Course guide
340131 - TFGR-K8R40 - Bachelor's Thesis

Last modified: 07/06/2023

Unit in charge: Vilanova i la Geltrú School of Engineering
Teaching unit: 340 - EPSEVG - Vilanova i la Geltrú School of Engineering.

Degree: BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Project subject).

Academic year: 2023 **ECTS Credits:** 24.0 **Languages:** Catalan, Spanish, English

LECTURER

Coordinating lecturer: Jaume Miret Tomàs

Others: Tot el PDI de l'EPSEVG pot ser Director de TFG's.

PRIOR SKILLS

It is advisable to have passed all the courses in the curriculum.

REQUIREMENTS

The TFG will, as a rule, be held in the last quarter of the degree. Student can enrol in the last one quadrimeter of the degree, when at most 36 credits remain to be exceeded. Enrollment of TFG is a prerequisite for Enrollment.

TEACHING METHODOLOGY

Student Activities directed by TFG Director.
Reading of didactic material, texts and articles related to the content of the subject.
Self-employed work.

LEARNING OBJECTIVES OF THE SUBJECT

Use techniques and tools for engineering project management, including planning, development and execution.
To know and apply specifications, regulations and rules.
Compose texts with the structure appropriate to the communication objectives.
To present the text to an audience with the appropriate strategies and means.
Identify your own information needs and use the available collections, spaces and services to design and run adequate research in the thematic field.
To carry out tasks in charge of the basic guidelines given by the professor, deciding the time to be used in each section, including personal contributions and expanding the sources of information indicated.
Take initiatives that generate opportunities, with a vision of process and market implementation.
Ability to assess the economic cost of different tasks including work.
Ability to analyse and assess the social and environmental impact.

STUDY LOAD

Type	Hours	Percentage
Self study	590,0	98.33
Hours large group	10,0	1.67

Total learning time: 600 h

CONTENTS

Engineering Project

Description:
Phases and concept of preliminary draft, project and feasibility

Full-or-part-time: 55h
Guided activities: 25h
Self study : 30h

Technical documentation

Description:
Identify information needs and use collections, spaces and services to design and execute searches suitable for the thematic area.

Full-or-part-time: 55h
Guided activities: 25h
Self study : 30h

Project Management

Description:
Perform work based on basic guidelines, deciding time to devote to each section, including personal contributions and expanding information sources.
To assess the economic cost of the different tasks that include work.

Full-or-part-time: 55h
Guided activities: 25h
Self study : 30h

Environmental and health and safety aspects of the project

Description:
Ability to analyse and assess the social and environmental impact.

Full-or-part-time: 55h
Guided activities: 25h
Self study : 30h

Communication on projects

Description:
Compose texts with the structure appropriate to the communication objectives.

Full-or-part-time: 125h
Guided activities: 25h
Self study : 100h

Normalization and regulation

Description:
To know and apply specifications, regulations and rules.

Full-or-part-time: 45h
Guided activities: 15h
Self study : 30h

Contribution of a final career job as an integrating or synthesis exercise

Description:
Performing a project in the field of the specific technologies of industrial electronics and automatic control of a professional nature in the to summarise and integrate the skills acquired during the course of the studies.

Full-or-part-time: 100h
Self study : 100h

Preparing Evaluable Activities

Description:
Preparing the presentation of texts and other material for the public exposure of the work done, taking into account the approach suitable strategies and means.

Full-or-part-time: 106h
Self study : 106h

TFG Defense

Description:
Preparations and public defense before the assigned university court.

Full-or-part-time: 4h
Guided activities: 4h

GRADING SYSTEM

Assessment based on the presentation of a project and a public exhibition of the work carried out before an assigned university court.
The assessment will take into account:
- Individual work
- Written and oral presentation of the TFG to a court that will assess acquired skills, knowledge and skills.

EXAMINATION RULES.

In order to be able to defend work before the assigned court, the final review and authorisation by the teacher will be required director of the same of the final memory.
The work will have to be presented according to the normalisation of the work established by the School. To this goal, the student will find all information and templates on School website (https://www.epsevg.upc.edu/es/curso-actual/tfe).