

Course guide 295912 - DP1 - Project Development I

Last modified: 14/06/2023

Unit in charge: Barcelona East School of Engineering

Teaching unit: 702 - CEM - Department of Materials Science and Engineering.

707 - ESAII - Department of Automatic Control.
709 - DEE - Department of Electrical Engineering.
710 - EEL - Department of Electronic Engineering.
712 - EM - Department of Mechanical Engineering.

737 - RMEE - Department of Strength of Materials and Structural Engineering.

Degree: BACHELOR'S DEGREE IN BIOMEDICAL ENGINEERING (Syllabus 2009). (Optional subject).

BACHELOR'S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2009). (Optional subject). BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING (Syllabus 2009). (Optional subject). BACHELOR'S DEGREE IN ENERGY ENGINEERING (Syllabus 2009). (Optional subject).

BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus

2009). (Optional subject).

BACHELOR'S DEGREE IN MECHANICAL ENGINEERING (Syllabus 2009). (Optional subject). BACHELOR'S DEGREE IN MATERIALS ENGINEERING (Syllabus 2010). (Optional subject).

Academic year: 2023 ECTS Credits: 6.0 Languages: Catalan, Spanish, English

LECTURER

Coordinating lecturer: Velasco Quesada, Guillermo

Tornil Sin, Sebastian

Others: Lluma Fuentes, Jordi

Mateo Garcia, Antonio Manuel Guerra Paradas, Edmundo El Mariachet Carreño, Jorge López Paricio, Roque Velázquez Corral, Eric

PRIOR SKILLS

It is convenient to have passed all the compulsory subjects of the curriculum.

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Transversal:

04 COE N3. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 3. Communicating clearly and efficiently in oral and written presentations. Adapting to audiences and communication aims by using suitable strategies and means.

06 URI N3. EFFECTIVE USE OF INFORMATION RESOURCES - Level 3. Planning and using the information necessary for an academic assignment (a final thesis, for example) based on a critical appraisal of the information resources used.

07 AAT N3. SELF-DIRECTED LEARNING - Level 3. Applying the knowledge gained in completing a task according to its relevance and importance. Deciding how to carry out a task, the amount of time to be devoted to it and the most suitable information sources.

TEACHING METHODOLOGY

Student activities leaded by the professor.

Reading teaching material, texts and articles related to the contents of the subject.

Student's autonomous work

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LEARNING OBJECTIVES OF THE SUBJECT

To use tools and techniques for the engineering project management including planning, development and execution. To know and implement rules and specifications. $\hat{a} = 0$ write text with correct structure to the communication objectives.

To introduce the assessment to the audience following the correct strategies and resources. $\hat{a} \square \otimes To$ identify the need and type of communication register, the surrounding and services within the knowledge field and context.

To develop and implement projects from the original guidelines transmitted by the professor within the aspects written before. $\hat{a} \square @$ To have a proactive attitude that generate new opportunities within a commercial perspective. $\hat{a} \square @$ To be able to evaluate the economic cost (budget) of the different tasks in the project.

To be able to analyse and evaluate the social and environmental impact.

CONTENTS

Engineering Project

Description:

Preliminary Project, final Project and viablity. Phases and concepts

Full-or-part-time: 13h 20m Guided activities: 5h 50m Self study: 7h 30m

Technical documentation

Description:

Identify information needs and use the collections, spaces and services to design and carry out searches appropriate to the subject area.

Full-or-part-time: 13h 20m Guided activities: 5h 50m Self study: 7h 30m

Project Management

Description:

Carry out work based on basic guidelines, deciding time to devote to each section, including personal contributions and expanding sources of information.

Assess the economic cost of the different tasks included in work.

Full-or-part-time: 12h 30m

Guided activities: 5h Self study: 7h 30m

Environmental, health and safety aspects of the project

Description:

Ability to analyze and assess the social and environmental impact.

Full-or-part-time: 10h Guided activities: 2h 30m Self study: 7h 30m

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Communication in Projects

Description:

Write texts with the appropriate structure for the communication objectives.

Full-or-part-time: 30h Guided activities: 5h Self study: 25h

Standardization and regulation

Description:

Know and apply specifications, regulations and standards.

Full-or-part-time: 10h 50m Guided activities: 3h 20m Self study: 7h 30m

Preparation of a project as an integrative or synthesis exercise

Description:

Realization of a project within the scope of the specific technologies of engineering of a professional nature in which the skills acquired throughout the studies are synthesized and integrated.

Full-or-part-time: 25h Self study : 25h

Preparation of evaluable activities

Description:

Prepare the presentation of texts and other material for the exhibition of the work carried out, taking into account the approach of appropriate strategies and means.

Full-or-part-time: 30h Self study : 30h

Project Defense

Description:

Preparations and defense in front of the assigned university court.

Full-or-part-time: 5h Guided activities: 5h

GRADING SYSTEM

Evaluation from the presentation of a preliminary draft and a presentation of the work before an assigned commission. The commission will be take into account:

- Individual work
- Written and oral presentation related to the contents of the subject
- Written and oral presentation of the project before the commission that will assess the acquired competences knowledges and abilities.

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EXAMINATION RULES.

In order to be able to present the work before the assigned commission, the final revision by the advisor professor of the final report is necessary.

The work must be presented according to the normalization established by the School.