



UNIVERSITA' DEGLI STUDI DI MILANO
PROGRAMME DESCRIPTION - ACADEMIC YEAR 2025/26
MASTER DEGREE
BIOGEOSCIENCES: ECOSYSTEM ANALYSIS AND SCIENCE
COMMUNICATION Classe LM-60 R)
Enrolled in 2025/2026

HEADING

Degree classification - Denomination and code:	LM-60 R
Degree title:	Dottore Magistrale
Curricula currently available:	ECOSYSTEM ANALYSIS, MONITORING AND MANAGEMENT / SCIENCE COMMUNICATION, DISSEMINATION AND TEACHING
Length of course:	2 years
Credits required for admission:	180
Total number of credits required to complete programme:	120
Years of course currently available:	1st
Access procedures:	Open, subject to entry requirements
Course code:	FBM

PERSONS/ROLES

Head of Interdepartmental Study Programme

Prof.ssa Morena Casartelli

Degree Course Coordinator

Prof.ssa Morena Casartelli

Tutors - Faculty

Tutor orientamento:

Curriculum ANALISI, MONITORAGGIO E GESTIONE DEGLI ECOSISTEMI

Cristina Bonza, Roberta Pennati, Marco Caccianiga, Maria Rose Petrizzo

Curriculum COMUNICAZIONE, DIVULGAZIONE E METODOLOGIE DIDATTICHE DELLE SCIENZE

Manuela Pelfini, Alessandra Moscatelli, Paolo Tremolada

Tutor piani di studio - Cristina Bonza, Manuela Pelfini, Alessia Colombo

Tutor per la mobilità internazionale e l'Erasmus - Silvia Caccia

Tutor per stage e tirocini - Alessandra Moscatelli

Tutor per trasferimenti - Cristina Bonza, Alessia Colombo

Tutor per riconoscimento crediti - Cristina Bonza, Alessia Colombo

Tutor per ammissione magistrale - Cristina Bonza, Alessia Colombo

Degree Course website

<https://biogeoscienze.cd.l.unimi.it>

Course management

via Botticelli 23 <https://informastudenti.unimi.it/saw/ess?AUTH=SAML>

Disability academic tutor: Prof. Claudio Olivari

Email: claudio.olivari@unimi.it

Disability academic tutor: Prof. Guglielmina Diolaiuti

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Libraries

<https://www.unimi.it/it/studiare/biblioteche>

Student registrar

via Celoria 18 Phone 0250325032 <https://www.unimi.it/it/node/360> <https://www.unimi.it/en/node/360>
<https://www.unimi.it/it/studiare/servizi-gli-studenti/segreteria-informastudenti>

EXPERIENCE OF STUDY ABROAD AS PART OF THE TRAINING PROGRAM

The University of Milan supports international mobility by providing its students with the opportunity to spend study and internship periods abroad. It is a unique chance to enrich your educational path in a new exciting environment.

The agreements entered into by the University with over 300 universities from the 27 EU member countries under the European Erasmus+ programme allow regularly enrolled students to carry out part of their studies at one of the partner universities or to undertake internships at companies, training and research centres and other organisations.

Similar international mobility opportunities are provided outside Europe, through agreements with a number of prestigious institutions.

The University of Milan is a member of the 4EU+ European University Alliance that brings together eight public multidisciplinary universities: University of Milan, Charles University of Prague, Heidelberg University, Paris-Panthéon-Assas University, Sorbonne University of Paris, University of Copenhagen, University of Geneva, and University of Warsaw. The 4EU+ Alliance offers integrated educational pathways and programmes to promote the international mobility of students (physical, blended and virtual).

How to participate in Erasmus mobility programs

How to participate in Erasmus+ mobility programmes

The students of the University of Milan can participate in mobility programmes, through a public selection procedure.

Ad hoc commissions will evaluate:

- Academic career
- the candidate's proposed study programme abroad
- his/her foreign language proficiency
- the reasons behind his/her application

Call for applications and informative meetings

The public selection for Erasmus+ mobility for study generally begins around February each year with the publication of a call for applications specifying destinations and requirements. Regarding the Erasmus+ Mobility for Traineeship, the University of Milan usually publishes two calls a year enabling students to choose a destination defined by an inter-institutional agreement or to find a traineeship position on their own.

The University organises informative meetings to illustrate mobility opportunities and rules for participation.

Erasmus+ scholarship

The European Union grants the winners of the Erasmus+ programme selection a scholarship to contribute to their mobility costs, which may be supplemented by the University funding for disadvantaged students.

Language courses

Students who pass the selections for mobility programmes can benefit from intensive foreign language courses offered each year by the University Language Centre (SLAM).

<https://www.unimi.it/en/node/8/>

Learn more at <https://www.unimi.it/en/node/274/>

For assistance, please contact:

International Mobility Office

Via Santa Sofia 9 (second floor)

Tel. 02 503 13501-12589-13495-13502

Contacts: InformaStudenti;

Student Desk booking through InformaStudenti

1st COURSE YEAR Core/compulsory courses/activities common to all curricula		
Learning activity	Ects	Sector
English proficiency B2 (3 ECTS)	3	ND
	Total compulsory credits	3

ACTIVE CURRICULA LIST

ECOSYSTEM ANALYSIS, MONITORING AND MANAGEMENT Course years currently available: 1st
SCIENCE COMMUNICATION, DISSEMINATION AND TEACHING Course years currently available: 1st

CURRICULUM: [FBM-A] ECOSYSTEM ANALYSIS, MONITORING AND MANAGEMENT

1st COURSE YEAR Core/compulsory courses/activities Curriculum-specific features ECOSYSTEM ANALYSIS, MONITORING AND MANAGEMENT

Learning activity	Ects	Sector
Methods in Ecosystem analysis	12	(4) GEO/04, (5) BIO/07, (3) BIO/03
Total compulsory credits	12	

Further elective courses Curriculum-specific features ECOSYSTEM ANALYSIS, MONITORING AND MANAGEMENT

GUIDED PATH COURSES

the student must choose 42 cfu for a total of 7 courses in accordance with the five rules listed:

1- The student must compulsorily choose 1 or 2 of the following courses (chemical, physical, mathematical and IT disciplines)

Astronomy	6	FIS/05
Environmental chemistry	6	CHIM/12
Geographic Information Systems and Environmental Modelling	6	INF/01

2- The student must compulsorily choose 1 or 2 of the following courses (agricultural, management and communication disciplines):

Environmental economics and policy	6	AGR/01
Environmental Ethic	6	AGR/01
Population Biology and Genetics	6	AGR/07

3- The student may choose 1 of the following courses (ecological disciplines):

Alpine Glaciology and Climatology <i>Active teaching (alternate years, not activated in A.Y. 2026-27)</i>	6	GEO/04
Applied geomorphology <i>Active teaching (alternate years, not activated in A.Y. 2026-27)</i>	6	GEO/04
Geomorphological heritage and geodiversity <i>In the 2025-26 academic year, the teaching will not be activated (activation in alternate years)</i>	6	GEO/04
Plant ecology	6	BIO/03
Quantitative ecology	6	BIO/07

4- The student must compulsorily choose 2 or 3 of the following courses (Earth Science disciplines):

Applied palaeoecology <i>Active teaching (alternate years, not activated in A.Y. 2026-27)</i>	6	GEO/01
Biominalization <i>Active teaching (alternate years, not activated in A.Y. 2026-27)</i>	6	GEO/01
Environmental Geochemistry	6	GEO/08
Gemology	6	(3) GEO/06, (3) GEO/09
Geological evolution of a habitable planet	6	GEO/02
Geology of the Mediterranean area <i>Active teaching (alternate years, not activated in A.Y. 2026-27)</i>	6	(4) GEO/03, (2) GEO/07
Stratigraphic Paleontology <i>Active teaching (alternate years, not activated in A.Y. 2026-27)</i>	6	GEO/01
Vertebrate paleontology	6	GEO/01

5- The student must compulsorily choose 2 or 3 of the following courses (biological disciplines):

Adaptation of animals and plants to environment	6	(3) BIO/09, (3) BIO/04
Anatomy and physiology of the integrated systems <i>In the 2025-26 academic year, the teaching will not be activated (activation in alternate years)</i>	6	(1) BIO/09, (5) BIO/06
Animal behaviour	6	BIO/05
Biogeography	6	(3) BIO/05, (3) BIO/02
Biological interactions and social behaviour in insects	6	BIO/05
Laboratory methods for biodiversity <i>In the 2025-26 academic year, the teaching will not be activated (activation in alternate years)</i>	6	(2) BIO/06, (2) BIO/05, (2) BIO/01
Palynology <i>In the 2025-26 academic year, the teaching will not be activated (activation in alternate years)</i>	6	BIO/02
Phylogeny and evolution	6	BIO/05
Wildlife management	6	BIO/05

RELATED AND SUPPLEMENTARY COURSES

The student must compulsorily choose 2 of the following courses:

Anthropology	6	BIO/08
Control strategies for insect pests and vectors	6	(3) VET/06, (3) AGR/11
Forensic sciences <i>In the 2025-26 academic year, the teaching will not be activated (activation in alternate years)</i>	6	MED/43
Geophysics for natural risks	6	(5) GEO/12, (1) GEO/11
Mathematical Modeling	6	MAT/07
Micropedology Laboratory <i>In the 2025-26 academic year, the teaching will not be activated (activation in alternate years)</i>	6	AGR/14

Principles And Dynamics of the "Critical Zone" <i>Active teaching (alternate years, not activated in A.Y. 2026-27)</i>	6	AGR/14
Symbiosis and parasitism	6	VET/06
FREE-CHOICE COURSES		
The student must autonomously acquire 12 CFUs from all the courses offered by the University (preferably chosen within the scientific area), as long as they are in line with the training project, subject to assessment by his/her tutor and approval by the committee in charge. In particular, the student may choose from all the optional courses in this manifesto unless previously chosen in the other rules.		
This category includes any courses identified in the context of the "University Transversal Skills" reported in the resolution (see the relevant paragraph "Struttura del corso □ Presentazione del piano di studi").		
In addition, the following course is activated as part of the DST Project of Excellence:		
Museology, management and enhancement of naturalistic cultural heritage	6	GEO/01
End of course requirements Curriculum-specific features ECOSYSTEM ANALYSIS, MONITORING AND MANAGEMENT		
Final exam	39	ND
Total compulsory credits	39	

CURRICULUM: [FBM-B] SCIENCE COMMUNICATION, DISSEMINATION AND TEACHING

1st COURSE YEAR Core/compulsory courses/activities Curriculum-specific features SCIENCE COMMUNICATION, DISSEMINATION AND TEACHING		
Learning activity	Ects	Sector
Teaching methodologies and techniques for biogeosciences	12	(6) GEO/04, (6) BIO/07
Total compulsory credits	12	
Further elective courses Curriculum-specific features SCIENCE COMMUNICATION, DISSEMINATION AND TEACHING		
GUIDED PATH COURSES:		
the student must choose 42 cfu for a total of 7 courses in accordance with the five rules listed:		
1- The student must compulsorily choose 1 or 2 of the following courses (chemical, physical, mathematical and computer science disciplines):		
Astronomy	6	FIS/05
Communication and teaching of Mathematics <i>In the 2025-26 academic year, the teaching will not be activated (activation in alternate years)</i>	6	MAT/04
Geographic Information Systems and Environmental Modelling	6	INF/01
Geometry in natural and anthropic environments and its teaching <i>Active teaching (alternate years, not activated in A.Y. 2026-27)</i>	6	(2) MAT/03, (4) MAT/04
2- The student must compulsorily choose 1 or 2 of the following courses (agricultural, management and communication disciplines):		
Cultural tools for the dissemination of BioGeosciences	6	SPS/08
Environmental economics and policy	6	AGR/01
Environmental Ethic	6	AGR/01
General pedagogy	6	M-PED/01
Methods of communication	6	SPS/08
3- The student may choose 1 of the following courses (ecological disciplines):		
Applied geomorphology <i>Active teaching (alternate years, not activated in A.Y. 2026-27)</i>	6	GEO/04
Geomorphological heritage and geodiversity <i>In the 2025-26 academic year, the teaching will not be activated (activation in alternate years)</i>	6	GEO/04
Plant ecology	6	BIO/03
4- The student must compulsorily choose 2 or 3 of the following courses (Earth Science disciplines):		
Geological evolution of a habitable planet	6	GEO/02
Geology of the Mediterranean area <i>Active teaching (alternate years, not activated in A.Y. 2026-27)</i>	6	(4) GEO/03, (2) GEO/07
Stratigraphic Paleontology <i>Active teaching (alternate years, not activated in A.Y. 2026-27)</i>	6	GEO/01
Vertebrate paleontology	6	GEO/01
5- The student must compulsorily choose 2 or 3 of the following courses (biological disciplines):		
Anatomy and physiology of the integrated systems <i>In the 2025-26 academic year, the teaching will not be activated (activation in alternate years)</i>	6	(1) BIO/09, (5) BIO/06
Biogeography	6	(3) BIO/05, (3) BIO/02
Cell biology <i>Active teaching (alternate years, not activated in A.Y. 2026-27)</i>	6	(1) BIO/06, (2) BIO/16, (3) BIO/01
Human Anatomy <i>In the 2025-26 academic year, the teaching will not be activated (activation in alternate years)</i>	6	BIO/16
Phylogeny and evolution	6	BIO/05
RELATED AND SUPPLEMENTARY TEACHINGS		
The student must compulsorily choose 2 of the following courses:		
Anthropology	6	BIO/08
Communication, dissemination and teaching of natural sciences	6	M-PED/03

Elementary Mathematics Teaching Workshop	6	MAT/04
History and teaching of Physics	6	FIS/08
Laboratory teaching for Natural science education	6	(2) CHIM/01, (2) GEO/09, (1) BIO/05, (1) BIO/02
Mathematical Modeling	6	MAT/07
Social anthropology	6	M-DEA/01
Symbiosis and parasitism	6	VET/06
Urban and regional geography	6	M-GGR/01
FREE-CHOICE COURSES		
<p>The student must autonomously acquire 18 CFUs from all the courses offered by the University (preferably chosen within the scientific area), as long as they are in line with the training project, subject to assessment by his/her tutor and approval by the committee in charge. In particular, the student may choose from all the optional courses in this manifesto unless previously chosen in the other rules.</p> <p>This category includes any courses identified in the context of the "University Transversal Skills" reported in the resolution (see the relevant paragraph "Struttura del corso□Presentazione del piano di studi").</p> <p>In addition, the following course is activated as part of the DST Project of Excellence:</p>		
Museology, management and enhancement of naturalistic cultural heritage	6	GEO/01
<p>For students in the Ecosystem Analysis, Monitoring and Management curriculum and other degree programmes, the following courses are activated:</p>		
Teaching methodologies and techniques for biosciences	6	BIO/07
Teaching methodologies and techniques for geosciences	6	GEO/04
<p><i>End of course requirements Curriculum-specific features SCIENCE COMMUNICATION, DISSEMINATION AND TEACHING</i></p>		
Final exam	33	ND
	Total compulsory credits	33