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.

INTRODUCTION

Duration and start date
1,5 academic year, 90 ECTS credits. Starting September

Timetable and delivery
Afternoons. Face-to-face

Fees and grants
Approximate fees for the master’s degree, excluding academic fees and degree certificate fee, €4,721 (€7,082 for non-EU residents).

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
- Qualification obtained in the applicant’s academic record. Average mark obtained from qualifications according to the following evaluation: Pass - 1; Merit - 2; Excellent - 3; Distinction - 4; Fail - 0
- 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).

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 of this master’s degree course will be experts able to work as technical personnel with high-level workplace risk prevention functions. It should be remembered that, since 1995, the Prevention Law 31/1195 and Royal Decree 39/1997 make it obligatory for companies to have preventative resources organised as internal or external prevention services, which must consist of accredited technical personnel.

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

• Show an in-depth knowledge of the relationship between working conditions and health, analyse the main occupational health problems and prevent workplace accidents.
• Differentiate between workplace accidents, professional illnesses and work-related illnesses.
• Show knowledge of the activities of the medical services, the fundamental aspects of health promotion in the workplace and the structure of the prevention system (public bodies with authority in such matters, private insurance companies, etc.).
• Demonstrate knowledge of legislation on workplace health, 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.
• Have 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, explosion, industrial hygiene, ergonomics, applied psychosociology, etc.
• Apply prevention-related techniques: product safety, management of capital assets and road safety, and communication techniques in the prevention of workplace risks.
• Identify and differentiate between the basic elements of organisation, management and integration of prevention within a company.
• Have good negotiation techniques, research techniques into workplace health, design and evaluation of ventilation systems, etc.
• Identify and differentiate between advanced techniques of noise evaluation and control in industry, mechanisms for transmission and entry routes for biological agents.
• Identify and differentiate between specific risks associated with construction, machinery, agricultural installations, offices, computer equipment, etc. and develop intervention plans to correct them.
• Coordinate prevention activities with health awareness activities and act in matters of first aid.
• Promote the system of responsibilities in matters of workplace risk prevention.
• Develop emergency plans, training plans and information plans for employees, including the detection of needs and the establishment of evaluation systems and monitoring measures.
• 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.
• Evaluate chemical, physical and biological risks in relation to physical and mental strain at work, etc. and suggest corrective measures.
• Draw up prevention plans, biological waste management plans, works safety plans, etc. Apply epidemiological methods to solving problems and design epidemiological studies to check hypotheses.
• Manage disasters related to the climate, road accidents involving hazardous chemical products or radioactive substances or fires.
• Prevent and detect psychosocial problems and implement techniques of adaptation between the demands of the job and the employee's abilities.
• Encourage healthy behaviour, habits, consumption and lifestyles and the active participation of employees as protagonists in their own health, while encouraging a culture of prevention within the company and the creation of healthy environments.
• Exchange and integrate information with multidisciplinary teams and exercise workplace risk prevention in accordance with ethical criteria.

ORGANISATION

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
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<th>Subjects</th>
<th>ECTS credits</th>
<th>Type</th>
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<tbody>
<tr>
<td>Health Monitoring</td>
<td>3</td>
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<tr>
<td>Industrial Hygiene II</td>
<td>6</td>
<td>Compulsory</td>
</tr>
<tr>
<td>Workplace Epidemiology</td>
<td>3</td>
<td>Compulsory</td>
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<tr>
<td>Workplace Ergonomics II</td>
<td>6</td>
<td>Compulsory</td>
</tr>
<tr>
<td>Workplace Psychosociology II</td>
<td>6</td>
<td>Compulsory</td>
</tr>
<tr>
<td>Workplace Safety II</td>
<td>6</td>
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</tbody>
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**THIRD SEMESTER**

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<tr>
<td>Economic and Financial Analysis in Business</td>
<td>3</td>
<td>Compulsory</td>
</tr>
<tr>
<td>Occupational Health and Safety Management</td>
<td>3</td>
<td>Compulsory</td>
</tr>
<tr>
<td>Quality and the Environment</td>
<td>3</td>
<td>Compulsory</td>
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<td>Work Placement</td>
<td>12</td>
<td>Compulsory</td>
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<td>Master's Thesis</td>
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<td>Project</td>
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