

BACHELOR'S DEGREE IN ENVIRONMENTAL ENGINEERING

Barcelona School of Civil Engineering
Barcelona School of Agri-Food
and Biosystems Engineering



UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH

BACHELOR'S DEGREE IN ENVIRONMENTAL ENGINEERING

With the bachelor's degree in Environmental Engineering, you will become part of a profession that has a great future and impact, because you will work on designing new production processes that help to control and mitigate environmental problems and to conserve natural resources by means of clean energy and technologies. In the fourth year you will be able to choose one of the two concentrations that are offered: Urban and Industrial Environment and Natural Environment and Global Change.

The actions and impact of industry and economic and social activities influence and directly or indirectly affect the environment and quality of life. In coming years, societies must face climate and/or environmental challenges and will require professionals with a scientific grounding and global awareness of how the planet works, in physical, chemical, geological and biological terms, who can foresee and provide solutions for these challenges.

Curriculum

This information may be subject to change.
Up-to-date information is available at: upc.edu

240 ECTS credits

1st year

1st semester

Biology and Ecology	6
Chemistry I	6
Earth System	6
Fundamentals Mathematics	6
Mechanics	6

2nd semester

Chemistry II	6
Environmental Economics and Sustainability	6
Environmental Thermodynamics and Kinetics	6
Geology and Edaphology	6
Mathematics I	6

2nd year

1st semester

Fluid Mechanics	6
Geographic Information Systems	6
Mathematics II	6
Microbiology and Environmental Biotechnology	6
Principles of Ecotoxicology and Environmental Analysis	6

2nd semester

Atmospheric Processes and Hydrology	6
Geomechanics	6
Hydraulics	6
Hydrogeology and Environmental Geochemistry	6
Statistics	6

91%

of the School's graduates are in employment

Source: Sixth graduate employment survey of Catalan universities by the Catalan University Quality Assurance Agency (AQU Catalunya, 2023)

19

international teaching and research laboratories

2

concentrations

Your bachelor's degree!

If you want to protect our environment and tackle environmental challenges, on the bachelor's degree in Environmental Engineering you will acquire the tools you need to identify, analyse and assess environmental problems in order to correct or avoid them. You will study the functioning of the planet from both an environmental and a social perspective.

Languages of instruction

You will take subjects taught entirely in English, which will allow you to certify you have attained English Level B2 when you graduate and to perform well in an international context.

Professional opportunities

As a graduate in Environmental Engineering, you will be able to

practise professionally at companies and institutions that work to protect the environment, are involved in environmental management plans, soil treatment and land restoration and the design of clean technologies, and carry out environmental impact studies, among others.

Where is the degree taught?

The degree is taught at the Barcelona School of Civil Engineering (ETSECCPB), in collaboration with the Barcelona School of Agri-Food and Biosystems Engineering (EEABB).

Go international!

You can go abroad for a semester or a whole academic year to take courses or do your bachelor's thesis thanks to the mobility agreements and networks in which the ETSECCPB and the EEABB

participate, such as Erasmus+, KA107, CINDA, Magalhães / SMILE and TIME.

Supervision

We offer academic supervision and tutoring for all bachelor's degrees, which involves continuous monitoring of students' academic records.

Work placement

You will go on work placement and field trips during the degree. In the last year you will have the option of taking a work placement at national and international companies and institutions to acquire professional experience.

3rd year

1st semester

Decontamination of Soils and Aquifers	6
Instrumentation, Remote Sensing and Big Data	6
Numerical Modelling	6
Structures	6
Water Treatment	6

2nd semester

Construction Procedures and Materials	6
Environmental Impact Assessment	6
Solid Waste	6
Sustainable Transport	6
Wastewater and Reuse	6

4th year

1st semester

Air and Noise Pollution	6
Compulsory Concentration Subjects*	18
Common Optional Subject**	6

2nd semester

Decision-Making Systems	6
Project Management and Environmental Legislation	6
Common Optional Subject**	6
Bachelor's Thesis	12

* Natural Environment and Global Change

Climate Change and Natural Hazards / River and Coastal Management / Energy Transition

Urbà and Industrial Environment

Sustainable Construction / Sustainable Mobility and Smart Cities / Supply and Drainage

** **Optional subjects:** Renewable Energies / Environmental Impact of Large Infrastructure / Sustainability and Environmental Ethics / Sustainable Aquaculture Production Technologies

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You will study the functioning of the planet from both an environmental and a social perspective.

Choose one of the concentrations to specialise in:

- Urban and Industrial Environment
- Natural Environment and Global Change



Your talent, leading your future

Further information:
camins.upc.edu

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