MASTER’S DEGREE IN ENVIRONMENTAL ENGINEERING

ESCOLA DE CAMINS
Barcelona School of Civil Engineering
The aim of this master’s degree is to provide in-depth knowledge of concepts and criteria that are fundamental to an understanding of the relations between human activity and the environment. The master’s degree provides up-to-date training in technologies for the prevention and treatment of pollution, as well as basic tools for managing and guaranteeing the quality of the environment. It produces graduates who are able to practise their profession with due regard to ethics and the proper management of environmental issues.

The master’s degree in Environmental Engineering provides multidisciplinary scientific, technical and technological knowledge for identifying, measuring, predicting and correcting environmental problems, which will enable you to make decisions and lead teams. It is aimed at anyone who is interested in deepening their knowledge in the field of environmental engineering from different perspectives who meet the general and specific access requirements.

Which subjects will you choose?

Each subject of the curriculum is 5 ECTS.
Professional opportunities
The master’s degree combines advanced materials science and applied engineering knowledge and its graduates are able to solve complex environmental engineering problems from various perspectives and go on to successfully pursue a doctoral degree in the field. Companies that employ graduates of this master’s degree are generally engineering and environmental consultancy firms, construction companies, national and international government agencies, universities and research centres.

Languages
Face-to-face teaching is in Spanish, Catalan or English.

International recognition
The master’s degree in Environmental Engineering has a high percentage of international students. A credit load of 120 ECTS credits distinguishes it from other options and ensures the provision of a solid education in this scientific and technical field.

Research
The research lines that lecturers pursue in their research groups cover many different fields of environmental engineering, from basic and scientific aspects of environmental chemistry and biology to processes and decision making in technological contexts and applied to large-scale facilities.

Master’s thesis
The master’s thesis is oriented towards professional practice or research on a subject of the degree. The student must make an original contribution to the subject or devise a new application for an aspect of it. The process of writing the thesis ends with the preparation of a report and a public defence to a committee of experts.

Specific requirements
• A pre-EHEA university degree in architecture, engineering (civil, industrial, chemical and mining engineering; forestry; engineering physics) or science (environmental, chemical, physical, biological and geological science).
• A bachelor’s degree in engineering (civil, industrial, chemical and mining engineering; forestry; engineering physics; agronomy), architecture or science (environmental, chemical, physical, biological and geological science).

Graduates of other university degrees may need to take bridging courses.

For further information on these requirements, visit the master’s degree website:
www.camins.upc.edu/estudis

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<th>Compulsory subjects</th>
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<td>Environmental Systems / Introduction to Environmental Biotechnology / Geochemical Processes / Climate and Climate Change / Environmental Systems Modelling / Environmental Engineering Laboratory.</td>
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<td>Characterisation, Management and Treatment of Air Pollution / Characterisation, Management and Treatment of Water Pollution / Characterisation, Management and Treatment of Soil and Groundwater Pollution / Characterization, Management and Treatment of Waste.</td>
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<tr>
<td>Environmental Management Systems and Tools / Economics, Law and Environmental Policy / Life Cycle Analysis and Sustainability Assessment / Environmental Project Management.</td>
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<th>Optional subjects</th>
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| Master’s Thesis                                                                 | 30   |

Basic environmental engineering  Environmental technology  Environmental management tools  Specific technologies, methods and sectors
Acquire technological and management knowledge for sustainable development

You can carry out the master’s thesis on an innovative and creative subject of the field

Your talent, leading your future

Further information:
www.camins.upc.edu/estudis
area.academica@upc.edu
www.upc.edu/sri/students

The Terrassa School of Industrial and Aeronautical Engineering provides teaching for this degree.