



ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA

DEGREE PROGRAMME TEACHING REGULATIONS  
LM-75 ENVIRONMENTAL AND LAND SCIENCES  
SCIENCE AND TECHNOLOGIES FOR ENVIRONMENTAL SUSTAINABILITY  
CURRICULUM – Water Costal Management

Ravenna Campus

Courtesy translation in English.  
In case of disputes, **the Italian version is prevalent.**  
Published on 09th August 2024

**Second Cycle Degree/ Two Years Master's Degree in  
Science And Technologies For Environmental Sustainability**

**SUMMARY**

<b>ART. 1 ADMISSION REQUIREMENTS .....</b>	<b>3</b>
<b>ART. 2 MOBILITY RULES BETWEEN DEGREE PROGRAMME CURRICULA</b> <b>into two curricula.....</b>	<b>4</b>
<b>ART. 3 INDIVIDUAL STUDY PLANS .....</b>	<b>4</b>
<b>ART. 4 IMPLEMENTATION OF LEARNING ACTIVITIES AND TYPES OF TEACHING ACTIVITIES .....</b>	<b>4</b>
<b>ART. 5 ATTENDANCE AND COURSE UNIT PREREQUISITES .....</b>	<b>4</b>
<b>ART. 6 PART-TIME STUDENT STATUS .....</b>	<b>4</b>
<b>ART. 7 ASSESSMENT OF LEARNING ACTIVITIES.....</b>	<b>4</b>
<b>ART. 8 ELECTIVE LEARNING ACTIVITIES .....</b>	<b>4</b>
<b>ART. 9 CRITERIA FOR THE RECOGNITION OF CREDITS ACQUIRED IN DEGREE PROGRAMMES IN THE SAME CLASS.....</b>	<b>5</b>
<b>ART. 10 CRITERIA FOR THE RECOGNITION OF CREDITS ACQUIRED WITHING DEGREE PROGRAMMES IN DIFFERENT CLASSES, FROM TELEMATIC UNIVERSITIES OR INTERNATIONAL DEGREE PROGRAMMES....</b>	<b>5</b>
<b>ART. 11 CRITERIA FOR THE RECOGNITION OF EXTRA-UNIVERSITY COMPETENCIES AND SKILLS .....</b>	<b>5</b>
<b>ART. 12 INTERNSHIPS FOR THE PREPARATION OF THE FINAL EXAMINATION .....</b>	<b>5</b>
<b>ART. 13 FINAL EXAMINATION .....</b>	<b>6</b>

## **ART. 1 ADMISSION REQUIREMENTS**

In order to to profitably attend the Second-Cycle Degree/Two-Year Master's Degree in Science and Technologies for Environmental Sustainability, students must possess appropriate knowledge of mathematics, physics, chemistry, biology, ecology, earth sciences at university level, and in particular:

- basic knowledge of mathematics in the fields of mathematical analysis and linear algebra
- basic knowledge of statistics and computer science
- basic knowledge of physics in the fields of thermodynamics and electromagnetics
- basic knowledge of general chemistry and organic chemistry
- basic knowledge in the field of cell biology, zoology and botany and ecology
- basic knowledge of earth sciences in the fields of geology and the description of the earth's surface

Additionally, candidates must meet the curricular requirements and pass the assessment of personal knowledge and skills.

### **a. Knowledge required for access**

#### **- Curricular requirements**

Curricular requirements are met through one of the two options provided:

1. Holding a bachelor's degree in the following class:

a. ex D.M. 270/04: L-32 Scienze e tecnologie per l'ambiente e la natura;

b. corresponding degrees according to previous regulations as well as other degrees obtained abroad, recognized as suitable;

2. Hold a bachelor's degree belonging to a class different from those indicated and have acquired at least 60 credits in the scientific disciplinary sectors (SSD) MAT, INF, FIS, CHIM, BIO, GEO, AGR, ICAR, ING-IND, SECS-S, VET.

### **b. Assessment of personal competences and skills**

Admission to the Master's Degree is subject to passing a test of the adequacy of personal preparation that will take place according to the methods defined in admission methods.

For admission to the international curriculum taught in English, WACOMA, a knowledge of at least level B2 of English language is required, according to Common European Framework (CEFR). Proficiency of English language is verified through the submission of suitable certification and/or the performance of a test (in person or online).

### **c. Admission modalities**

The assesment of the adequacy of the personal preparation is carried out by the Admission Board and is aimed at evaluating the competences in mathematics, physics, chemistry, biology, ecology and earth sciences acquired by the candidate in previous academic studies.

In particular, the candidate's personal preparation is assessed through the analysis of the curriculum and a possible interview or written test (in person or online ) assigning an overall score of maximum 100 points of which:

- From 0 to 40 points for the degree grade achieved or the weighted average if graduating;
- From 0 to 60 points for possession of the indicated skills, assessed on the basis of the acquisition, during the previous career, of ECTS in the scientific-disciplinary macro-sectors: MAT, INF, FIS, CHIM, BIO, GEO.

Personal preparation is considered adequate if the candidate obtains at least 60 points.

The details of the admission procedures, criteria and calendar are decided by the Degree Programme Board and made available on the University portal.

#### **ART. 2 MOBILITY RULES BETWEEN DEGREE PROGRAMME CURRICULA**

The course of study is divided into two curricula.  
Transfer between the planned curricula is not permitted.

#### **ART. 3 INDIVIDUAL STUDY PLANS**

It is possible to submit individual study plans according to the methods, criteria and terms published on the University Portal. Individual study plans, approved by the Degree Programme Board, cannot, however, ignore the regulations and guidelines defined by the competent Bodies.

If the study plan includes the choice of learning activities activated by a Restricted access degree programme, admission to them must also be previously approved by the Restricted access degree programme Board on the basis of criteria previously defined by it.

#### **ART. 4 IMPLEMENTATION OF LEARNING ACTIVITIES AND TYPES OF TEACHING ACTIVITIES**

The attached course structure diagram indicates all the learning activities and their division into hours of classroom teaching, practical exercises or internship, as well as the type of teaching methods. Any further information will be published annually on the University website.

#### **ART. 5 ATTENDANCE AND COURSE UNIT PREREQUISITES**

Compulsory attendance is specified in the attached course structure diagram, as well as any prerequisites for individual course units. Methods of verification of the attendance requirement, if applicable, are established annually by the Degree Programme Board when presenting the teaching planning and are made known to students before the start of lessons via the University Portal.

#### **ART. 6 PART-TIME STUDENT STATUS**

Students can choose to enroll as a part-time student that allows to complete the degree programme in a longer or shorter time than the standard duration (2 years for Second Cycle degree programmes), according to the procedures defined in the University Teaching Regulation.

In case of necessary deactivation, learning activities provided by the degree programme can be replaced to guarantee the quality and sustainability of the programme catalogue.

#### **ART. 7 ASSESSMENT OF LEARNING ACTIVITIES**

The attached course structure diagram defines cases in which the learning activities end with an exam marked (with a score out of 30) or by a "pass".

The assessment methods (oral, written or practical exam or any combination thereof; individual or group exams) are established annually by the Degree Programme Board during the presentation of the teaching planning and are notified to the students via the University Portal prior to start of the programme.

#### **ART. 8 ELECTIVE LEARNING ACTIVITIES**

Students may autonomously select one or more learning activities among those offered by the degree programme and available in the attached course structure diagram.

If students intend to sit exams concerning an activity that is not included among those identified by the Degree Programme Board, they should submit an official request to the Board in the terms established annually and published on the University website. The Board will assess the coherence of the choice with the student's study programme.

#### **ART. 9 CRITERIA FOR THE RECOGNITION OF CREDITS ACQUIRED IN DEGREE PROGRAMMES IN THE SAME CLASS**

The acquired university credits are recognized for no less than half of them and up to the amount of credits acquired in the same scientific disciplinary sector provided for by the Degree Programme Regulations.

If, having recognised the credits according to the provisions of this regulation, there are unused residual credits, the Degree Programme Board may recognise them by assessing the specific case in coherence with the teaching and cultural affinities.

For what concerns the international curriculum, recognition refers to course units taught in English.

#### **ART. 10 CRITERIA FOR THE RECOGNITION OF CREDITS ACQUIRED WITHIN DEGREE PROGRAMMES IN DIFFERENT CLASSES, FROM TELEMATIC UNIVERSITIES OR INTERNATIONAL DEGREE PROGRAMMES**

The acquired credits are recognised by the Degree Programme Board according to the following criteria:

- analysis of the course contents
- assessment of the coherence of the scientific-disciplinary fields and the contents of the learning activities in which the student has acquired the credits with the specific learning outcomes of the study programme and the individual learning activities to be recognised, in any case pursuing the aim of promoting student mobility.

The credits are recognised up to the maximum number of university credits provided for in the programme.

If having recognised the credits according to the provisions of this regulation, there are unused residual credits, the Degree Programme Board may recognise them by assessing the specific case in coherence with the teaching and cultural affinities.

For what concerns the international curriculum, recognition refers to course units taught in English.

#### **ART. 11 CRITERIA FOR THE RECOGNITION OF EXTRA-UNIVERSITY COMPETENCIES AND SKILLS**

Competences acquired outside of the university may be recognised in the following cases:

- professional knowledge and skills certified under the terms of the applicable laws;
- competences and skills acquired in post-graduate learning activities run or planned by the University.

The request for recognition will be assessed by the Degree Programme Board considering the indications of the academic bodies and the maximum number of recognisable credits laid down in the Degree Programme Teaching Regulations.

This recognition is subject to the activities being coherent with the specific learning outcomes of the degree programme and the learning activities which are recognised, also in consideration of the contents and duration in hours of the implemented activity.

#### **ART. 12 INTERSHIPS FOR THE PREPARATION OF THE FINAL EXAMINATION**

Upon student's request, the Degree Programme offers the possibility of carrying out a curricular internship in preparation for the final examination according to the procedures established by the general regulations for University Internships and by the international mobility programs.

## **ART. 13 FINAL EXAMINATION**

### **a. Characteristics of the Final Examination**

The final examination of a Second Cycle Degree Programme consists in the production and public discussion of an original dissertation based on a topic that is consistent with the programme objectives, under the guidance of a supervising professor.

The dissertation must demonstrate the student's ability to work independently and to clearly and fully present and discuss the results of an original research project, of an experimental or theoretical nature, on a specific topic.

### **b. Modalities of the final examination**

The thesis can be written in Italian or in English.

The title of the thesis must be submitted at least six months before the discussion and must be approved by the Degree Programme Board. The preparation of the thesis is carried out under the supervision of a professor supervisor from Unibo and is discussed in a cross-examination with a counter-supervisor chosen from among the members of the Degree Programme Board.

The course structure diagram allows students to choose the preparation of the final exam in Italy or abroad or, alternatively, an internship for the thesis in Italy or abroad.

The discussion of the thesis takes place with the support of a power point presentation lasting 30 minutes. Score: 9 points can be awarded: 4 of which are available to the Supervisor, 3 to the Counter-Supervisor and 2 to the Commission. Students who have participated in 14 'Thursday Seminars' organized and certified by the Degree Programme are entitled to 1 additional point on the final grade.

\*\*\*

The Joint Teacher-Student Committee expressed its favourable opinion under the terms of article 12 para. 3 of Ministerial Decree no. 270/04.