Course guide
205514 - 205514 - Paper and Graphic Industrial Challenge

Last modified: 11/04/2025

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 717 - DEGD - Department of Engineering Graphics and Design.

Degree: MASTER'S DEGREE IN PAPER AND GRAPHICS TECHNOLOGY (Syllabus 2020). (Optional subject).

Academic year: 2025 **ECTS Credits:** 3.0 **Languages:** Spanish

LECTURER

Coordinating lecturer: Roncero Vivero, Maria Blanca
Valls Vidal, Cristina
Cusola Aumedes, Oriol

Others:

TEACHING METHODOLOGY

The teaching methodology is divided into the following parts:
• A face-to-face session where the student will discuss with the teachers the challenge to be developed.
• Monitoring sessions on the development of work.
• Autonomous work on the chosen topic.
• Oral presentation of the work.

LEARNING OBJECTIVES OF THE SUBJECT

At the end of the course the student must:
• Have acquired skills to identify industrial challenges such as globalization, technological transformation, environmental impact, or the transformation towards the circular bioeconomy.
• Apply the knowledge acquired in the other subjects of the master's degree to identify, formulate and solve problems in multidisciplinary contexts.
• Identify the specific challenges of the company in the sector whose professional experience has been validated.
• Communicate the knowledge and conclusions, both orally and in writing, to specialized and non-specialized audiences in a clear way.

STUDY LOAD

Type	Hours	Percentage
Hours small group	27,0	36.00
Self study	48,0	64.00

Total learning time: 75 h

CONTENTS

Module 1: Industrial challenge

Description:
This subject is aimed to students of the MUTPiG taking the route 3 consisting in the validation of their professional experience in the paper and graphic sector.
The student will identify and choose a technological challenge specific to the companies in the paper and graphic sector where he/she is carrying out (or has carried out) his professional experience, and to develop it. The challenge may consist of: New management models, conversion and adaptation of existing industries, improvements in industrial energy efficiency, digital technologies for the optimization of industrial productivity, implementation of new industries 4.0 and industrial solutions, use of resources and circular economy.
The student will present the work proposal to the teachers and will then have to do a written report. In the report, he/she will develop the topic in detail with the corresponding solutions to answer the challenge. Finally, the work will be presented orally to the teachers.

Full-or-part-time: 75h
Theory classes: 27h
Self study : 48h

ACTIVITIES

Activity 1: Written work

Description:
Completion of the written work. The student will autonomously analyze the challenges arising from his/her professional experience, and will choose one (or more) for their development. Prior to the start of the development, the student will present the challenge to the teachers of the subject, who will validate it. After validation, the student will work autonomously, and will finally write the report.

Full-or-part-time: 25h
Self study: 16h
Theory classes: 9h

Activity 2: Oral defense

Description:
Preparation of the oral defense. Oral presentation of the work done to the teachers.

Full-or-part-time: 50h
Self study: 32h
Theory classes: 18h

GRADING SYSTEM

The final grade of the subject (NG) will be the result of the following calculation:
NG = 0.50 x EV1 (Written report) + 0.50 x EV2 (Oral Defense)
On:
EV1 Grade obtained in the evaluation of the written report (activity 1).
EV2 Grade obtained in the oral presentation of the work done (activity 2).
The work will be individual and will be delivered as a written report. It is a necessary condition to pass the subject to do both: the written work and the oral defense.