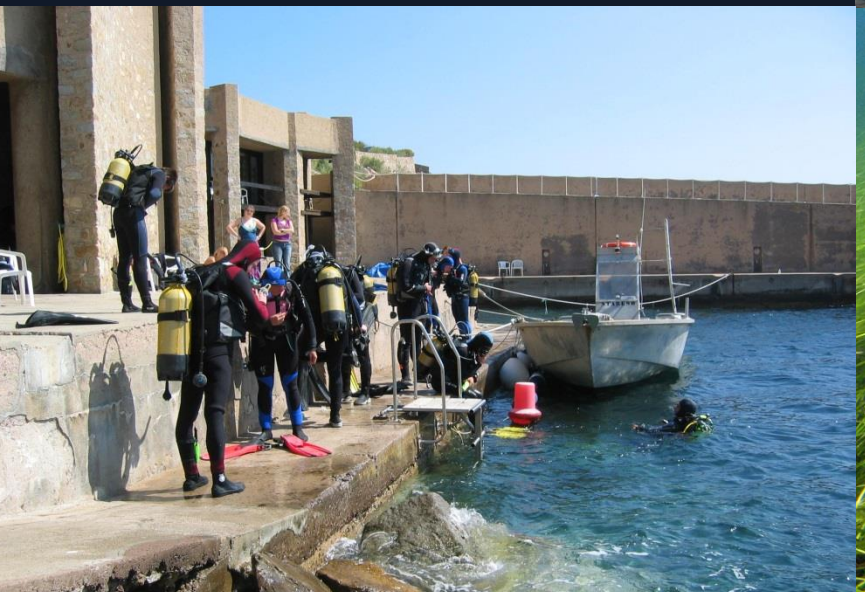
Master Marine Biology



Contacts

http:// www.rug.nl/masters/marine-biology

https://www.facebook.com/MarineBiologyGroningen

university of groningen

Master Programme Marine Biology

The central theme of the newly revised two-year Marine Biology Master is adaptation of marine systems and organisms to a changing world through the lens of ecology, eco-physiology and evolution. Marine Resource utilization is also considered within the curriculum. The programme is taught by a team of 10+ research groups in Marine Biology at the University of Groningen and in formal collaboration with the Royal Netherlands Institute for Sea Research (NIOZ) on Texel and in Yerseke.

We provide an initial block of exclusive and compulsory master courses dealing with the Principles of Marine Biology. This block is followed by a more specialized set of facultative Marine Biology modules.

We focus on Biology!
- We are good at: conservation of marine mammals, biomimics, polar ecosystems, coastal food webs, the Wadden Sea
- We work with fish, seagrass, algae, whales, seals and schooling fish.

We are strongly committed to *hands-on research* and learning by doing: thus knowing how to do science and not just understanding science. Field work opportunities include:
- The Principles block excursions to our "backyard": the Wadden Sea, Schiermonnikoog, NIOZ Texel; and also Sweden's west coast in the Gullmar Fjord
- Mediterranean rocky shores (Corsica) (every even years)
- Researchers also have links with many marine laboratories throughout the world for co-supervised MSc projects.

Research opportunities for Master Projects

There are plenty of options whether you choose the MB Research profile or the Science, Business and Policy profile (P- or M-variant, see Biology Master Study guide). You will design your own study programme to fit your personal preferences. Some examples of potential research areas include: Climate change on pelagic food webs (Polar and North Sea); conservation of marine vertebrates (global issues for marine mammals and other top predators; marine conservation more generally; the function of coastal food webs (Wadden Sea and Baltic Sea research); phylogeography or marine organisms; ecological and evolutionary genomics of adaptation; marine applications (biomimetics, algal applications); host-parasite interactions and more.

Study Elements See http://www.rug.nl/masters/marine -biology and download the detailed study guide	***ECTS credits***
Principles courses: - -Biological Oceanography - -Marine Biology & Ecology - -Marine Conservation	5 x 3 = 15
Specialization/Profiling courses *Marine Biology* programme - Evolutionary ecology of marine organisms - Marine ecosystem service & global change - Polar ecosystems - Numerical Modeling for Marine Biologists - Mediterranean rocky shores	≤ 25
Tool-box courses *Marine Biology* and *Ecology &Evolution* - Practical Bioinformatics for Biologists - A Primer in Population Genetic Modeling - Analyses of Genetic Data inBehaviour, Ecology and conservation - Meta analyses in Ecology (Joint course with University of - Oldenburg) - Radio-isotopes in experimental Biology - Advanced statistics - Programming in C++ for biologists - Molecular methods in Ecology & Evolution - Mathematical models in Ecology & Evolution - Self-organization and more…	
Research Project 1 (RUG or NIOZ)	≥ 40
Research Project 2 (Anywhere in the world with approval. M-track students substitute internship with a company or NGO	≥ 30
Essay	5
Colloquium	5
Total	***120***

Admission

An academic Bachelor's degree in any field of biological sciences*. This includes, but is not restricted to, ecology, evolution, physiology, genetics, molecular biology, microbiology, theoretical biology and behavior. Students entering with no marine biological background will be brought up to speed in the Principles courses.
The new MSc programme is research focused. Although there are no official requirements with respect to grades, candidates are encouraged to have a strong quantitative background in, e.g., analytical –multivariate statistics, data processing, programming, modelling, molecular lab skills or other hard skills.

*Interested candidates with a background in other fields such as chemistry, physics, engineering, economics, or other cross disciplines will be considered but will need to contact the admissions committee to discuss their particular case.