

# Master's degree in Paper and Graphics Technology

The main aim of the **master's degree in Paper and Graphics Technology** is to contribute to and become a benchmark for technical and scientific education in the paper and graphics sector, including all the basic technological aspects of the sector and process and product innovation. In particular, the intention is to contribute to training in the design of new products with a high added value and improved manufacturing processes, in order to adapt to new needs and strategies in the industrial sector and the socioeconomic environment.

This master's degree has a dual professional and research orientation and therefore takes into account technology, research and innovation needs in the entire cycle of paper products.

## **GENERAL DETAILS**

## **Duration and start date**

1 academic year, 60 ECTS credits. Starting September

## Timetable and delivery

Mornings. Face-to-face

## Fees and grants

Approximate fees for the master's degree, **excluding other costs** (does not include non-teaching academic fees and issuing of the degree certificate):

€1,660 (€6,331 for non-EU residents).

More information about fees and payment options

More information about grants and loans

## Language of instruction

Spanish

Information on language use in the classroom and students' language rights.

## Location

The School of Industrial, Aerospace and Audiovisual Engineering of Terrassa (ESEIAAT)

## Official degree

Official title

## **ADMISSION**

#### **General requirements**

Academic requirements for admission to master's degrees

## Specific requirements

#### **Direct admission**

The recommended entrance qualifications for the master's degree are those listed below. Graduates of these programmes are not required to take any bridging courses.

- Bachelor's degree in an industrial engineering field.
- Bachelor's degree in Forest Engineering, Natural Environment Engineering, Food Engineering, Agronomic Science
  Engineering, Agricultural, Environmental and Landscape Engineering, Engineering Physics, Agricultural Engineering or
  equivalent.
- Pre-EHEA industrial engineering degree.
- Pre-EHEA industrial engineering diploma.
- Pre-EHEA degree in Forest Engineering, Agronomic Engineering or equivalent.
- Pre-EHEA diploma in Forest Engineering, Agricultural Engineering or equivalent.
- Bachelor's degree in Chemistry, Physics, Biology, Biotechnology, Biochemistry, Environmental Sciences or equivalent.
- Pre-EHEA degree in Chemistry, Physics, Biology, Environmental Sciences or equivalent.

## **Bridging courses**

For holders of qualifications other than those that provide direct admission, the academic committee will review each applicant's academic record to determine what bridging courses must be taken if the student is admitted.

Applicants who do not hold one of the recommended qualifications will be required to take bridging courses carrying between 0 and 30 ECTS credits. When a student is required to take bridging courses that carry 15 or fewer ECTS credits, the subjects must be taken in the first semester of the master's degree. Students who are required to take bridging courses that carry more than 15 ECTS credits must take the corresponding subjects before starting the master's degree.

Any bridging courses required will be subjects taught on bachelor's degrees in the industrial engineering field at the Terrassa School of Industrial, Aerospace and Audiovisual Engineering (ESEIAAT).

## **Admission criteria**

- Academic record: 60%
- Professional experience: 10%
- English-language level: 10% (proof of a level corresponding to a B2.2 certificate in the Common European Framework of Reference)
- Entrance qualification: 20%

## **Places**

30

# **Pre-enrolment**

Pre-enrolment period open. Expected deadline: 01/07/2024.

How to pre-enrol

#### **Enrolment**

How to enrol

# Legalisation of foreign documents

All documents issued in non-EU countries must be legalised and bear the corresponding apostille.

## **PROFESSIONAL OPPORTUNITIES**

## **Professional opportunities**

Graduates may find employment in any of the areas that constitute the paper industry and the printing and paper handling industry, from research into raw materials to digital printing finishes on paper substrates, including the processing of fibres and the manufacture of paper, cardboard and complex by-products.

This wide range of sectors is justified by the fact that the degree encompasses all aspects of the process, from the raw material to the final product that reaches the market (raw materials, fibre production, paper production, paper recycling, printing industry, paper converting).

Future graduates may also find work in a variety of industries related to the paper industry, such as the manufacture and marketing of chemical products, the manufacture of felts and other textiles and the manufacture of printing components such as inks and toners.

They will have a wide range of opportunities in the paper, graphics and related fields, in which they will be able to occupy positions with quite different profiles: production heads, designers, product quality managers, research specialists, heads of development and innovation in paper and printing processes and products, technical and commercial support staff, in-company environmental specialists, etc.

## **Competencies**

# **Generic competencies**

Generic competencies are the skills that graduates acquire regardless of the specific course or field of study. The

generic competencies established by the UPC are capacity for innovation and entrepreneurship, sustainability and social commitment, knowledge of a foreign language (preferably English), teamwork and proper use of information resources.

# **Specific competencies**

- To identify and assess raw materials and intermediate and final products in the field of paper and graphics technology.
- To analyse and apply unit operations and manufacturing process systems within the field of the degree.
- To apply environmental and sustainability technologies within the field of degree.
- To select and assess sources of vegetable fibres that are appropriate for the manufacture of paper products that have specific technical characteristics.
- To select and assess the auxiliary products that are most suitable for material processes and for developing new properties of materials in papermaking and printing processes.
- To analyse and assess, in theoretical and experimental terms, the specific structural, physical, mechanical and optical properties of materials in papermaking and printing.
- To develop types of paper, supports and other paper products in view of the specifications that must be met and their specific technical applications.
- To carry out and present and defend before an examination committee an original, individual piece of work consisting of a study or project of a professional or research nature that synthesises the competencies acquired on the master's degree.

#### **ORGANISATION: ACADEMIC CALENDAR AND REGULATIONS**

# **UPC** school

Terrassa School of Industrial, Aerospace and Audiovisual Engineering (ESEIAAT)

#### Academic coordinator

Maria Blanca Roncero

#### Academic calendar

General academic calendar for bachelor's, master's and doctoral degrees courses

## Academic regulations

Academic regulations for master's degree courses at the UPC

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