

Worldwide, ocean ecosystems are feeling the impacts of increased harvesting pressure. Most fisheries in the world are currently near or above sustainable exploitation limits, and global consumption of fish as food has doubled in the period 1973-2003 and is still rising.

Aquaculture represents a growing contributor to the production of aquatic food worldwide. Farming finfish, shellfish and aquatic plants is one of the world's fastest growing food sectors, it already provides the planet with about half of all the fish we eat.

### Aquaculture in our region

In Europe, aquaculture accounts for about 20% of fish production and directly employs some 70,000 people. The sector is mainly composed of SMEs or micro-enterprises in coastal and rural areas.

EU aquaculture is renowned for its high quality, sustainability and consumer protection standards. Still, EU overall output has been more or less constant in volume since 2000 whereas global production, at the same time, has been growing by nearly 7% per year. The current reform of the Common Fisheries Policy aims, inter alia, to develop the full potential of EU aquaculture in line with the Europe 2020 objectives: sustainability, food security, growth and employment.

#### Visit us on aquavip.edu.pl

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Acknowledgements: http://www.fao.org, https://ec.europa.eu/fisheries, https://www.was.org Photo credits: AquaVIP partners

## What is aquaculture?

Food and Agriculture Organization of the United Nations (FAO) defines aquaculture as farming of aquatic organisms including fish, mollusks, crustaceans and aquatic plants.

Aquaculture includes: breeding, rearing, and harvesting of plants and animals in all types of water environments including ponds, rivers, lakes, and the ocean.



Aguaculture includes the production of seafood from hatchery fish and shellfish to market size in ponds, tanks, cages, or raceways.

Moreover, there is stock restoration, in which hatchery fish and shellfish are released into the wild to rebuild wild populations. Aguaculture also includes the production of ornamental fish for the aquarium trade, and growing plant species used in a range of food, pharmaceutical, nutritional, and biotechnology products.











Yes, we need you in aquaculture of the South Baltic Region

## **GUIDE IN AQUACULTURE CAREER**







European Regional Development Fund

# Aquaculture education & training in the South Baltic Region

Universities worldwide offer training in fields that provide useful services in various parts of the aquaculture, such as: research and development, business skills, environmental management or communications, IT, and engineering.

To fulfill the needs of specifically the South Baltic region

AquaVIP partner organizations provide an educational offer in aquaculture on various levels.



## Aquaculture: Business and Technology Bachelor's degree program

University of Gdańsk, Poland

The goal of the bachelor's programme is training for careers at companies and science laboratories related to aquaculture, as well as specialized administrative staff taking care of aquaculture business.

During the course students develop knowledge and practical skills in biology, physiology of breeding organisms (fish, invertebrates, algae), food processing, aquaculture products, legal aspects of aquaculture, and the basics of business management.

The course is practical, and students acquire their first professional experiences for two 7-week internships in companies related to aquaculture.



## Universität Rostock



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## Aquaculture, Master's degree program Rostock University, Germany

Master degree programme in aquaculture is offered by the Faculty of Agricultural and Environmental Sciences since the winter term 2009/2010 and provides room for 20 students.

The course is a **science orientated university program** with a duration of two years, where core competences of marine fish aquaculture, searanching and the aquaculture of algae is taught. Further, knowledge in economical sciences, fishing, nature conservation legislations and the construction of technical facilities is impaired. Thus, the students are enabled to work on complex problems that occur in the development and application of aquaculture.

https://en.oig.ug.edu.pl/studies\_and\_admission/bachelors\_degree https://www.auf.uni-rostock.de/en/study/master-dregree-program/aquaculture https://www.ku.lt/leaders\_academy





## Blue Growth Leaders Academy Certified course Klaipeda University & Klaipeda Science and Technology Park

The content of the programme consists of thematic areas related to the following **Blue Growth** industries: ports and shipping, blue biotechnology, shipbuilding, aquaculture, coastal energy, sea and coastal tourism.

The Blue Growth Leaders Academy programme is intended for representatives of business and other organizations as well as for professionals working, or intending to develop their activity, in the Blue Growth sector. The internationality of the programme offers an opportunity to meet experts from different fields and become part of a quality networking platform.



## **Aquaculture** education & training in AquaVIP



summer schools & study visits

Klaipeda University & University of Gdańsk

AquaVIP summer schools introduce participants to background theoretical skills in modern aquaculture biotechnology: main types, biological and technological processes and development trends.

The courses intend to provide participants with practical hands-on **experience** on modern aquaculture technology and innovative blue biotechnology-based approaches to increase aquaculture development potential.



The provision of scientific and technical skills enable exchange of know-how and good practices between experts and participants.

Facilities within and outside the South Baltic area are chosen for study visits of university students and young professionals according to the training needs: Innovative farms & institutional facilities

The topics are set according to the needs defined by the sector. Topics include aquaponics, RAS shrimp cultivation, microalgae cultivation and others.





Aquaculture professional trainings at Rostock University are dedicated for farmers aiming at becoming master fish farmers.

Thanks to the theoretical contents and practical training farmers upgrade their skills in innovative solutions which increase their business capacity and expand employability in the sector.

class AquaProfi master programme is based on the experience of Rostock University and the edition ran within InnoAquaTech project.

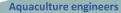


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### Job options in aquaculture

There are many types of careers and occupations in the aquaculture sector, ranging from on-farm jobs to careers in academic institutions and government and other national agencies.

Many of the occupations are highly skilled and require both formal training and on-the-job upgrading. A practical list of occupations in the aquaculture sector include, to name some:



**Aquatic veterinarians** 

**Aquaculture development specialists** 

**Aquaculture divers** 

**Biologists** 

Farm managers

**Environmental assessment technicians** 

Fish farm technicians

**Environmental and regulatory affairs managers** 

**Hatchery technicians** 

https://www.was.org/WasEs/Job/SiteList

**Feed production technicians** 

Fish health technicians

**Production managers** 

**Hatchery managers** 

**Processing supervisors** 

**Research scientists** 

Research and development coordinators

**Processing line operators** 

**Policy advisors** 

Research technicians

Waste management technologists

WAS employment service:
https://www.was.org/wases/job/list
List of national and international data basis:

Yes, we need you in aquaculture of the South Baltic Region

### **WAS** employment service

As the aquaculture sector grows, new positions become available. There are many aquaculture job search engines. A complex one is offered by **World Aquaculture Society (WAS)**.

WAS service is offering a database with positions available all over the world.

It includes international job and research career offering database, to find a job, post a job possibility, find a candidate, list or post a resume. Career opportunities include PhD programs, postdoc openings, early career possibilities including internships, and positions for professionals. The range of topics is very diverse, covering research, production, technology, management in all areas connected to aquaculture.

The service also includes a wide list of national and international data basis and search machines for career opportunities in

aquaculture.

