

Department of Environmental and Earth Sciences

Master's Degree
in
Marine Sciences – Scienze Marine

Annual manifesto
Academic Year 2022/2023

Educational programme

Following the entry into force of the Ministerial Decree 270/2004 and according to the approved order in Marine Sciences Master's degree programme – Marine Sciences (degree class LM-75), the following academic years will be activated during the 2021/2022:

- **first year** concerning the [Didactic Regulations](#) of the Academic Year 2022/2023;
- **second year** concerning the [Didactic Regulations](#) of the Academic Year 2021/2022.

- ACTIVE COURSES -

FIRST YEAR

(For students who enroll in the Academic Year 2022/2023)

Common courses

Code	Course	Cfu	SSD	Modules	Cfu	Semester
F7502Q004	BIODIVERSITY AND MARINE ECOLOGY	12	BIO/07	BIODIVERSITY	6	First
				MARINE ECOLOGY	6	First
F7502Q001	CHEMISTRY OF MARINE ENVIRONMENT	6	CHIM/12	CHEMISTRY OF MARINE ENVIRONMENT	6	Second
F7502Q037	FUNDAMENTALS OF MARINE BIOLOGY	6	BIO/05	FUNDAMENTALS OF MARINE BIOLOGY	6	First
F7502Q038	FUNDAMENTALS OF MARINE PHYSICAL GEOGRAPHY	6	GEO/04	FUNDAMENTALS OF MARINE PHYSICAL GEOGRAPHY	6	First

F7502Q044	INTERNATIONAL LAW OF THE SEA	6	IUS/13	INTERNATIONAL LAW OF THE SEA	6	First
F7502Q005	PHYSICS OF THE SEA	6	FIS/06	PHYSICS OF THE SEA	6	Second

Mandatory multiple-choice courses

The student has to choose two courses among the following ones:

Code	Course	Cfu	SSD	Modules	Cfu	Semester
F7502Q021	APPLIED GEOMORPHOLOGY AND HABITAT	6	GEO/04	APPLIED GEOMORPHOLOGY AND HABITAT	6	Second
F7502Q014	BIOFACIES	6	GEO/01	BIOFACIES	6	Second
F7502Q039	ENVIRONMENTAL JUSTICE AND GEOPOLITICS OF THE SEA	6	M-GGR/02	ENVIRONMENTAL JUSTICE AND GEOPOLITICS OF THE SEA	6	Second
F7502Q013	GEOBIOLOGY	6	GEO/01	GEOBIOLOGY	6	First
F7502Q016	HUMAN GEOGRAPHY OF SMALL ISLAND SYSTEMS	6	M-GGR/01	HUMAN GEOGRAPHY OF SMALL ISLAND SYSTEMS	6	Second
F7502Q035	MARINE ENVIRONMENTAL MICROBIOLOGY	6	BIO/19	MARINE ENVIRONMENTAL MICROBIOLOGY	6	Second
F7502Q011	MARINE INVERTEBRATE ZOOLOGY	6	BIO/05	MARINE INVERTEBRATE ZOOLOGY	6	Second
F7502Q012	MARINE VERTEBRATE ZOOLOGY	6	BIO/05	MARINE VERTEBRATE ZOOLOGY	6	Second
F7502Q045	OCEAN AFFAIRS LAW AND POLICY	6	IUS/13	OCEAN AFFAIRS LAW AND POLICY	6	Second

SECOND YEAR

(For students who enroll in the Academic Year 2021/2022)

Common courses

Code	Course	Cfu	SSD	Modules	Cfu	Semester
F7502Q007	COASTAL AND MARINE HAZARD AND RESILIENCE	6	M-GGR/02	COASTAL AND MARINE HAZARD AND RESILIENCE	6	First

Mandatory multiple-choice courses

The student has to choose two courses among the following ones:

Code	Course	Cfu	SSD	Modules	Cfu	Semester
F7502Q040	APPLIED MARINE GEOLOGY	6	GEO/04	APPLIED MARINE GEOLOGY	6	First
F7502Q017	COASTAL AND MARINE BOTANY	6	BIO/01	COASTAL AND MARINE BOTANY	6	First
F7502Q025	COASTAL AND MARITIME TOURISM	6	M-GGR/02	COASTAL AND MARITIME TOURISM	6	First
F7502Q023	COASTAL RISKS AND DYNAMICS	6	ICAR/02	COASTAL RISKS AND DYNAMICS	6	First
F7502Q027	COMMUNICATION SKILLS AND INTERPERSONAL RELATION MANAGEMENT	6	M-PSI/08	COMMUNICATION SKILLS AND INTERPERSONAL RELATION MANAGEMENT	6	First
F7502Q018	MANAGEMENT OF AQUATIC RESOURCES: FISHERIES	6	BIO/07	MANAGEMENT OF AQUATIC RESOURCES: FISHERIES	6	First
F7502Q019	MARINE MOLECULAR BIOLOGY	6	BIO/11	MARINE MOLECULAR BIOLOGY	6	First
F7502Q042	OCEAN MONITORING AND DATA ANALYSIS	6	GEO/12	OCEAN MONITORING AND DATA ANALYSIS	6	First
F7502Q020	PALEOCEANOGRAPHY AND PALEOCLIMATOLOGY	6	GEO/01	PALEOCEANOGRAPHY AND PALEOCLIMATOLOGY	6	First

Other mandatory activities

Code	Course	Cfu	SSD	Modules	Cfu	Semester
F7502Q008	Practical training	4	NN		4	
F7502Q010	FINAL EXAMINATION	28	PROFIN_S		28	

FURTHER LINGUISTIC KNOWLEDGE – 4 CFUs

Italian students have to choose one language among the following ones:

F7502Q030	FURTHER LINGUISTIC KNOWLEDGE - ENGLISH - C1 LEVEL (OR HIGHER)	4	NN	FURTHER LINGUISTIC KNOWLEDGE - ENGLISH - C1 LEVEL (OR HIGHER)	4	Annual
F7502Q031	FURTHER LINGUISTIC KNOWLEDGE - FRENCH - B2 LEVEL (OR HIGHER)	4	NN	FURTHER LINGUISTIC KNOWLEDGE - FRENCH - B2 LEVEL (OR HIGHER)	4	Annual
F7502Q032	FURTHER LINGUISTIC KNOWLEDGE - GERMAN - B2 LEVEL (OR HIGHER)	4	NN	FURTHER LINGUISTIC KNOWLEDGE - GERMAN - B2 LEVEL (OR HIGHER)	4	Annual
F7502Q033	FURTHER LINGUISTIC KNOWLEDGE - SPANISH - B2 LEVEL (OR HIGHER)	4	NN	FURTHER LINGUISTIC KNOWLEDGE - SPANISH - B2 LEVEL (OR HIGHER)	4	Annual

Foreign students have to do the following Italian B1 language test:

F7502Q043	FURTHER LINGUISTIC KNOWLEDGE - ITALIAN - B1 LEVEL (OR HIGHER)	4	NN	FURTHER LINGUISTIC KNOWLEDGE - ITALIAN - B1 LEVEL (OR HIGHER)	4	Annual
EDUCATIONAL ACTIVITIES TO BE CHOSEN BY THE STUDENT - 12 CFUs						
The student can choose among the courses offered in this programme or other ones of the University and/or one of the following activities, for a total amount of 12 CFUs:						
F7502Q036	Practical training	6	NN		6	
F7502Q009	Practical training	12	NN		12	

1. Admission rules

In order to be admitted to the Marine Sciences master's degree programme it is necessary to have a degree or a three-year University diploma, that is another certificate earned abroad which is recognized as eligible.

In particular, to be admitted to the Marine Sciences master's degree programme, in order to acquire the specific knowledge, students must have at least 18 CFUs concerning the basics in the following areas:

- Chemistry (CHIM/01, CHIM/02, CHIM/03, CHIM/06),
- Earth Sciences (GEO/04, GEO/07),
- Biology (BIO/01, BIO/05),
- Ecology (BIO/03, BIO/07).

All students are expected to be assessed through their curriculum studiorum analysis and an interview according to the methods, criteria and procedures established by the Educational Coordination Council and posted on the [University portal](#).

At the end of the interview, in case of admission, the candidate will be suggested the most suitable educational path.

An English language certification, issued by the University or a University-accredited institution, corresponding to level B2 is also required.

Admission methods

The admissions committee will verify the disciplinary requirements (18 CFUs or international equivalents in the areas of chemistry, biology, earth sciences, ecology) on the basis of the curriculum studiorum presented by each candidate. In case the candidate's curriculum doesn't have the CFUs (or ECTS or international equivalents) in the above-mentioned disciplinary areas, the candidate will be told the courses/exams to follow/do in order to access the master's degree programme later.

The personal knowledge will be assessed through an interview aimed at verifying the real skills that are necessary to follow the programme successfully. The interview will be held in English language.

Dates and test and interview development will be posted on the master's degree website <http://elearning.unimib.it/course/view.php?id=17872>.

Information concerning the submission of assessment applications is posted on the University website <https://www.unimib.it/graduate/marine-sciences>.

2. CFUs validation and transfer instructions

In case of transfer, the student can ask for the validation of the credits acquired in the previous programme. The procedure will be done by a dedicated committee, named by the Educational Coordination Council, in compliance with the contents of the previous programme and the ones of the programme the student wants to access. The partial validation of a course is allowed.

At least 50% of the credits of students from degree programmes in the same class will be recognized (M.D. n. 155 of 16/03/2007).

According to Ministerial Decree 270/2004 and Law 240/2010, universities may recognize as credits (CFUs) the knowledge and professional skills individually certified, pursuant to the relevant regulations in force, as well as other knowledge and skills gained in post-secondary education activities to which the University participated, for a total amount of 12 CFUs among programmes and master's degree. This validation has to be approved by the Educational Coordination Council on Committee proposal named by the Council itself.

3. Enrolment to the years following the first one

As for the enrolments to the years following the first one, please refer to the web page: <https://www.unimib.it/servizi/segreterie-studenti/rinnova-liscrizione>.

4. Lessons timetable and office hours

Lessons will be held in two semesters according to the following periods:

First semester

- Lessons will be held: from **October 3rd 2022** to **January 27th 2023**;
- Didactic pause during the first semester: from **14th** to **18th November 2022** (only for the second-year students)

Second semester


- Lessons will be held: from **March 1st 2023** to **June 23 2023**;
- Didactic pause during the second semester: from **12th** to **18th April 2023**

Lessons timetable of the first semester will be posted within September 30th on the timetable portal on the University website:

<http://gestioneorari.didattica.unimib.it/PortaleStudentiUnimib/>.

Lecturers' office hours will be posted on the e-Learning platform, in the [course syllabus](#).

5. Courses syllabus

On the web page of the programme, in the e-Learning section it will be possible to see the courses syllabus by entering the following link and clicking on the  icon next to each single course (after selecting the academic year and the programme year of interest):
<https://elearning.unimib.it/course/index.php?categoryid=3628>.

6. Further linguistic knowledge

The acquisition of 4 CFUs of the "Additional Language Knowledge" type is done in the following way.

Italian students:

- passing a University test of foreign language, level B2, choosing among French, Spanish or German;

or

- passing a University test of English language, level C1.

In both cases students (having certificates issued by Institutions accredited by the University which verify linguistic knowledge of equal or higher level than B2 for French, Spanish or German, and equal or higher level than C1 for English) will be exempted from the test and will receive the validation for the expected credits.

Foreign students:

- passing a University test of Italian language, level B1. Students having certificates issued by Institutions accredited by the University will be exempted from the test and will receive the validation for the expected credits.

Information about the test development is defined by the University and will be available on the University website: <https://www.unimib.it/didattica/lingue-unimib>.

7. Educational activities to be chosen by the student

The activities to be chosen are part of the curriculum and must be submitted to the approval of the Educational Coordination Council in order to check the consistency with the educational project. According to the regulation in force, in order to calculate the total number of the exams, the activities to be chosen by the student count for only one exam.

The student can acquire the expected 12 CFUs by choosing among the following ways:

- a) courses for 12 CFUs offered in this programme or by other master's programmes of the University.
- b) internship activities (Practical training) for 6 CFUs and one course for 6 CFUs offered in this programme or by other master's programmes of the University;
- c) internship activities (Practical training) for 12 CFUs.

Further details on the internship activities mentioned under the points b) and c) are reported under the following point 8.

8. Internships

The educational path includes a mandatory 4-CFUs internship. The student has also the chance to involve another internship activity in his curriculum among the activities "to be chosen" in two different ways:

- a 6-CFUs practical training / internship
- a 12-CFUs practical training / internship

The internship activity aims at providing the student the opportunity to gain skills, both scientific and technical, learned during the academic path.

Under the guidance of a University tutor and a corporate tutor, this internship will be held in the labs, companies, bodies and institutions, even at international level, the University set agreements with, and it must be used in order to prepare for the final examination.

Other activities like summer/winter schools, seminars, research activities at the University research centers or other international centers can be validated as "6-CFUs internship" and must be agreed in advance with the committee, which will evaluate the contribution of the activities and the number of CFUs recognizable up to 6 CFUs.

At the end of the agreed activities, the student will have to submit to the Committee, through the appropriate form, the application for validating the activities for 6 CFUs as "6-CFUs internship", by attaching the papers which prove the activities carried out.

9. Exams

Exams can be oral and written according to the University Didactic Regulations. For the minimum number of sessions, please refer to the [Didactic Regulations](#).

The evaluation of the exam is expressed within a range from 18 to 30; for the internship activity it is necessary to receive an "approval" by the lecturer in charge. The exercises, where required, contribute to the final mark.

The registrations to the exam sessions must be done through the [Online Student Registry](#). The calendar of the sessions is available, both in the section [Exams Session](#) and in the Web Agenda in the section [Exams Calendar](#).

10. Curriculum presentation

The curriculum involves all the mandatory educational activities, mandatory activities to be chosen by the student and the educational activities chosen by the student according to the Didactic regulations of the degree programme.

When enrolling in the first year, the student is automatically given a curriculum which represents a statutory curriculum. Later the student has to submit his own curriculum including the mandatory activity to be chosen and the ones self-chosen.

The curriculum is assessed by the Curriculum Committee and approved by the Educational Coordination Council.

The student's right to do the exam of an educational activity depends on the presence of the activity itself in the approved curriculum.

As for all that is not provided, please refer to the [University Regulations for the students](#).

Methods and deadlines for the submission of the curriculum are set by the University. Further information will be posted in the web page:

<https://www.unimib.it/servizi/segreterie-studenti/piani-degli-studi>.

Supernumerary credits

Notwithstanding the provisions of article 22 paragraph 3) of the University Regulations in force, the Academic Senate, by resolution dated May 11 2020, has provided also for students enrolled to the master's degree programmes, the chance of including in their own curriculum other supernumerary activities up to 16 CFUs, starting from the year 2019/2020.

The 16 CFUs can be acquired by recognizing the exams done during the [Erasmus](#) programme or other [activities offered by the University](#).

CFUs and the marks received for the additional courses are not included in the calculation for the average grade of the exams but they will be registered in the curriculum and appear in the Degree Supplement.

11. Degree

Final examination

The final examination consists in writing a dissertation with original scientific contents, written and discussed in English, under the guidance of a Supervisor.

Development of the final examination

Introduction

The final examination has to be a research on a specific topic related to the marine environment, also referring to the internship experiences.

The examination will be discussed in an open session, also online, in front of a committee of lecturers who will express the final evaluation in hundredths with potential honors, considering the whole student's career.

In order to be admitted to the final examination, the student must have the credits related to the activities of the programme which need to be added to the ones obtained during the final examination to reach the 120 credits.

Development

Before starting the dissertation the student must have already done a project that the supervisor will send to the secretary's office (didattica.ms@unimib.it), to be later submitted to the Educational Coordination Council.

The dissertation can be developed internally, if carried out in a department research group, or in collaboration or externally, if carried out in a company, an institution or another University, also foreign ones.

The final examination related to the dissertation represents an important stage for acquiring practical skills and it ends with the submission and discussion in English of the original topic. The dissertation has to be written in English as well.

The forms and the standards related to the procedure for submitting the project of the final examination, the regulations for evaluating the examination, and the calendar of the degree sessions are available on the e-learning platform of the master's degree programme (<http://elearning.unimib.it/course/view.php?id=17854>).

12. Contacts

Location:

Department of Earth and Environmental Sciences

Buildings U1 and U4 - Piazza della Scienza, 1 and 4 – 20126 Milan

Secretary's Office

Office hours (Building U1): Tuesday 9.30-11.30 am; Wednesday 2.00-4.00 pm, by appointment.

e-mail: didattica.ms@unimib.it

Programme website: <http://elearning.unimib.it/course/index.php?categoryid=3626>

For information you don't find in this document, please refer to the Didactic Regulations available on the website:

<https://elearning.unimib.it/mod/page/view.php?id=217660>