



UNIVERSITA' DEGLI STUDI DI MILANO
PROGRAMME DESCRIPTION - ACADEMIC YEAR 2024/25
IN
VALORIZATION AND SUSTAINABLE DEVELOPMENT OF
MOUNTAIN AREAS (Classe LM-73)
Immatricolati dall'a.a. 2022/23

HEADING

| | |
|--|-------------------------------------|
| Degree classification - Denomination and code: | LM-73 |
| Degree title: | Dottore Magistrale |
| Length of course: | 2 years |
| Credits required for admission: | 180 |
| Total number of credits required to complete programme: | 120 |
| Course years currently available: | 1st , 2nd |
| Access procedures: | open, subject to entry requirements |
| Course code: | G67 |

PERSONS/ROLES

Head of Study Programme

Prof.ssa Annamaria Giorgi

Tutors - Faculty

Study plan tutor

Prof. Stefano Corsi (student surname A-D)

Prof. Marco Fiala (student surname E-L)

Prof. Silvana Mattiello (student surname M-R)

Prof. Simon Pierce (student surname S-Z)

Degree Course website

<https://mountainside.cdl.unimi.it>

Didactic Secretariat of the Faculty of Agricultural and Food Sciences

via Celoria 2 - Milano Città Studi Tel. 0250316511 Public opening hours: Monday from 10 am to 12 am and from 2 pm to 4 pm

Contacts: <https://informastudenti.unimi.it/saw/ess?AUTH=SAML>

Head of study programme

Email: presidente.edolo@unimi.it

Secretariat of study programme

Via Morino 8, Edolo (BS) Tel. 0250330500 Email: corso.edolo@unimi.it

SLD Tutor

Prof.ssa Fulvia Tambone Email: fulvia.tambone@unimi.it

Student registrar

via Celoria 18 - Milano Città Studi Tel. 0250325032 <https://www.unimi.it/en/node/360> <https://www.unimi.it/en/node/359>

CHARACTERISTICS OF DEGREE PROGRAMME

General and specific learning objectives

The Master's Degree Course in VALORIZATION AND SUSTAINABLE DEVELOPMENT OF MOUNTAIN AREAS, taught in English, aims to form professionals who are capable of promoting the enhancement, development and sustainable management of mountain territories, by applying innovative approaches and a systemic vision. Multidisciplinary training will integrate environmental and agro-forestry knowledge with proficiency in the economic, legal, historical-geographical and communication skills necessary to clearly delineate the specifics of mountain territories. This will foster the ability to highlight and transmit unique and valuable elements of the mountain context. The graduate will be able to promote the creation of products and/or services of economic and social value beginning from the specific environmental, natural and

agro-forestry resources of the mountains, following the principles of sustainability and in relation to local and global processes operating at the level of environmental (e.g., climate change) and socio-economic factors (depopulation, competitiveness and new models of development, etc.) and related national, European and international intervention policies.

The master's degree program will allow graduates to acquire concrete knowledge, skills and abilities specific to the environmental characteristics of mountain agro-forest ecosystems, specific technologies and methods for monitoring and sustainable management of the mountain environment and its resources, and to optimize the services rendered (ecosystem services, tourism, etc.) and the products that can be obtained. Indeed, the training aims to promote the sustainable enhancement of the specific resources of mountain territories in strategic sectors for the economy such as tourism (e.g., planning and promotion of greenways and paths, dissemination/environmental education), energy from renewable sources, as well as (with regard to "bio-resources" and mountain agrobiodiversity) traditional local short supply chains (e.g. agritourism companies, catering, crafts, etc.) but also in typical industrial supply chains in various sectors such as agri-food, medicinal/health, nutraceutical, cosmetic, manufacturing (e.g. textile) biotechnology, or in the context of the bioeconomy and the circular economy. The specific knowledge, skills and competence of a historical-geographical, juridical-legislative and economic nature will allow the graduate to contribute to the development of business, marketing (product, service and territorial strategies) appropriate to the mountain context, both for the start-up of new businesses and for the planning and management of interventions in the context of programs and strategies for the development of these areas. Furthermore, the expert professional of the mountain territory knows how to use effective communication techniques and methodologies (transversal skills applicable across a range of sectors) including the most innovative digital technologies (web, social, etc.). This is essential to effective interaction with service and innovation centres, between the mountain and urban, local and "global" scales, for continuous training, networking, technical-scientific dissemination and outreach, as well as the marketing of the territory and its products and services. The master's degree in VALORIZATION AND SUSTAINABLE DEVELOPMENT OF MOUNTAIN AREAS is characterized by unique elements with regard to training for the management and sustainable development of mountain territories, including international orientation (the inclusion of these territories in an international framework of dialogue is essential to their development) and multidisciplinary. Another unique aspect is the logistical location of the course, which takes place entirely at the UNIMONT pole of the University of Milan, which has been active for 25 years at Edolo (a mountain municipality in the central Alps) exclusively dedicated to the development of mountain areas through teaching, research and third mission activities. The location of the centre favours teaching within the mountain environment and gives students the opportunity to experience, on a day-to-day basis, the characteristics of the territory that, as professionals, they will influence. However, from a methodological and operational point of view students are guaranteed an experience that is anything but "local", as UNIMONT is part of an "ecosystem" that includes the main sector stakeholders at regional, national and international levels, effectively connecting the local dimension with the supra-local, facilitating the processes of innovation, capacity building and empowerment of human capital essential for the enhancement of these territories. Therefore, the master's course is specific for mountain areas, includes multidisciplinary and the connection between the local and the "global" dimension.

Expected learning outcomes

Consistent with the educational objectives of class LM 73 (the only class that includes the sustainable development of the mountains among its objectives) the master's degree in VALORIZATION AND SUSTAINABLE DEVELOPMENT OF MOUNTAIN AREAS ensures graduates the following learning outcomes with reference to the five Dublin descriptors:

1. Knowledge and understanding

Graduates acquire:

- Knowledge of the environmental, natural and agro-forestry specifics of the mountain context;
- Knowledge of techniques for surveying, processing, and interpreting environmental data for the analysis, monitoring and sustainable management of mountain environments, nature and agro-forestry;
- Knowledge of the specific characteristics of raw materials of natural and/or agro-forestry origin of the mountains, to collaborate in the planning and promotion of the transformation into products/services of economic and/or social value, in the strategic sectors of these areas, also in the context of the bioeconomy and circular economy;
- Knowledge of methodologies and technologies for the analysis, planning, management and promotion of soft mobility networks for sustainable mountain tourism;
- Knowledge and understanding of the environmental, technical and managerial aspects relating to the production of energy from renewable sources and the needs for the protection of mountain environmental resources and the sustainability of optimization interventions in the biomass-energy chain;
- Knowledge of the socio-economic environment and understanding of the specific economic phenomena of mountain areas in relation to socio-cultural evolution, the principal dynamics in progress and the main players in the "ecosystem" of innovation in these territories;
- Economic and marketing knowledge for the evaluation of goods and services of the mountain territory and European planning;
- Knowledge of legal and regulatory aspects (national, European and international) relating to the environment and the mountain territory, and the main policies and intervention programs for sustainable development and the protection of these areas;
- Knowledge of methods and techniques of communication, of the dissemination of scientific knowledge (both traditional and online) and understanding of strategies and methodologies for dissemination and networking.

The assessment of the acquired knowledge and understanding will be carried out through written and oral examinations,

reports of the results of laboratory activities carried out in-situ, within hosting companies, in the field, in the laboratories and throughout the elaboration and discussion of the thesis.

2. Applying knowledge and understanding

Graduates are able to:

- Use the most appropriate and innovative technologies and methods to carry out surveys, processing and interpretation of complex data of different origins to carry out analyses, monitoring and assessment of the ability to produce goods and services (including ecosystems) and for the development of sustainable management plans for the mountain environment;
- plan interventions to evaluate, safeguard and enhance the heritage of natural and agro-forestry biodiversity, also in an educational context;
- use scientific, technological and economic knowledge to promote both traditional and innovative processes in the bioeconomy and circular economy for the enhancement of products from forestry and mountain agro-environmental raw materials (e.g. bio-resources, agrobiodiversity), interacting with specialists from different sectors in multidisciplinary working groups;
- apply environmental, technical and managerial knowledge relating to the production of energy from renewable sources;
- correctly apply knowledge to guide strategic business choices and to analyse and find solutions to the management problems of mountain resource enhancement initiatives in the specific socio-economic and legal legislative framework of the mountain territory;
- identify tenders and financing opportunities for development projects, and apply economic knowledge to collaborate with sectorial experts in the planning and management of development and marketing initiatives for products/services and the mountain territory, and in the development of economic and business plans;
- develop programs for scientific dissemination and environmental education, as well as communication regarding the specific features and products/services of the mountains, using traditional and digital methods (web, social), for networking and effective interaction with service and innovation centres.

The assessment of the skills related to the application of the knowledge and understanding will take place through final written and oral tests, evaluation of laboratory activities, reports of group work, workshops, elaboration of plans and projects as well as through the evaluation of the final dissertation.

3. Making judgements

Graduates in VALORIZATION AND SUSTAINABLE DEVELOPMENT OF MOUNTAIN AREAS can independently formulate constructive and original ideas and appropriate judgements regarding: priority issues to be addressed in a complex context such as that of the mountain environment; the specifics to be enhanced; the most appropriate survey methodologies to be adopted; the interventions to be implemented to promote the sustainable development of mountain areas, including consideration of social and ethical responsibilities related to the application of knowledge and judgements. The multidisciplinary training course gives graduates a systemic vision of the mountain territory and its complexities, also strengthened by the experience of daily life in a mountain municipality and by the interaction with local, regional, national and international stakeholders - aspects that, together, stimulate the development of critical ability and independence of thought.

The assessment of independent judgement will take place through the evaluation of laboratory activities, reports of group work, workshops, elaboration of plans and projects as well as in the final overall assessment of the training course, the internship activities and during the assessment and discussion of the dissertation.

4. Communication skills

Graduates in VALORIZATION AND SUSTAINABLE DEVELOPMENT OF MOUNTAIN AREAS are prepared to effectively communicate, both on a technical-scientific and instructive level, both the most specialized and focussed matters and those relating to broader, complex systemic projects. They are able to address the scientific community of different fields using the appropriate technical language as well as translating complex technical-scientific contents into intervention proposals for policy makers, as well as into "messages" of interest to general society. This will effectively contribute to the creation of the correct degree of knowledge and awareness of the characteristics and specificities of the environment and mountain areas and of the products/services offered, of the role and value of these areas for society as a whole. The graduate also knows how to operate effectively in the field of scientific dissemination and environmental education, is able to interact and communicate within working groups, at stakeholder tables and project partnerships, as well as interacting in focus groups within projects for territorial development and marketing. Graduates can communicate fluently in English (the official language of the course) and can use traditional communication tools (oral and written) but also the most innovative and technological means, using the web, social networks, programs and applications and the most effective methods to achieve aims.

Communication skills in different forms and with different technological and digital tools will be tested during individual lessons, during specific exercises, group work, exams, laboratories and workshops, which include moments of presentation of ideas and projects to the network of mountain stakeholders at local, regional, national and European level, and which may also involve journalists and web and social communication experts. Communication skills will also be assessed during the presentation of the final thesis.

5. Learning skills

During the training course, the master's graduate improves the learning skills necessary to face a complex and multidisciplinary issue such as that of territorial development, given the rapid evolution of society, in which methods, tools

and approaches are modernised thanks to the increasingly rapid acquisition of new knowledge in different sectors. The graduate therefore knows how to identify and consult the accredited sources of reference in the various sectors, and how to use the main open-source platforms of international scientific literature, in order to learn about innovation and promptly transfer this knowledge to the local level. The graduate, knowing the characteristics and composition of the "ecosystem" of the actors and tools of the development of the mountain area, knows how to identify and choose courses for in-depth study and professional updates in areas key to their professional activity.

The ability to learn will be assessed throughout the course of study, both within the planned courses (compulsory, curricular and free-choice) and in the framework of the other planned training activities, including the preparation and discussion of the dissertation.

Professional profile and employment opportunities

The graduate in VALORIZATION AND SUSTAINABLE DEVELOPMENT OF MOUNTAIN AREAS is a specialist in the enhancement and sustainable development of mountain areas who operates using innovative and specific scientific and technological methods and approaches with particular reference to the analysis, monitoring, conservation, management and enhancement of natural and agro-forestry resources (e.g. analysis and monitoring of mountain ecosystems, planning of forestry and silvicultural restoration and conservation actions, protection and production functions including ecosystem services; collaboration in defining natural resource management plans, enhancing agrobiodiversity, etc.). The graduate will be able to collaborate in the design, implementation and promotion of unique products and/or services of economic and/or social value deriving from the environmental and agroforestry resources of the mountain territory (e.g. planning and coordinating interdisciplinary interventions for the tourist/recreational and educational use of the territory; enhance and promote the use of energy from renewable sources, with specific reference to local sources and the forest-wood-energy supply chain; collaborate in defining processes for enhancing traditional and innovative local products, etc.). The graduate can use their training for the identification of business strategies and resource enhancement in relation to specific governance and development policies and regulations, participation in the management of projects for the enhancement and development of the mountain territory in the context of local, regional and national programs, and European and international cooperation. The graduate can apply digital technologies and communication methods to networking, strategic marketing and scientific dissemination of environmental resources and products and services of mountain areas.

Additionally, graduates will have the ability to understand and interpret the specific legal, administrative and socio-economic cultural framework of these territories, to understand dynamic phenomena related to change (climatic and demographic), within the context of the planning of interventions allowing ecological and digital transitions for the definition of new models of sustainable development.

The graduate is able to:

- recognize the specific environmental, natural and agro-forestry resources of the mountains and the ecosystem services connected to them;
- evaluate the evolution and effects of climatic and anthropogenic factors on the natural and agro-forestry components of the environment, the main impacts and adaptation and/or mitigation strategies;
- recognize and safeguard biodiversity heritage using specific intervention programs, including didactic-educational actions, with particular reference to agro-biodiversity;
- apply scientific, technological and economic knowledge to collaborate in the promotion of processes for enhancing traditional and/or innovative products from raw materials (bio-resources, agrobiodiversity) from natural and mountain agro-forest ecosystems, interacting with specialists from different sectors in multidisciplinary working groups;
- identify calls for regional, national and European funding programs for the development of mountain areas and collaborate in the design and management of systemic enhancement and development interventions;
- use territorial information systems and the most innovative technological tools for territorial monitoring, management and planning, also for the purposes of tourism and energy enhancement;
- apply specific knowledge about the economic and cultural environment in which companies and public and private subjects operate, identifying appropriate strategies for enhancing resources, additionally to support decision-making processes in governance, in the planning of interventions for territorial development and enhancement products/services;
- apply specific knowledge regarding the juridical-legislative framework from which policies, strategies, programs and regulations relating to the sustainable development of mountain territories are derived, for the planning of sustainable development interventions and technical support for managing the complexity of these areas;
- work in interdisciplinary and international groups;
- apply economic and marketing knowledge to working processes for territorial development (territorial marketing);
- apply specific technical knowledge to collaborate with professionals from sectors specializing in promoting the use of energy from local renewable sources, combining methods of assessing economic sustainability with methods of quantifying environmental impacts;
- apply knowledge related to the use of digital technologies and communication tools for networking and effective interaction with service and innovation centres, strategic marketing and technical-scientific training and dissemination.

Professional opportunities include entrepreneurial activities, or as a freelance consultant or employee with coordination and responsibility roles in private or public, national or international companies in strategic sectors for the mountain economy, such as environmental, environmental tourism, agro-forestry, energy and project management for the development of mountain areas at:

- technical-professional firms and consultancy and design companies for the enhancement and development of the territory;
- forestry companies and consortia;

- local action groups - LAGs;
- territorial and tourism promotion consortia;
- farms;
- syndicates of agricultural producers;
- trade associations;
- parks and protected areas;
- Municipalities, consortia and unions of Municipalities, Mountain Communities, Provinces, Regions, Ministries;
- developmental agencies;
- foundations and NGOs;
- training and dissemination bodies and companies;
- research and development bodies;

Graduates can carry out freelance activities as a Doctor in Agronomy and Forestry, and after passing the state exam and enrolment they can access recruitment contests for positions as officials of the former State Forestry Corps and other Environmental Policing Corps, pursue a research doctorate in Italy or abroad, or a second level master's degree.

The professional profile covers the following categories:

Agronomists and Foresters; Planners, landscape architects and specialists in the reclamation and conservation of the territory; Researchers and technicians with degrees in agricultural, zootechnical and animal production sciences; Editors of technical journals.

Pre-requisites for admission

Graduates in degree class L-25 (Agricultural and Forestry Science and Technology, pursuant to Ministerial Decree 270/04), L-26 (Agri-food Science and Technology, pursuant to Ministerial Decree 270/04) or in the equivalent class 20 (Agricultural, agri-food and forestry sciences and technology, pursuant to Ministerial Decree 509/1999) and L-32 (Environmental and Nature Science and Technology pursuant to Ministerial Decree 270/04) or in the equivalent class 27 (Environmental and Nature Science and Technology, pursuant to Ministerial Decree 509/1999) or those in possession of an equivalent qualification obtained abroad can access the Master's Degree Course in Valorization and Sustainable Development of Mountain Areas

Graduates from classes other than those indicated above can also access the course, if they have acquired at least 45 credits (CFU) in the scientific-disciplinary sectors listed below, of which at least 12 credits (CFU) earned in biological and agro-forestry and environmental disciplines:

Mathematics, physics, chemistry, computer science and statistics

MAT/02 - Algebra, MAT/03 - Geometry, MAT/05 - Mathematical analysis, MAT/06 - Probability and statistics, MAT/08 - Numerical analysis, FIS/01 - Experimental physics, FIS /03 - Physics of matter, FIS/06 - Physics of the earth and the circumterrestrial medium, FIS/07 - Applied physics (to cultural heritage, the environment, biology and medicine), CHIM/01 - Analytical Chemistry, CHIM/03 - General and inorganic chemistry, CHIM/06 - Organic chemistry, CHIM/12 - Chemistry for the Environment and Cultural Heritage, INF/01 - Computer science, ING-INF/05 - Data processing systems information, SECS-S/01 - Statistics, SECS-S/05 - Social statistics

Biological and agro-forestry and environmental disciplines

AGR/02 - Agronomy and field crops, AGR/03 - General arboriculture and tree cultivation, AGR/05 - Forest management and silviculture, AGR/14 - Pedology, AGR/15 - Food science and technology, AGR /16 - Agricultural microbiology, AGR/17 - General zootechnics and genetic improvement, AGR/19 - Special zootechnics, BIO/01 - General botany, BIO/03 - Environmental and applied botany; BIO/05 - Zoology, BIO/07 - Ecology, BIO/19 - General microbiology, GEO/02 - Stratigraphic and sedimentological geology, GEO/04 - Physical geography and geomorphology, GEO/05 - Applied geology , GEO/07 - Petrology and petrography

Agricultural and forestry engineering and land planning disciplines

AGR/08 - Agricultural hydraulics and hydraulic-forestry management, AGR/10 - Rural buildings and agroforestry land planning, ICAR/06 - Topography and cartography, ICAR/20 - Urban planning and technique, ICAR/21 - Urban planning, ING-IND/09 - Systems for energy and the environment, ING-IND/22 - Science and technology of materials

Socio-economic and legal disciplines

SPS/10 - Urban and environmental Sociology of the environment, M-GGR/01 - Geography, M-GGR/02 - Economic and political geography, AGR/01 - Rural economics and appraisal, SECS-P/01 - Political economics, SECS-P/02 - Economic policy, SECS-P/08 - Economics and business management-marketing, SECS-P/06 - Applied economics, SECS-P/12 - History of Economics, IUS/03 - Agri-food law, IUS/14 - European Union law, IUS/09 - Public law, IUS/10 - Administrative law

Students without an Italian University degree

Those holding another qualification obtained abroad and recognized as suitable by the admission commission will also be able to access.

Admission procedure for all students

Admission requires the verification of the curricular requirements specified above and of personal preparation. These verifications are carried out by a Commission. The verification aims to ascertain the candidate's possession of the necessary preparation in the basic subjects. If needed, the commission may require the candidate to integrate the information provided. The candidates will be informed of the outcome of the procedure via the online admission application system.

Proficiency in English at a B2 level or higher, under the Common European Framework of Reference for Languages (CEFR), is required for admission.

The B2 level requirement will be assessed as follows:

- by submitting a Language certificate at or above B2, through the online application;
- during a specific admission interview.

Programme structure

Teaching methods and organisation

- lectures
- classroom exercises
- exercises in the computer and multimedia classroom
- laboratories
- field activities
- seminars, workshops, problem solving sessions

The teaching activities are organized in such a way as to create the conditions for the independence of the student in the context of the courses provided in the study plan. This is organized and delivered in such a way as to favour participation and interaction in lectures, individual and group work (cooperative learning), the critical analysis of case studies, the comparison and direct interaction with the natural, agro-forestry, and socio-economic environments specific to the mountain territory. Teaching activities will include laboratories, workshops, group exercises, design challenges and problem solving, including activities in the natural and virtual environment, contamination labs, both multidisciplinary and interactive, which stimulate students to transform ideas into concrete projects/products/services. Activities may also include the participation of representative stakeholders, as well as discussion forums, including the use of digital platforms and tools. Teaching is organized in such a way as to leave the necessary space for self-learning and laboratories.

Course organisation

Teaching will typically be organized for each year of the course in two coordinated cycles lasting less than one year, conventionally called "semesters" and equal to no less than 12 weeks each. The courses will be delivered in English.

Presentation of the study plan

To obtain the 8 free choice credits required, the student must define his or her Study Plan indicating the teaching modules (or activities) activated for the degree course or for other degree courses of the Faculty and University, or usable for other training activities that can be evaluated in terms of ECTS credits. These activities will be freely chosen by the student with the help of a tutor, but must be approved by the Academic Board which will judge their consistency with the training course. The presentation of the Study Plan, usually completed online through SIFA, must take place in the second year of the course, within the deadline indicated by the teaching secretaries. The student is required to present the Study Plan to his/her tutor who in turn will submit it to the judgment of the Academic Board which will assess the correspondence of the chosen activities with the training course. The methods and terms of presentation of the plans will be made known by the Student Administration Office with notices published on the page <https://www.unimi.it/en/study/bachelor-and-master-study/following-your-programme-study/plan-study> and reported on the webpage of the degree course website.

Furthermore, we highlight the activities included in the University project for the development of transversal skills: <https://www.unimi.it/en/study/bachelor-and-master-study/following-your-programme-study/soft-skills>

These training activities are compulsory to attend, have a defined number of places and can be included in the study plan, among the "Free choice activities", only if they have been approved by the relevant CdS.

Details are available on the page <https://mountainside.cdl.unimi.it/en/courses>

Calendar of teaching activities

For the academic year 2024/2025, the teaching calendar is as follows:

first semester from September 23th 2024 to January 17th 2025

second semester from February 24th 2025 to June 13th 2025

Lesson timetable

The lesson timetable will be published on the website: <https://www.unimi.it/it/node/128/>

Exams

Exam sessions

For the academic year 2024/2025, the exam sessions will occur during the following periods:

- from January 20th 2025 to February 21th 2025

- from June 16th 2025 to July 31th 2025

- from September 1st to 19th 2025

The following teaching breaks to allow exam sessions and ongoing tests are also envisaged:

- from November 11th to 15th 2024

- from May 5th to 9th 2025

The exam calendar is published on the degree course website.

Registration for the exams is mandatory and can be done through online services: <https://www.unimi.it/en/study/student-services/technology-and-online-services/online-services-former-sifa> or from the section "Exams and teaching evaluation" ("Esami e valutazione della didattica") of UNIMIA.

Tutoring

At the time of enrolment, each student is assigned a tutor belonging to the teaching staff, whom the student can contact, throughout the training course, for organizational and cultural orientation and for all needs related to teaching activities and for the compilation of the Study Plan. The tutors are indicated in this document in the paragraph "Points of reference - Tutors" ("Riferimenti-Docenti tutor"); any changes will be communicated to the students during the first weeks of the first semester of the first year. The student is therefore guaranteed a specific support activity, with the opportunity to meet the teacher individually or in small groups.

- Students with learning difficulties and disabilities

The University of Milan - in order to guarantee the right to study, equality and social integration within the university community - provides assistance and services to University students with disabilities or specific learning disabilities ("disturbi specifici di apprendimento"; DSA). For all information in this regard and how to access the service, please refer to the University website (<https://www.unimi.it/en/study/student-services/services-students-specific-learning-disabilities-sld> and <https://www.unimi.it/en/study/student-services/services-students-disabilities>).

Compulsory attendance

Attendance of the training activities is strongly recommended.

Internship criteria

The course of study includes an internship that leads to the acquisition of 6 ECTS credits and a master's degree thesis, the preparation and discussion of which will result in the attainment of 20 ECTS credits. The internship, and possibly also the thesis, are carried out in close collaboration with national and international stakeholders in the sector, and will aim to develop original, innovative and concrete contributions and projects aimed at enhancing mountain areas.

Degree programme final exam

The master's degree in VALORIZATION AND SUSTAINABLE DEVELOPMENT OF MOUNTAIN AREA is obtained after passing a final test, consisting of the presentation of the degree thesis, written and presented in English. This will be developed by the student with the guidance of a supervisor, and possibly a co-supervisor from among the other professors or external experts. The subsequent defence of the thesis will be carried out based on critical comments and questions of the Commission, composed of teachers of the degree course. The evaluation of the presentation, the defence of the thesis, and the overall career of the student will determine the final grade. Admission to the final exam takes place following the acquisition of all the credits required by the training course, with the exception of those credits obtained during the final exam itself. Each candidate is presented by the supervisor who will highlight the commitment and quality of the thesis preparation work, the individual contribution and autonomy, originality of the work and the skills acquired. The student's entire career will also be summarized, including additional reporting of the average grade of the exams taken, any other element useful for the assessment, including any periods of study abroad, etc. The candidate is required to present the thesis to the commission in a well-defined time, following the structure of a scientific article. During the discussion the members of the Commission ask questions for an overall and conclusive evaluation. The final graduation mark, expressed out of a total of 110, is formulated by the Commission on the basis of the score obtained during the university career. This considers the average mark of the exams taken, to which the score corresponding to the evaluation of the supervisor and the Commission is added. The awarding of honours takes place if proposed by the President of the Graduation Commission and unanimously approved by the commission.

EXPERIENCE OF STUDY ABROAD AS PART OF THE DEGREE 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 organizations. Similar international mobility opportunities are provided outside Europe, through agreements with a number of prestigious institutions.

Study and internships abroad

The Master's Degree Course offers ample opportunities for study abroad mainly through the Erasmus + program which includes about 30 foreign universities located in the countries of the European Community and the Swiss Mobility Program. The sectors that can be developed at the partner universities embrace all the specific areas of the Master's Degree Course. The definition of the study program (learning agreement) takes place in collaboration with the Erasmus manager of the study course, both with regards to the choice of exams and the organization of the internship at the partner university. Before completing the learning agreement, the student must obtain formal approval, from professors holding equivalent or similar courses at the University of Milan, of the exams to be taken at the host university. To carry out an experimental activity abroad, which can constitute part or all of the internship activity, a letter of consent is required from a professor of the

partner university and the formal approval of the objectives, of the program and the period of the internship by a professor of the course of study who acts as a supervisor. The grade and the associated credits obtained in the partner universities are recognized almost in their entirety, thus giving the students the certainty that what work carried out at the host university is then positively evaluated in their study curriculum. There are also other opportunities for cultural exchanges with universities that have established agreements with our university but which are not part of the Erasmus system. These belong to non-community areas such as China, Japan, and Latin America. Thus, through the constant interaction in European and international working groups, as part of the degree course in "Valorization and Sustainable Development of Mountain Areas", students will have the opportunity to activate Erasmus exchanges and internships at research and universities both in the Alpine Region and in an international non-European context.

The participation of the UNIMONT pole in the principle networks of institutes and research centres active on interdisciplinary issues relating to the enhancement and sustainable development of mountain areas and their specifics (<https://www.unimontagna.it/networking/livello-internazionale/>), facilitates the interaction between students and the specific international "ecosystem" of innovation for mountain areas, increasing opportunities to gain specific experiences abroad at these institutions.

How to participate in Erasmus mobility programs

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 organizes 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; mobility.out@unimi.it

Student Desk booking through InformaStudenti

ADMISSION CRITERIA: 1ST YEAR OPEN, SUBJECT TO ENTRY REQUIREMENTS

Application and enrolment information and procedures

Access is open, with the assessment of curricular requirements and adequate personal preparation.

Information and organizational methods for enrolment

Deadlines to apply for admission are from 22th January up to 31st October, 2024.

Non-EU citizens applying for a visa must apply from 22th January to 30st April 2024.

Graduates and those who will graduate by 31st December 2024 can apply.

Candidates from other universities must attach the documentation certifying the degree obtained or to be achieved, the exams passed, the exams still to pass, and any language certifications.

For undergraduates and graduates of the University of Milan, this documentation can be acquired from the university offices.

Detailed information is available on the page: <https://www.unimi.it/en/study/bachelor-and-master-study/degree-programme-enrolment/enrolment-masters-programme/open-admission-master-programmes>

N° of places reserved to non-EU students resident abroad

5

| 1st COURSE YEAR Core/compulsory courses/activities | | | | |
|---|--|---|---|-----------------------------|
| Scheduling | Learning activity | Module/teaching unit | Ects | Sector |
| 1 semester | Applied statistics for mountain agri-environmental analyses | | 6 | SECS-S/01 |
| 1 semester | Bioresources for innovation in mountain products (Total number of ects:12) | Bio active and functional compounds in traditional and innovative mountain products | 6 | (3) CHIM/06, (3) VET/04 |
| | | Microbiology for traditional and innovative products | 6 | AGR/16 |
| 1 semester | Environmental geology for mountain areas | | 6 | GEO/05 |
| 2 semester | European union law | | 6 | IUS/14 |
| 2 semester | Geographic and historical development of the mountain in the long run | | 6 | (3) SECS-P/12, (3) M-GGR/01 |
| 2 semester | Mountain ecosystems and biodiversity valorization | | 12 | (6) AGR/19, (6) BIO/03 |
| 2 semester | Sustainable management and bioeconomy of mountain forests | | 8 | AGR/05 |
| | | | Total number of compulsory credits/ects | 56 |

| 2nd COURSE YEAR Core/compulsory courses/activities | | | | |
|---|--|----------------------|---|--------|
| Scheduling | Learning activity | Module/teaching unit | Ects | Sector |
| 1 semester | Economics, management and valorization of mountain goods and services | | 8 | AGR/01 |
| 1 semester | Renewable energy and mountain sustainable environment management | | 6 | AGR/09 |
| 2 semester | Infrastructures and landscape planning for sustainable tourism in mountain areas | | 6 | AGR/10 |
| 2 semester | Web communication theories and techniques | | 6 | SPS/08 |
| | | | Total number of compulsory credits/ects | 26 |

Further elective courses

The teaching plan includes 8 self-chosen ECTS credits, to be acquired with modules offered by the University of Milan. Some of the activities of your choice may include the attendance of seminars, conferences, refresher courses, or other activities organized by the university or another body, always following a favourable assessment from the Academic Board, and can usually allow students to acquire up to a maximum of 4 ECTS credits. These activities must appear in the study plan and are freely chosen by the student with the help of the tutor, but must be approved by the Academic Board which judges their consistency with the master's course. The courses specifically activated by the Master's degree in Valorization and Sustainable Development of Mountain Areas are listed in the table below. See also the paragraphe "Programme structure - Study plan definition and submission for approval.

| | | | | |
|------------|--|--|---|---------------------------|
| 1 semester | Co-creation for policy: challenge-based learning and outdoor education as tools to connect people and places | | 3 | SPS/08 |
| 2 semester | Current issues in mountain tourism management | | 2 | SECS-P/08 |
| 2 semester | Mountain biodiversity conservation and protected areas | | 4 | (2) BIO/05, (2) BIO/03 |

STUDENTS HAVE TO ACQUIRE AN ADDITIONAL 4 CREDITS.

Additional Language Skills: Italian (foreign students).

To obtain the degree, those who do not hold an Italian high school diploma or bachelor's degree must demonstrate proficiency in Italian at the A2 or higher level per the Common European Framework of Reference for Languages (CEFR). This level must be demonstrated prior to completing the course programme in one of the following ways:

- by submitting a certificate of A2 or higher level issued no more than three years prior to the date of submission. You will find the list of language certificates recognized by the University at: <https://www.unimi.it/en/node/349>). The language certificate must be submitted to the University Language Centre (SLAM) via the Language Test category of the InformaStudenti service: <https://informastudenti.unimi.it/saw/ess?AUTH=SAML>;
- via a entry-level test administrated by SLAM that can only be taken only once and is compulsory for all students who do not have a valid language certificate.

Those who fail to reach A2 level will have to attend one or more than one 60-hour Italian course(s) geared to their level.

Those who do not take the entry-level test or fail to pass the end-of-course test after six attempts will have to obtain language certification privately in order to earn the 3 credits of Additional language skills: Italian.

| | | | | |
|--|--|--|---|----|
| | Additional Language Skills: Italian (3 ECTS) <i>Compulsory for foreign students</i> | | 3 | ND |
| | Other training activities (1 ECTS) | | 1 | NA |
| | Other training activities (4 ECTS) | | 4 | NA |

End of course requirements

| | | | | |
|--|------------|--|---|----|
| | Internship | | 6 | NA |
| | Final exam | | 20 | NA |
| | | | Total number of compulsory credits/ects | 26 |