

Nordic Master in Sustainable Production and Utilization of Marine Bioresources

[See study programme](#)

Autumn 2024 (1. semester)

Laboratory Safety Master	KJ301F 0 sp
Scientific Communication and Research Methods	BI300F 10 sp
Introduction to MARBIO, Sustainable Production and Utilization of Marine Bioresources	BIO5003 15 sp

Elective courses

Aquaculture Production and Environment	BIO5005 10 sp
Sustainable Aquaculture	BIO5006 10 sp
Research Seminars in Bioscience	BIO5004 0 sp
Work Placement in the Aquaculture Industry	PRA2005 5 sp
Individual Curriculum	BI307F 10 sp
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Fish Physiology	BIO5001 10 sp
Evolutionary Genetics	BI317F 10 sp
Research Theory and Methods	VT308E 7.5 sp
Social and Sustainable Entrepreneurship	ENT5008 7.5 sp

Spring 2025 (2. semester)

Elective courses	
<u>Marine Macrophytes</u>	BIO2002 10 sp
<u>Molecular Ecology</u>	BI214F 10 sp
<u>RNA Biology</u>	BI322F 5 sp
<u>International Governance and Business in the High North</u>	EN313E 7.5 sp
<u>Circular Economy</u>	ECO5017 7.5 sp
<u>Ecosystem Resilience</u>	BI313F 5 sp
<u>Aquatic Animal Health</u>	AK310F 10 sp
<u>Biophysical Interactions</u>	BI312F 10 sp
<u>Sustainable Aquaculture Nutrition</u>	AK320F 10 sp
<u>Aquatic Genomics and Bioinformatics</u>	BI311F 10 sp
<u>Research Seminars in Bioscience</u>	BIO5004 3 sp

Autumn 2025 (3. semester)

<u>Master's Thesis in Sustainable Production and Utilization of Marine Bioresources (1/2)</u>	BIO5000 0 sp
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Spring 2026 (4. semester)

<u>Master's Thesis in Sustainable Production and Utilization of Marine Bioresources (2/2)</u>	BIO5000 60 sp
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The MARBIO Master program will be introduced by a mandatory course which is organized by the partner universities responsible for the program and comprises web-based modules combined with a physical meeting (intensive campus course and/or field visit, ...) for up to one week at the partner universities. The students enrolled in the programme must take a minimum 30 ECTS at one of the partner universities. Students must have completed a safety course before they can use special rooms, special equipment or perform procedures that involve increased risk. Depending on the master's thesis and electives, students could gain expertise in the following areas depending on the partner university:

- Marine fish, shellfish, Algae Biology,
- Civil Law, Political Science, Business and Economics
- Aquaculture,
- Environmental Interactions, Marine Ecology,
- Genomics and Epigenetics
- Freshwater Biology and Fish Behavior
- Micro- and macroalgae biotechnology

Learning outcomes

Knowledge:

Upon completion of the course the students will have advanced knowledge and broader perspective of the sustainable production and use of marine bioresources, including

aquaculture from a Nordic perspective.
understanding of Food webs in the ocean,
aquaculture and fishery industry globally.

Skills:

At the end of the MAR-BIO programme, the student is able to

independently select and use relevant methods for research and development work
carry out an independent and limited research or development project under supervision and in compliance with applicable research ethics standards
present the knowledge acquired and his/her own analyses and syntheses, both orally and in writing.

General competence:

After completion of the MAR-BIO programme the candidate can:

analyse and deal critically with various sources of information and use them to structure and formulate scientific arguments
evaluate facts from different sources, discuss them and take a stand for the pros and cons with different theories within the field of marine bioresources
communicate academic issues, analyses and conclusions both with specialists and the general public

Admission requirements

Admission requirements are:

- Bachelor's degree (180 ECTS) within bioscience or social science, including socio economy
- Average grade of C or better (laudabilis) in the Bachelor's degree.
- A motivation letter must be uploaded to the application portal within the specified deadline.

For applicants outside the Nordic countries, applicants are asked to document proficiency in English language.

For more information please see:

<https://www.nord.no/en/studies/admission>

<https://www.nord.no/en/studies/admission/how-to-apply-master>

Applicants are ranked by:

1. Motivational letter
2. Grades of the Bachelor's degree

Applicants will be ranked by their motivation letters. The applicant's motivation for the study, and his/her motivation for the idea of travelling between the partner universities, as well as his/her academic background and future career plans will be emphasized.

Applicants apply to the preferred university. It's possible to apply to more than one.

Career possibilities

The mandatory course will prepare the students to a wide range of employment opportunities, as a PhD student or in industry, in the field of circular bioeconomy and blue growth.

Depending on the master's thesis profile, candidates will be well qualified for positions in relevant business sectors such as Aquaculture, Fisheries, further development and production of marine food, utilization of waste bi-products, Biological Consultancy, Municipal Planning, municipal and state management of environment, nature and aquaculture resources, as well as the development of coastal communities.

Further education

Further education will depend on background also from the bachelor's degree. Assuming biological background from a bachelor's degree and completed MAR-BIO, the candidate will be able to proceed with a PhD in Aquatic Biosciences at Nord University, or equivalent PhD degrees at the University of Gothenburg. Candidates with a Social Sciences background on their bachelor's degree will, after completing MAR-BIO, also qualify for doctoral degrees at other institutions in Norway or abroad.

Study abroad

The students enrolled in the programme will do a minimum of 30 credit exchange to one of the partner universities; University of Gothenburg or Holar University College. The application deadline for exchange is 1 September for the spring semester and 20 January for the autumn semester. For more information on the process, please contact [Jose de Pool](#), advisor for study exchange.

[Exchange agreements, FBA](#)

Costs

Semester fees and cost of course literature and laptop apply. In addition to the semester fee and syllabus literature, students are expected to have a laptop with microphone and camera. Students must purchase their own laboratory coat for use in courses with laboratory exercises.

Costs related to visits to partner universities must be expected.

In addition, the compulsory exchange (at least 30 credits) at one of the partner universities, will result in travel,

housing and food expenses. The students can apply for a travel grant from the Norwegian State Educational Loan Fund (Lånekassen) if Norwegian. All students can also apply for a ERASMUS+ grant.

Tuition fees

Students with citizenship from countries outside the EU/EEA and Switzerland, must pay tuition fees. This study programme lists as a category D, and the fee rate is NOK 180 000 per year.

Nord University does not offer scholarships or grants. You can find more information on tuition fees, payment details and exemptions on our website.

[Tuition fees for international students](#)

Assessment methods

Information about assessment form is described under each course.

Programme evaluation

The study programme is evaluated annually by the students through course evaluations and study programme evaluations. The evaluations are part of the university's quality assurance system.

Qualifications requirements and regulations

[View rules and regulations for examinations](#)