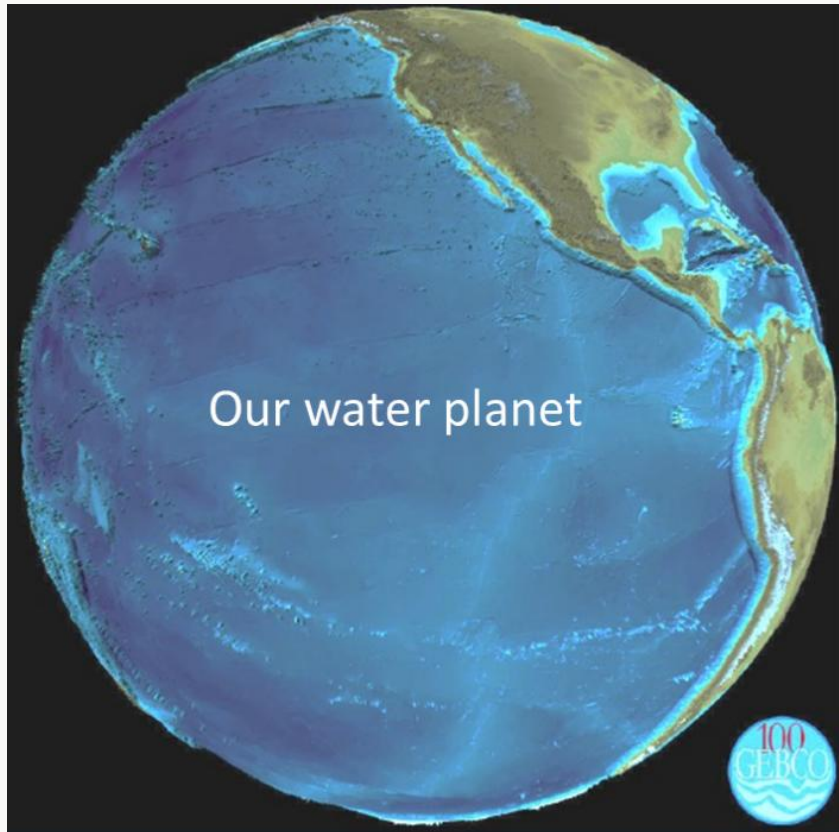


# Marine Sciences

An international Master's degree, 2 years



# Our mission and vision



## The Science We Need For The Ocean We Want

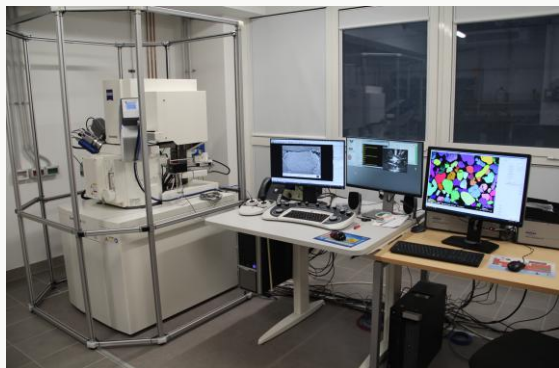
- Training and integrating students from European and Non-European countries for the sustainable management of the marine environment
- Inter, Multi and Transdisciplinary approach in the framework of ocean-related sciences
- Interaction between oceans and society
- Learning *concepts + how to do* (from theory to practice)

# Why in Bicocca?

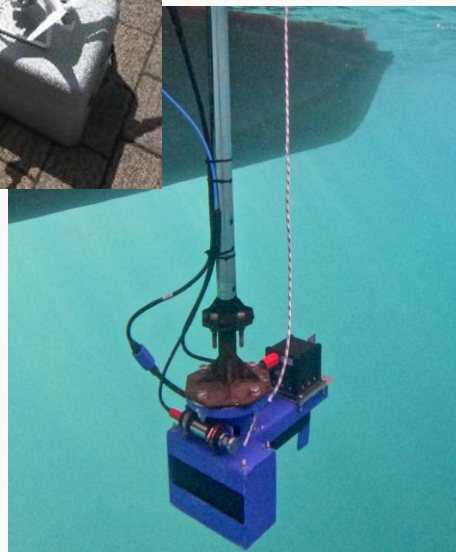
- Researchers from Milano have a decades-long history of top-level research in Marine Sciences
- The Dept. of Earth and Environmental Sciences - DISAT is a «Department of Excellence» in the national ranking (<https://www.disat.unimib.it/>)
- Marine Sciences is partner of UNESCO for the Decade of Ocean Science for sustainable development
- Top level research output from marine researchers ([IRIS-BOA](#))
- Top level overall evaluation of Marine Sciences from our students



## Resources and facilities



Biology, sedimentology, geobiology, chemistry laboratories.



Equipments and other facilities for field learning



**Marine Research and High Education  
(MARHE) Center**  
Faafu Magoodhoo Island, Maldives

Please note: Activities at the MARHE center are not included in the Master.

- 120 CFU
- 11 exams
- Completely in English

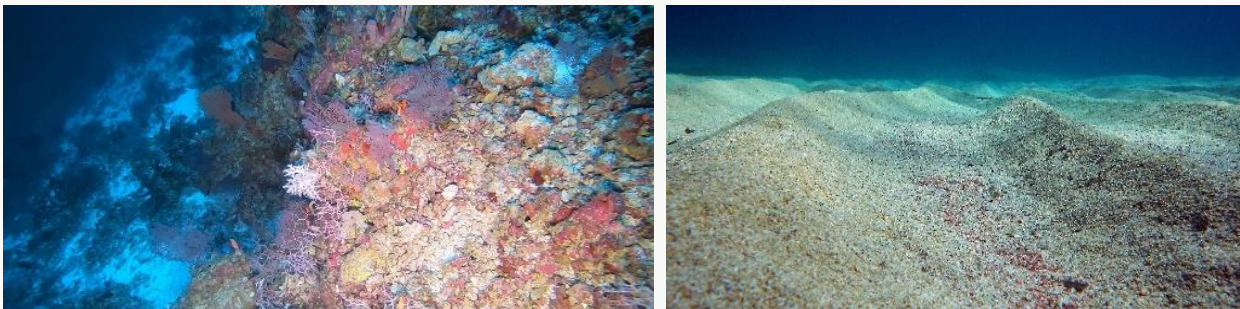
## 3 Learning Areas

- Geo-Environmental Area
- Geographical and Legal Area
- Bio-Ecological Area
  
- **First year:** 7 mandatory courses + 2 mandatory multiple-choice courses
- **Second year:** 2 mandatory multiple-choice courses and mobility



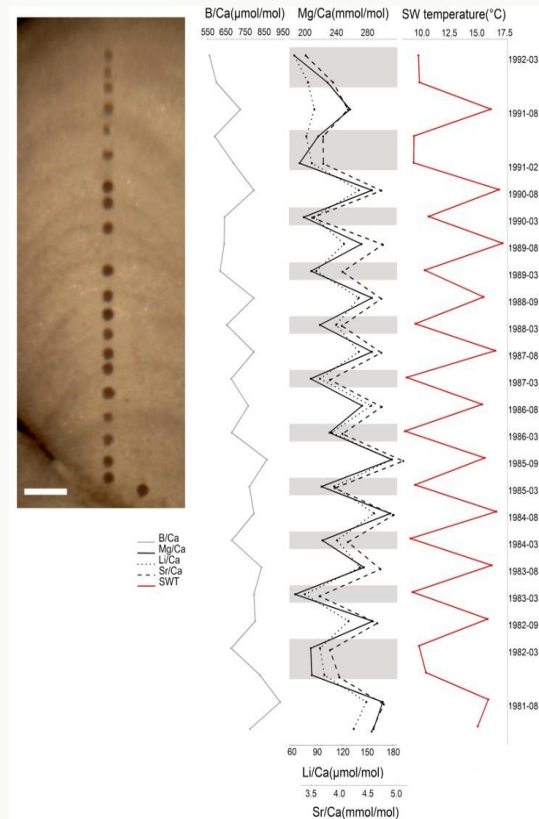
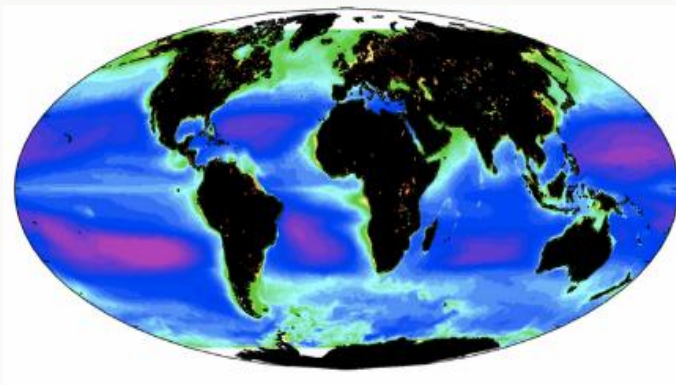
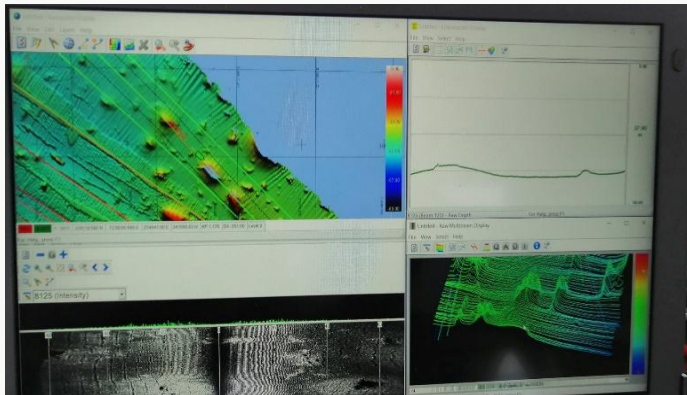
MARINE  
SCIENCES

## Geo-Environmental Area



**The Geo-Environmental Area embraces the study of abiotic and biotic components of marine and coastal ecosystems, focusing on the understanding of short- and long-term interplays between physical processes and marine organisms, with emphasis on climate changes.**

## Geo-Environmental Area



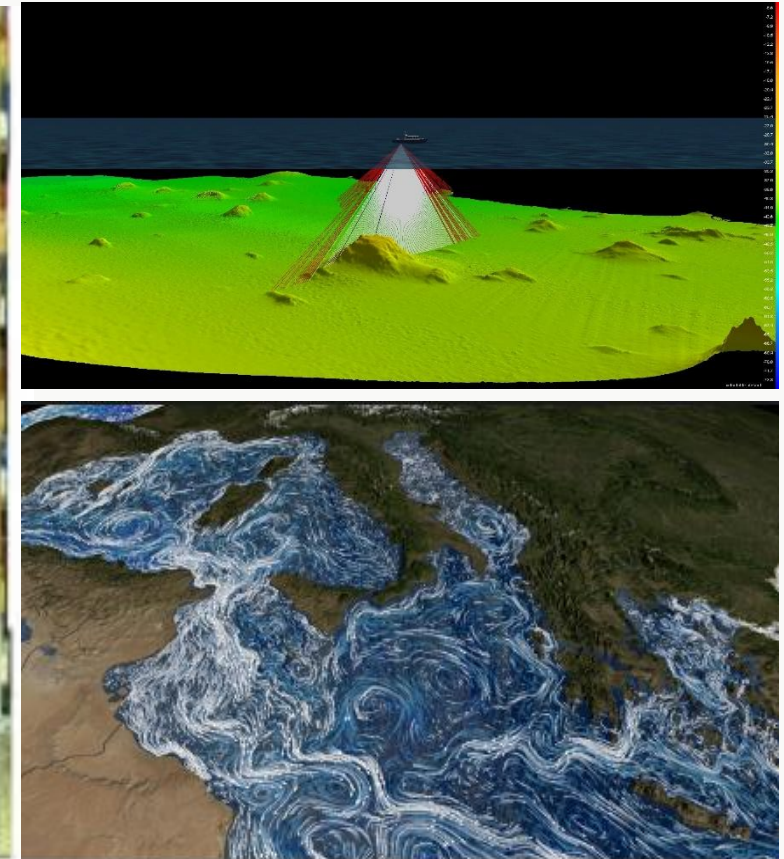
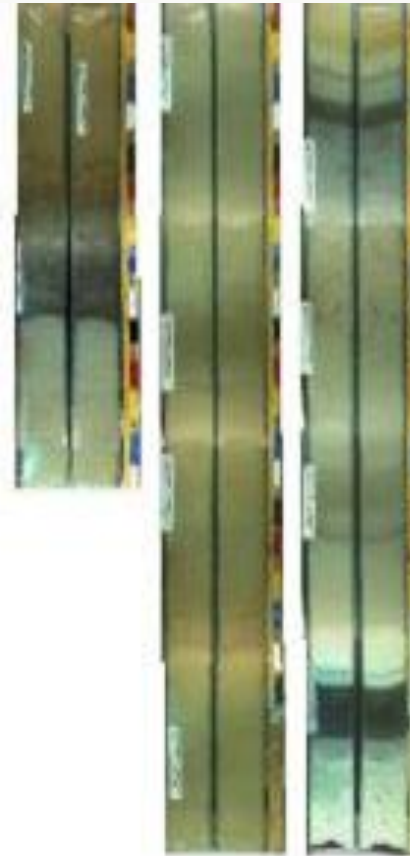
The main topics are:

- ★ Ocean technology for seafloor and habitat mapping
- ★ Modern methods and equipment involved in exploring and monitoring the seabed
- ★ Sediments and benthos characterization, including biocostructions
- ★ Geo-biological processes
- ★ Climate and global changes in the oceans
- ★ Ocean circulation, acidification, sea-level rise or coastal erosion
- ★ Conservation paleobiology and Ecological baseline

## Geo-Environmental Area

- Biogeosciences and global changes (1st year)
- Marine Geomorphology (1st year)
- Physical oceanography (1st year)
- Chemistry of the marine environment (1st year)
- Applied geomorphology & habitat
- Applied marine geology
- Applied Micropaleontology & Biomonitoring
- Conservation Paleobiology
- Ocean monitoring & data analysis
- Coastal risks and dynamics

Mandatory courses in red



# Geographical and Legal Area

*“Geography is the study of the Earth as the home of the people”*

Yi-Fu Tuan

**Geographical studies** related to the marine and coastal environments embrace the study of cultural, political, and social aspects throughout the world and how people relate to spaces and places. As such, it encompasses a large range of topics, such as environmental conflicts, social resilience, population and gender issues, tourism, and geographical representations of the sea

**Coastal and Marine Hazard and Resilience:** The course explores the complexity of the relationships between culture, risk and disaster in marine and coastal areas. The aim of the course is to improve the knowledge and understanding of the risks associated with coastal and marine environments in order to better manage them and analyse people's resilience to risk, exploring the cultural dimension of disaster in marine areas

**Environmental Justice and Geopolitics of the Sea:** the course focuses first on the historical representation of the ocean as a "political and social space" and on how the sea can be framed by international geopolitical discourse, in relation to the processes of territorialisation, geo-power and extra-territoriality of marine spaces

**Human Geography of Small Islands Systems:** Mainly referring to the general framework of the Island Studies, the course aims to provide a set of tools useful to the analysis of socio-spatial dynamics within island systems. Furthermore the course aims to provide tools and interpretative models useful to understand how, at local scale, human communities (privately, socially and politically) cope with socio-environmental changes, crises, conflicts and transitions by producing a set of resilient practices, knowledge and adjustments

# Geographical and Legal Area

*“The sea has always been lashed by two major contrary winds: the wind from the high seas towards the land is the wind of **freedom**; the wind from the land towards the high seas is the bearer of **sovereignities**. The law of the sea has always been in the middle between these conflicting forces”*

René-Jean Dupuy

**Legal studies** related to the oceans in the mandatory course “**INTERNATIONAL LAW OF THE SEA**” embrace the dynamics of the spatial distribution of jurisdiction among States and the legal regime of the different maritime spaces, international straits, and international waters. They aim at leading to a sound understanding of the legal aspects concerning marine environment protection, navigation and overflight, fishing, the conduct of marine scientific research and hydrographic surveys, the uses of the seabed and subsoil (laying of cables and pipelines, including “smart” cables and fiber sensing, construction of installations), deep-seabed mining, naval exercises, naval blockades, conservation and sustainable use of marine genetic resources within and beyond areas of national jurisdiction.

The course “**OCEAN AFFAIRS LAW AND POLICY**” addresses the legal intricacies linked to specific regions (i.e., the Arctic Ocean, the Mediterranean Sea, the Black Sea, compared to the greater ocean spaces), the law of maritime delimitations, and the legal rules for the settlement of maritime disputes before international courts and tribunals, with a focus on specific issues deriving from the current geopolitical dynamics.

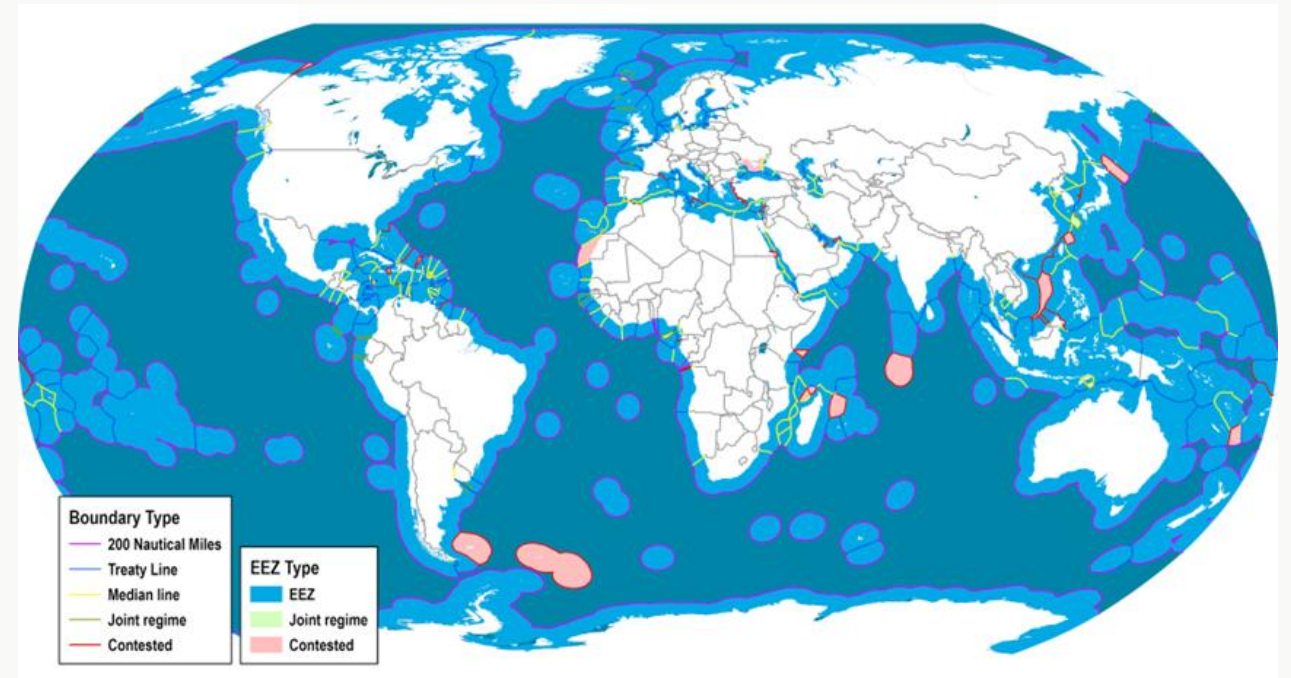
# Geographical and Legal Area

## Legal studies:

- **International law of the sea (1st year)**
- Ocean affairs law and policy

## Geographical studies:

- Coastal & marine hazard & resilience
- Environmental justice & geopolitics of the sea
- Human geography of small island systems
- Coastal and maritime tourism
- Communication skills and interpersonal relation management



Mandatory courses in red

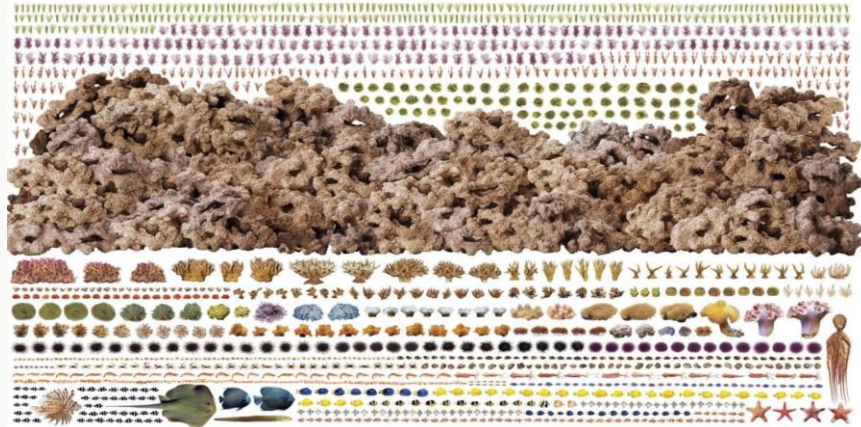
## Bio-Ecological Area

**After that magic moment when my eyes opened in the sea, I was no longer able to see, think or live as before.**

**(Jacques Cousteau)**



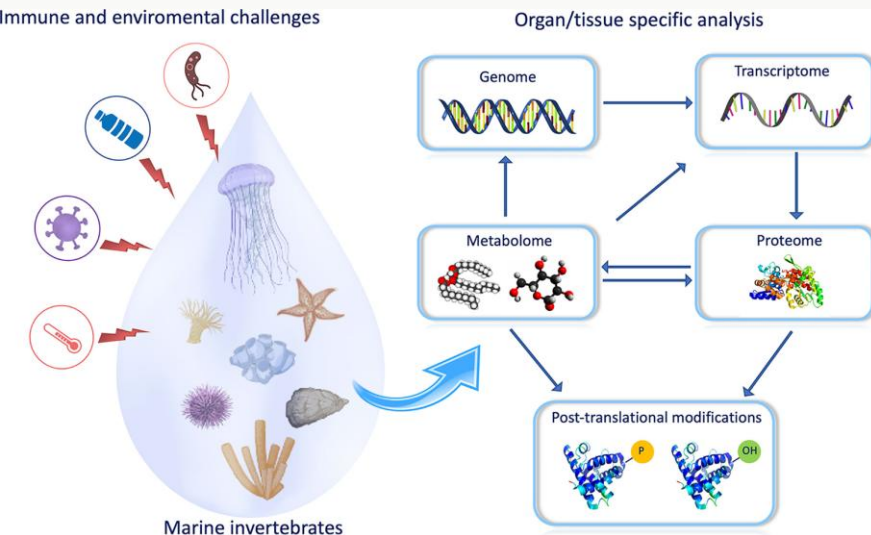
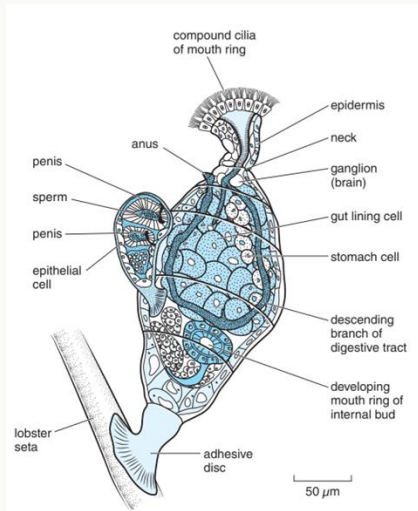
**The Bio-Ecological Area track embraces the study of life in the oceans and includes a broad range of topics, from biogeography to biodiversity, marine botany, molecular ecology, biological systematics, population ecology, management of aquatic resources, and fisheries.**



## Bio-Ecological Area

The main topics are:

- Marine biology and ecology, biodiversity, fisheries
- Knowledge of the marine biological processes, from individuals to ecosystems
- Patterns of marine biodiversity and threats to ecosystem integrity and biodiversity
- Zoology and botany
- Principles and applications of molecular biology tools for the study of marine organisms and microorganisms



## Bio-Ecological Area



Mandatory courses in red

- Fundamentals of marine biology (1st year)
- Biodiversity & marine ecology (1st year)
- Management of aquatic resources: fisheries
- Marine bioprospecting
- Marine invertebrate zoology
- Marine vertebrate zoology
- Coastal and marine botany
- Marine molecular biology
- Marine environmental microbiology
- Climate change impacts on marine ecology
- Multidisciplinary marine lab: bio-ecology
- Underwater Scientific Methodologies for ecological studies

# Admission: curricular requirements

To be eligible for admission to the MSc Degree Programme in Marine Sciences – Scienze Marine, applicants **must fulfill some curricular requirements and attend an interview to assess their educational background.**

## 1) Curricular requirements:

1.a) Having a Bachelor's Degree, or related international degrees (three-year) in one of the following scientific fields:

- Environmental Sciences (Italian Classes L-32 or 27)
    - Earth Sciences (Italian Classes L-34 or 16)
      - Biology (Italian Classes L-13 or 12)
- (or Italian Classes ex DM 270/04 or ex DM 509/99)

The adequacy of curricular requirements and overall preparation will be **assessed by the Admission Committee.**

# Admission: curricular requirements

To be eligible for admission to the MSc Degree Programme in Marine Sciences – Scienze Marine, applicants **must fulfill some curricular requirements and attend an interview to assess their educational background.**



## Curricular requirements:



1.b) Graduates with Italian Bachelor's Degree: required to have a total amount of at least 24 CFU (Italian university credits) in one or more of the following academic disciplines:

- Chemistry: CHIM/\* (all chemical disciplines, from CHIM/01 to CHIM/12)
- Biology: BIO/\* (all biological disciplines, from BIO/01 to BIO/19)
- Geology: GEO/\* (all earth science disciplines, from GEO/01 to GEO/12)

1.c) Graduates with international Bachelor's Degree: evaluated on a case-by-case basis by the Admission Committee, considering the alignment of the candidate's study plan (transcript of records - TOR) with one or more of the academic disciplines among which **CHEMISTRY, BIOLOGY and/or GEOLOGY.**

The adequacy of curricular requirements and overall preparation will be **assessed by the Admission Committee.**

## Admission: curricular requirements

### 2) A certificate of Level B2 proficiency in the English language

To demonstrate their adequate knowledge of English, applicants must submit one of the following documents:

- a) Level-B2 English certificate, or higher, issued by a [University-accredited Institution](#) obtained in the three calendar years before the date of application;
- a) A certified document issued by the University of Origin stating that the Bachelor's Degree Programme attended by the applicant is entirely or almost entirely offered in English;
- a) ONLY FOR UNIMIB STUDENTS: [Open Badge Bbetween Languages - English](#) at a level not lower than B2 - No expiration date. UNIMIB students, who do not yet possess it before applying for admission, can obtain it free of charge through [Languages@Unimib](mailto:Languages@Unimib)

English native language candidates are exempt from submitting a separate language proficiency certificate. Countries where English is considered a native language include United States, the United Kingdom, Canada (excluding Quebec), Australia, New Zealand, Ireland, South Africa, and countries in the Caribbean where English is an official language.

# Admission: interview

## Admission interview:

Applicants, who meet the curricular requirements, will be required to undergo an interview to assess their basic knowledge in geology, biology, chemistry and geography. The interview is in English.

**Eligible candidates will receive the details of the interview via email.**

Candidates living at a distance of at least 100 km away from the Milano-Bicocca University, those being off-site for proven study or work activities or unable to attend the interview for medical reasons as well as foreign candidates may **ask the Admission Committee for a remote interview, by videoconference.**

Applicants who meet the curricular requirements and hold a Bachelor's degree (1.a) with a **final mark  $\geq 99$  or a GPA  $\geq 3.7$  will be exempt from the interview.**

**HOW TO BE ADMITTED: <https://elearning.unimib.it/course/view.php?id=17872>**

# Enrollment: HOW TO in 2026-2027

## Candidates with Italian qualification:



Application for admission through [Online Student Registry](#) (Segreterie Online):

- **Self-certification** (i.e. Dichiarazione Sostitutiva di Certificazione) attesting the academic qualification, the graduation mark, passed exams, examinations CFUs (i.e. ECTS) and scientific areas, i.e. Settori Scientifico-Disciplinari or SSD (if a pre-filled self-certification form from your University is not available, please use the form "[Substitutive declaration of certification Enrolment Graduation Exams](#)"). The self-certification must be signed by the candidate, under penalty of exclusion from admission procedures
- **A certificate of Level B2 proficiency in the English language**

### FIRST WINDOW

From **March 2<sup>nd</sup> to June 12, 2026**

Interview: **24-25-26 June 2026**

### SECOND WINDOW

From **June 30 to September 7, 2026**

Interview: **16-17-18 September 2026**

<https://elearning.unimib.it/course/view.php?id=17872>

## Enrollment: HOW TO in 2026-2027

### Candidates with international qualification (Eu and non-EU)



Application for admission through the new platform: [https://apply.unimib.it/en\\_GB/courses/course/78-marine-sciences/](https://apply.unimib.it/en_GB/courses/course/78-marine-sciences/)

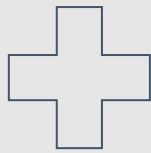
- Final diploma of a first-level degree (accompanied by an official translation in Italian or English)
- Certificate of exams (Transcript of Records - ToR) accompanied by an official translation in Italian or English
- Any further documentation relating to access requirements
- **A certificate of Level B2 proficiency in the English language**
- For non-EU candidates requiring a visa, the **pre-enrollment receipt on the UNIVERSITALY Portal**, where available

To any questions, please email [credential.evaluations@unimib.it](mailto:credential.evaluations@unimib.it)

More information for non-EU candidates: <https://en.unimib.it/international/international-students/getting-essentials>

1<sup>st</sup> year - 60 CFU

**7 MANDATORY  
COURSES (48 CFU)**



**2 mandatory multiple-  
choice exams (12 CFU)**

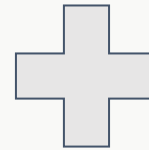
2<sup>nd</sup> year - 60 CFU

- **12 CFU: 2 MANDATORY MULTIPLE-CHOICE EXAMS**
- **4 CFU: TRAINEESHIP**
- **12 CFU: ACTIVITIES “TO BE CHOSEN BY THE STUDENT”**
- **4 CFU: ADDITIONAL LINGUISTIC COMPETENCES**  
*For Italian students only: by passing a University test of foreign language proficiency at level B2 or higher among French, Spanish or German or by passing a University test of English proficiency at level C1 or higher.*  
*For foreign students only: by passing a University test of Italian proficiency at level B1 or higher.*  
<https://elearning.unimib.it/course/section.php?id=313333>
- **28 CFU: THESIS**

1<sup>st</sup> year

## 7 MANDATORY COURSES (48 CFU)

- **Chemistry of marine environment, CHIM/12 - 6 CFU**
- **Fundamentals of marine biology, BIO/05 - 6 CFU**
- **Marine Geomorphology, GEO/04 - 6 CFU**
- **Biogeosciences and global changes, GEO/11 - 6 CFU**
- **Biodiversity and marine ecology, BIO/07**
  - module Biodiversity - 6 CFU
  - module Marine ecology - 6 CFU
- **Physical oceanography, FIS/06 - 6 CFU**
- **International law of the sea, IUS/13 - 6 CFU**
- **Geoenvironmental** ● **Bio-Ecological** ● **Geographical and Legal**



**2 mandatory multiple-choice exams (12 CFU)**  
**see the list in slides 8, 11 and 14**

## 2<sup>nd</sup> year: Traineeship 4 CFU\*

To be acquired with traineeship pertinent to the students' study plan with the aim to acquire applicative competences;

To be carried out in **external institutions** (national or international), laboratories, industries, etc. (not UNIMIB);

An official **agreement** between UNIMIB and the hosting institution is **required**

**Contact TRAINEESHIP Commission:** [davide.maggioni@unimib.it](mailto:davide.maggioni@unimib.it), [luca.fallati@unimib.it](mailto:luca.fallati@unimib.it)

## 2<sup>nd</sup> year: 12 CFU of ACTIVITIES “TO BE CHOSEN BY THE STUDENT”

- 12 CFU by exams
- 6 CFU by practical training + 6 CFU exam
  - 12 CFU by practical training

If you opt for Practical Training >> same rules as for the 4 CFU traineeship external + agreement

## Practical training



Practical training can be supported by Exchange and Erasmus programs:

Mobility without Exchange/Erasmus: [davide.maggioni@unimib.it](mailto:davide.maggioni@unimib.it), [luca.fallati@unimib.it](mailto:luca.fallati@unimib.it)

Mobility with Exchange/Erasmus: [rodolfo.gentili@unimib.it](mailto:rodolfo.gentili@unimib.it), [elena.valsecchi@unimib.it](mailto:elena.valsecchi@unimib.it)

\*traineeship can be associated with the mobility for the practical training and/or thesis and only in this case be funded within an Erasmus program.

Location of some hosting institutions and stakeholders visited by Marine Sciences students:

Maldives, Indonesia, Saudi Arabia, Mauritius, Seychelles, Philippines, Martinique, Thailand, South Africa, Madagascar, Singapore, Kenya, USA, Egypt, Israel, United Arab Emirates, French Polynesia, Mexico, Ecuador, Malta, Norway, Spain, Portugal, UK, Germany, France, Greece, Belgium, several Italian Marine Protected Areas.

# Exchange, Extra UE Study



Erasmus+



The ERASMUS programme supports education and training for student  
across EUROPE

## Possibilities

- spend a period to **attend courses, sit exams** at an **EU** University (min. 12 CFU) (Inter-institutional agreement between UNIMIB and the receiving Institution is required)
- spend a period to carry out **practical activities** in an **EU** university / institution / company (Inter-institutional agreement is not required, min. 12 CFU)
- spend a period to carry out **practical activities** in a university / institution / company **outside the EU** (Inter-institutional agreement is not required, min. 6 CFU)

## Funding instruments

Erasmus  
study

Erasmus  
Traineeship

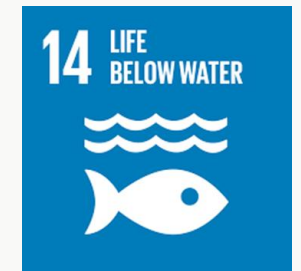
Exchange  
Extra-UE

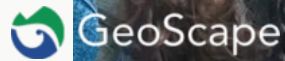
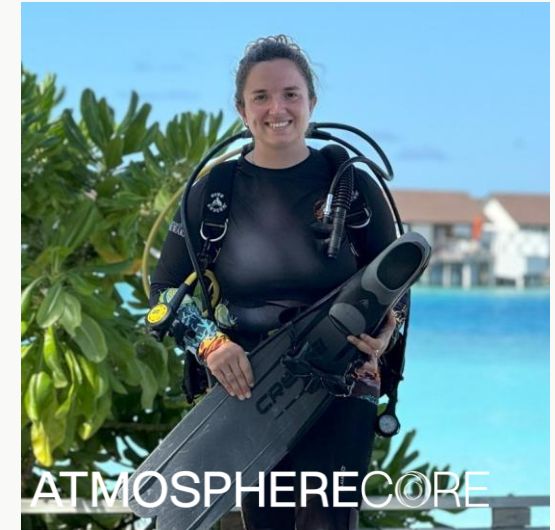
3 different  
calls

✓ **Erasmus Coordinator for MS** → **Rodolfo Gentili** - Email: [rodolfo.gentili@unimib.it](mailto:rodolfo.gentili@unimib.it)  
**Elena Valsecchi** (Erasmus committee) – E-mail: [elena.valescchi@unimib.it](mailto:elena.valescchi@unimib.it)

## Job market

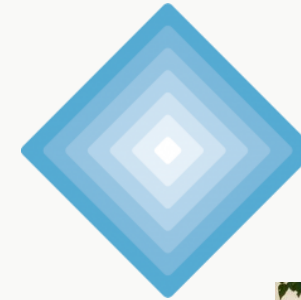
- Governmental and intergovernmental marine spatial planning, management and decision-making groups
- Oil & Gas industry (exploration, production, environmental assessments)
- Law of the sea and national space boundaries
- Marine Protected Areas (MPA)
- Local administrations: management of marine ecosystems and resources, including ecosystem services
- Sustainable tourism
- Scientific support for sustainable management of European and tropical marine environments
- Ocean Literacy, diffusion of scientific culture



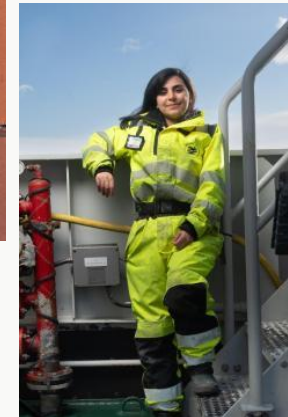


## PhD opportunities

- UNIMIB PhD School in Marine Sciences Technology and Management
- UNIMIB PhD School in Chemical, Geological and Environmental Science
- Access to international PhD positions worldwide



SCUOLA DI DOTTORATO  
BICOCCA



E-learning UNIMIB page <http://elearning.unimib.it/>

follow Scienze, Master degree, Marine Sciences for full info about admission procedure, courses, regulations...and much more (<https://www.unimib.it/graduate/marine-sciences>)

Director of the Master's programme in Marine Sciences

Prof. Alessandra savini

[alessandra.savini@unimib.it](mailto:alessandra.savini@unimib.it)

Write to the secretariat for problems with application,

required documents, etc.

[didattica.ms@unimib.it](mailto:didattica.ms@unimib.it)

Students' representative:

**Daneluzzi Gabriele** - [g.daneluzzi@campus.unimib.it](mailto:g.daneluzzi@campus.unimib.it)

**Santoro Ginevra** - [g.santoro34@campus.unimib.it](mailto:g.santoro34@campus.unimib.it)

Tutor:

**Alice Barbarioli** - [alice.barbarioli@unimib.it](mailto:alice.barbarioli@unimib.it)

**Eleonora Concari** - [eleonora.concari@unimib.it](mailto:eleonora.concari@unimib.it)

Tutor peer to peer

Fereshteh Hemmatjneiad,

[f.hemmateenejad@campus.unimib.it](mailto:f.hemmateenejad@campus.unimib.it)

Luca Marino, [l.marino27@campus.unimib.it](mailto:l.marino27@campus.unimib.it)



Area Scientifica

