



Course guide

205563 - 205563 - Textile Industrial Challenge

Last modified: 11/04/2025

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 702 - CEM - Department of Materials Science and Engineering.

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

Academic year: 2025 **ECTS Credits:** 3.0 **Languages:** Catalan, Spanish, English

LECTURER

Coordinating lecturer: Diana Cayuela Marín

Others:

PRIOR SKILLS

Have taken the compulsory subjects of the Master's Degree in Textile Design and Technology

TEACHING METHODOLOGY

Autonomous work by the student under the supervision and guidance of the teacher of the subject. Teachers will provide a study and activity monitoring plan (ATENA).

LEARNING OBJECTIVES OF THE SUBJECT

By developing an industrial challenge in the company where the student works, at the end of the course he must:

- know how to apply a specific methodology to the development or research studied
- to know the tools at our disposal for the bibliographic search
- know how to organize the documentation, extract the information from the results obtained and translate them in an appropriate way in a document.

STUDY LOAD

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

Total learning time: 75 h



CONTENTS

Subject 1. Study of the problem and approach of the solution

Description:

The student will develop the problem to be solved or process to be improved or implemented. Once analyzed, a bibliographic search will be made with the bibliographic search tools at our disposal and, once the state of the art of the subject has been analyzed, a working hypothesis will be considered.

Specific objectives:

Propose solutions with the most up-to-date information on possibilities.

Full-or-part-time: 18h

Laboratory classes: 10h

Self study : 8h

Subject 2. Development of the experimental plan

Description:

An experimental plan is developed, designed from the data obtained in subject 1. This experimental plan is developed in the facilities of the company where the student works and the results obtained are analyzed.

Full-or-part-time: 42h

Practical classes: 7h

Self study : 35h

Subject 3. Presentation of the results

Description:

Once the experimental work has been completed, the student will write the document of the report of the developed work and also present it orally.

Full-or-part-time: 15h

Laboratory classes: 10h

Self study : 5h

GRADING SYSTEM

Interim reports of the work carried out: 25%

Final report of the work carried out: 50%

Oral presentation of the work developed: 25%

RESOURCES

Other resources:

Notes available to students at ATENEA