

SHELLFISH AND SEAWEED PRODUCTION IN RESEARCH INFRASTRUCTURES

FREE
training course

**DATE: LIVE LECTURE (PART 1): 29 JANUARY 2025 | SELF-PACED
LEARNING (PART 2): AVAILABLE AFTER PART 1 LOCATION: ONLINE**



COURSE DESCRIPTION

This course provides an in-depth exploration of shellfish and seaweed production within research-focused infrastructure. Blending online lectures with curated background literature, the course is divided into two engaging sections.

- The first section introduces essential topics, including shellfish production techniques from hatchery to grow-out stages, and seaweed production methods from hatchery through land-based farming and extending to offshore cultivation.
- The second section consists of a recorded online lecture, complemented by procedural guides and selected readings. Through this structure, participants will gain valuable skills and insights into effectively upscaling shellfish and macroalgae production.

TARGET AUDIENCE

This course is designed for researchers, PhD students, MSc students, technicians and people from the industry that would like to learn about the important factors involved in producing shellfish and seaweed.

LEARNING OBJECTIVES

- Outline the production cycles and key phases of European shellfish and seaweed aquaculture, with an emphasis on native oysters, blue mussels, kelp, dulse and asparagopsis.
- Describe foundational farming practices and cultivation strategies across various aquaculture systems, including land-based and offshore setups for shellfish and seaweed.
- Evaluate optimisation strategies for aquaculture systems, considering key factors such as biosecurity, upscaling, and environmental challenges like climate change and offshore expansion.
- Explore current research and emerging trends in aquaculture, focusing on advancements in production techniques, technology integration, and sustainable cultivation practices.

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COURSE STRUCTURE

This course, led by DTU, will be divided into two parts. Part 1 will be delivered as a live lecture covering modules 1 to 5. Part 2 will be self-paced and will include a recorded online lecture, complemented by examples of procedural guides and selected readings which will be made available for registered applicants after the course date.

Module 1: European flat oyster production for aquaculture and restoration: hatchery methods and grow out

Lecturers: Camille Saurel and Daniela Sganga (DTU Aqua)

Lecture Objectives:

- Provide an overview of European flat oyster production
- Identify each phase of oyster production and its specific functions
- Evaluate major challenges in oyster production, such as biosecurity and upscaling, and suggest strategies to address them

Module 2: Mussel culture technique - grow out optimisation

Lecturers: Camille Saurel and Pernille Nielsen (DTU Aqua)

Lecture Objectives:

- Describe mussel aquaculture practices across Europe
- Identify the various sources of mussel seed and constraints for hatchery production
- Assess methods for optimising suspended culture, mitigation tools, emerging technologies, and current challenges for aquaculture

Module 3: Kelp cultivation techniques in Europe - current state of the art

Lecturers: Silje Forbord, David Aldridge and Aurora Tung Nilsen (SINTEF Ocean)

Lecture Objectives:

- Gain an overview of European kelp cultivation
- Basic elements of kelp nursery procedures
- Know the most commonly used and latest technologies for kelp cultivation

Module 4: The Journey of Dulse Farming in Denmark: Hatchery Methods and Growth Prospects

Lecturers: Mette Møller Nielsen and Peter Søndergaard Schmedes (DTU Aqua)

Lecture Objectives:

- Acquire insights into the production cycle of the specie
- Attain foundational knowledge of farming practices
- Develop an understanding of Dulse cultivation strategies
- Explore current and emerging research topics in the field

Module 5: Farming the red seaweed *Asparagopsis*: systems and grow-out procedures

Lecturers: Leonardo Mata (CCMAR & Greener Grazer)

Lecture Objectives:

- *Asparagopsis* commercial applications
- Acquire insights into the life cycle of *Asparagopsis* spp.
- Learn about the cultivation systems and strategies
- Key cultivation considerations to optimise production

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PRACTICAL INFORMATION

Location: Online Course. Full details on access will be provided after registration.

Date & Time:

- **Live lecture (Part 1)** will be carried out on 29 January 2025, from 9:00 to 13:00 hrs CET (Central European Time)
- **Self-paced lecture (Part 2)** will be made available to all registered applications after the live lecture is carried out

Language of instruction and materials: English

Fees: Course attendance is free, thanks to EU Horizon 2020 Funding

REGISTRATION

Complete your registration request through the [form](https://aquaexcel.eu/training-courses/training-course-4-shellfish-and-seaweed-production-in-research-infrastructures/) that can be found on the official AQUAEXCEL3.0 website: <https://aquaexcel.eu/training-courses/training-course-4-shellfish-and-seaweed-production-in-research-infrastructures/>

REGISTRATION DEADLINE = 27 January 2025, 9:00 hrs (CET)

Course Coordinator: geertje.schlaman@wur.nl

Other queries: info@aquaexcel.eu



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