

# Master's degree in Aquaculture

The [master's degree in Aquaculture](#), coordinated by the **Universitat de Barcelona (UB)** and with the **UPC as a participant**, trains highly qualified multidisciplinary professionals to a managerial level and encourages them to make decisions and focus on the sustainability of the company and sector for the long term rather than on immediate profitability.

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## GENERAL DETAILS

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### Duration and start date

One academic year, 60 ECTS credits. Starting September

### Timetable and delivery

Afternoons. Face-to-face

### Language of instruction

Spanish

### Location

The 30 compulsory credits will be taught sequentially in time at the three universities participating, beginning with the Universitat de Barcelona, then the Universitat Autònoma de Barcelona, and finally the Universitat Politècnica de Barcelona. The remaining credits correspond to a research project.

### Official degree

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

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## ADMISSION

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### General requirements

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

### Places

35

### Pre-enrolment

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

[How to pre-enrol](#)

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## PROFESSIONAL OPPORTUNITIES

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### Professional opportunities

Graduates of this master's degree will be recognised experts in the management of fish farms, animal feed and agricultural equipment factories, pathology diagnosis services, facilities design, public administration areas related to fishing, fish farming and the environment. They will also be trained to work in fields related to the physiology of aquatic species, fish pathology, facilities engineering and production management, taking environmental sustainability and animal welfare into consideration.

### 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.

On finishing the master's degree, graduates will be able to:

- Make decisions on stock and larval management with a view to obtaining the maximum benefits in terms of the growth potential of fish, choosing the most suitable installations and water conditions and forecasting the stock's evolution for subsequent marketing.
- Choose the most appropriate nutritional, feeding and handling parameters to obtain a high-quality product. Prepare fish feed that meets requirements.
- Make decisions on the handling of reproducers and reproductive strategies.
- Assess and interpret the productive and sanitary parameters of cultured animals taking into account economic and wellbeing issues.
- Look after the health and wellbeing of animals, prioritising prevention strategies over therapy.
- Detect the main symptoms of disease and make a diagnosis.
- Decide on the main strategies for planning and managing aquaculture projects to ensure a sustainable and responsible company.
- Choose between the different technologies available.
- Prepare feasibility projects and studies to launch new installations or modify those that already exist.
- Design a plan for managing quality in an aquaculture company.
- Design an environmental management plan for an aquaculture company.
- Assess the implications of technical decisions in the company's economy and market decisions to be able to advise or manage aquaculture companies within a context of sustainability.
- Identify the main risk factors involved in aquaculture activity and suggest remedial measures.

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## ORGANISATION: ACADEMIC CALENDAR AND REGULATIONS

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### UPC school

[Barcelona School of Agricultural Engineering \(ESAB\)](#)

### Participating institutions

[Universitat Politècnica de Catalunya \(UPC\)](#)

[Universitat Autònoma de Barcelona \(UAB\)](#)

[Universitat de Barcelona \(UB\)](#) - **Coordinating** university

### Academic coordinator

[Lourdes Reig](#)

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## CURRICULUM

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