

Master's degree in Occupational Health and Safety

The aim of the **interuniversity master's degree in Occupational Health and Safety** is to provide professionals with the knowledge, abilities and skills necessary to take on high-level professional responsibilities in the field of occupational health and safety. Students specialise in various non-medical areas of prevention, including occupational safety, industrial hygiene, ergonomics and applied social psychology, enabling them to update their technological knowledge and to embark on a doctoral thesis.

GENERAL DETAILS

Duration and start date

1.5 academic year, 90 ECTS credits. Starting September

Timetable and delivery

Afternoons. Face-to-face

During the 2020-2021 academic year, students who are unable to attend in person at the beginning of the academic year will be given the opportunity to **stream classes**.

Fees and grants

Approximate fees for the master's degree, excluding other costs, €4,149 (€6,224 for non-EU residents).

[More information about fees and payment options](#)

[More information about grants and loans](#)

Language of instruction

Spanish

Location

[Barcelona School of Building Construction \(EPSEB\)](#)

Official degree

[Recorded in the Ministry of Education's degree register](#)

ADMISSION

General requirements

[Academic requirements for admission to master's degrees](#)

Specific requirements

Graduates of foreign universities or higher education institutions must submit the original homologation certificate and a photocopy (or certified copy) of the qualification that grants access to the master's degree.

Admission criteria

- The qualification obtained in the applicant's academic record. The average mark obtained from the qualifications according to the following evaluation: Pass - 1; Merit - 2; Excellent - 3; Distinction - 4; Fail - 0.
- The curriculum vitae.
- Letters of reference and tasks related to workplace risk prevention will be considered positively.

Places

30

Pre-enrolment

Pre-enrolment closed (consult the new pre-enrolment periods in the [academic calendar](#)).

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 of this master's degree course will be experts able to work as technical staff with high-level workplace risk prevention functions. It should be remembered that, since 1995, the Prevention Law 31/1995 and Royal Decree 39/1997 make it obligatory for companies to have preventive resources organised as internal or external health and safety services, which must consist of qualified technical staff.

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 skills

- In-depth knowledge of the relationship between working conditions and health, and ability to analyse the main occupational health problems and prevent workplace accidents.
- Ability to differentiate between workplace accidents, occupational illnesses and work-related illnesses.
- Knowledge of the activities of the medical services, the fundamental aspects of health promotion in the workplace and the structure of the health and safety system (public bodies with authority in such matters, private insurance companies, etc.).
- Knowledge of legislation on workplace health and ability to follow updates to this legislation, identify the autonomous community, national and European technical bodies related to workplace health and safety and interpret specific legislation and technical regulations concerning matters of safety in the workplace.
- Sufficient technical knowledge to carry out risk assessments and to suggest corrective measures for general hazards related to the workplace, facilities, working equipment, fire hazards, explosions, industrial hygiene, ergonomics, applied psychosociology, etc.
- Ability to apply prevention-related techniques: product safety, management of capital assets and road safety, and communication techniques in the prevention of workplace risks.
- Ability to identify and differentiate between the basic elements of organisation, management and integration of health and safety within a company.
- Good negotiation techniques, research techniques into workplace health, design and evaluation of ventilation systems, etc.
- Ability to identify and differentiate between advanced techniques of noise evaluation and control in industry, mechanisms for transmission and entry routes for biological agents.
- Ability to identify and differentiate between specific risks associated with construction, machinery, agricultural installations, offices, computer equipment, etc., and to develop intervention plans to correct them.
- Ability to coordinate health and safety activities with health awareness activities and to provide first aid.
- Ability to promote the system of responsibilities regarding workplace risk prevention.
- Ability to develop emergency plans, training plans and information plans for employees, including detection of needs and establishment of evaluation systems and monitoring measures.
- Ability to communicate appropriately with employees and their representatives and with other technical and management agents in the company with responsibilities in the area of workplace health and safety conditions.
- Ability to evaluate chemical, physical and biological risks in relation to physical and mental strain at work, etc., and to suggest corrective measures.
- Ability to draw up health and safety plans, biological waste management plans, works safety plans, etc.

Ability to apply epidemiological methods to solving problems and to design epidemiological studies to check hypotheses.

- Ability to manage disasters related to the climate, road accidents involving hazardous chemical products, radioactive substances or fires.
- Ability to prevent and detect psychosocial problems and to implement techniques of adaptation between the demands of the job and the employee's abilities.
- Ability to encourage healthy behaviour, habits, consumption and lifestyles and the active participation of employees in their own health, while encouraging a culture of health and safety within the company and the creation of healthy environments.
- Ability to exchange and integrate information with multidisciplinary teams and to exercise workplace risk prevention in accordance with ethical criteria.

ORGANISATION: ACADEMIC CALENDAR AND REGULATIONS

UPC school

[Barcelona School of Building Construction \(EPSEB\)](#)

Participating institutions

[Universitat Politècnica de Catalunya \(UPC\)](#) - **Coordinating** university

[Universitat de Barcelona \(UB\)](#)

[Universitat Pompeu Fabra \(UPF\)](#)

Academic coordinator

[Rogelio López Bravo](#)

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](#)

CURRICULUM

Subjects	ECTS credits	Type
FIRST SEMESTER		
Business and Society	4	Compulsory
Fundamentals of Prevention	3	Compulsory
Industrial Hygiene I	4	Compulsory
Safety and Health Legislation	3	Compulsory
Training and Communication	3	Compulsory
Work Scheduling	3	Compulsory
Workplace Ergonomics I	3	Compulsory
Workplace Psychosociology I	3	Compulsory
Workplace Safety I	4	Compulsory
SECOND SEMESTER		
Health Monitoring	3	Compulsory
Industrial Hygiene II	6	Compulsory
Workplace Epidemiology	3	Compulsory
Workplace Ergonomics II	6	Compulsory

Subjects	ECTS credits	Type
Workplace Psychosociology II	6	Compulsory
Workplace Safety II	6	Compulsory
THIRD SEMESTER		
Economic and Financial Analysis in Business	3	Compulsory
Occupational Health and Safety Management	3	Compulsory
Quality and the Environment	3	Compulsory
Work Placement	12	Compulsory
Master's Thesis	9	Project

November 2020. [UPC](#). Universitat Politècnica de Catalunya · BarcelonaTech