Master's degree in Oceanography and Marine Management

The aim of this interuniversity master's degree, coordinated by the Universitat de Barcelona (UB) and with the UPC as a participant, is to offer advanced theoretical and practical education in oceanography and the management of the marine environment, with two specialisations and a clear interdisciplinary focus. Students will become experts in the different areas of marine science and will be capable both of carrying out high level scientific research and of taking on responsibilities in the business world.

GENERAL DETAILS

Duration and start date
One academic year, 60 ECTS credits. Starting September

Timetable and delivery
Mornings and afternoons. Face-to-face

Language of instruction
Subjects will be taught in Catalan, Spanish or English, depending on the student's level of comprehension and on the teaching objectives of the master's degree course.

Location
Classes will be given in Barcelona, in the Faculties of Biology and Geology of the University of Barcelona and the North Campus of the Universitat Politècnica de Catalunya

Official degree
Recorded in the Ministry of Education's degree register

ADMISSION

General requirements
Academic requirements for admission to master's degrees

Places
50

Pre-enrolment
To enrol for an interuniversity master’s degree coordinated by a university other than the UPC, you must enrol through the coordinating university:
Universitat de Barcelona (UB)

PROFESSIONAL OPPORTUNITIES

Professional opportunities
Graduates of this master’s degree course will be experts in oceanography and management of the marine environment who will be able to work as researchers in public and private bodies and as professionals in the business sector.
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**

On completing this master's degree, students will be able to:

- Select the best approaches and tools for tackling the problems and issues that need resolving.
- Design experiments to gain empirical data for improving knowledge or gauging theoretical and numeric models.
- Use the most modern field instruments to characterise different physical, chemical, geological and biological processes.
- Simulate the most important processes using the most appropriate numeric models.
- Design and build numeric models for simulating the most important processes in the master's areas of specialisation.
- Apply the scientific knowledge gained to resolve practical problems in the marine environment.
- Apply the scientific knowledge gained to interdisciplinary work teams.

**Generic or cross-disciplinary competencies**

On completing this master's degree, students will be able to:

- Recognise the need for ongoing training throughout their professional career and identify the areas in which training is required.
- Learn independently and be motivated by work well done.
- Apply research to solving practical problems of interest to society.
- Analyse and solve scientific problems.
- Apply knowledge and skills gained to new environments and integrate new, apparently unrelated knowledge and ideas, including those from fields other than their own.
- Practice criticism and self-criticism.
- Evaluate the ethical aspects of professional situations and the ethical and social consequences of personal decisions.
- Adapt to new situations and generate new ideas and knowledge.
- Have initiative, an entrepreneurial spirit and creativity.
- Detect applicability and opportunity in abstract ideas.
- Be aware of standard research practices in marine sciences and technology in order to apply them to scientific and technological innovation activities.
- Integrate into working teams that are often interdisciplinary and work in an international context.
- Provide the team with knowledge and skills and look for opportunities to make valuable contributions.
- Occupy different positions within working groups according to the level of responsibility reached.
- Efficiently communicate scientific ideas, plans, results and conclusions to specialised and non-specialised audiences using appropriate scientific terminology, both verbally and in writing.

---

**ORGANISATION**

**UPC school**  
Barcelona School of Civil Engineering (ETSECCPB)

**Participating institutions**  
Universitat Politècnica de Catalunya (UPC)  
Universitat de Barcelona (UB) - Coordinating university