystems
- Group Drawings (UF). Lists
- Subgroup 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)

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The syllabus of the subject is following explained:

- Unit 1: Introduction.
- Unit 2: Project integration analysis.
- Unit 3: Stakeholders management.
- Unit 4: Project scope definition.
- Unit 5: Time management.
- Unit 6: Risk management.
- Unit 7: Procurement management.
- Unit 8: Quality management.
- Unit 9: Cost management.
- Unit 10: Human resources management.
- Unit 11: Communication management.

5.4. Course planning and calendar

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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.
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The planning and calendar of the subject will be announced by the professor of the subject via Moodle platform. Project management is a compulsory subject to be taught in the first semester of the fourth year of the study plan, being common to all the branches offered in the degree. It consist of 6 ECTS credits.

This subject focuses on project management methodology as a key tool for an engineer. This methodology provides the student with the necessary skills to be able to understand, plan and solve any technical or management project in the industrial, civil or military field. It fosters the development of general competences like team work, self-learning and the capacity for theoretical concept application. Case studies and practical work will be carried out in class or by the students (self-study) during the term. They will be used for discussion in the practical sessions so that the students could have an active role in their learning curve process. The analytical and synthesis skills developed by the student, being able to analyze obtained results within a project, will be key points to take into account for their assessment.

According the syllabus included in the chapter 5.3, the hourly distribution of the theory units and practical sessions is explained in the following schedule:

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5.5. Bibliography and recommended resources

RESOURCES:

- Access to the subject documentation using the Moodle platform

BIBLIOGRAPHY (SPECIALIZATION IN BUSINESS):

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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Tobes Monzón, Julio. Apuntes Asignatura O.T. 1 edc La Almunia: EUPLA, 2012

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Piedrafita Moreno, Ramón. Ingeniería de la automatización industrial / Ramón
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Rodríguez de Abajo, F.Javier. Dibujo técnico / F.Javier Rodríguez de Abajo,
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F.Javier Rodríguez de Abajo, Roberto
Rodríguez Mata, Antonio. Desarrollo de sistemas secuenciales / Antonio Rodríguez
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Mata, Julián Cóceres Rueda [Madrid] :
Serrano Nicolás, Antonio. Neumática práctica / Antonio Serrano Nicolás Madrid :
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Vidondo, Tomás.. Tecnología mecánica 3 /
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LISTADO DE URLs:
Autodesk electrical -
Manual electrotécnico Telesquemario Schneider Electric España, S.A. -

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- Preparación para el examen PMP. Rita Mulcahy. RMC publications
- UNE ISO 21500 Directrices para la dirección y gestión de proyectos. AENOR. Marzo 2013