



UNIVERSITÀ
DEGLI STUDI
DI MILANO

Master's degree programme in
**Valorization and
sustainable development of
mountain areas**

FACOLTÀ DI

Scienze Agrarie e Alimentari

Applications and admissions

Open, subject to entry requirements.

Admission requirements

Graduates in the 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 ects in the scientific-disciplinary sectors listed below, of which at least 12 ects 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 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.

Objectives

The Master's Degree Programme 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 starting from the specific environmental, natural and agro-forestry resources of the mountains. The graduate will be able to operate following the principles of sustainability and in relation to local and global processes, taking into account environmental (e.g., climate change) and socio-economic factors (depopulation, competitiveness and new models of development, etc.), and the related national, European and international policies.

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 an international orientation (the inclusion of mountain territories in an international framework of dialogue is essential to their development) and

multidisciplinary approach. Another unique aspect is the location of the course, which takes place entirely at the UNIMONT pole of the University of Milan. UNIMONT has been active for 25 years at Edolo (a mountain municipality in the central Alps), in the Province of Brescia, and is exclusively dedicated to the development of mountain areas through teaching, research and third mission activities (dissemination of culture and transfer of research results). The location of the the UNIMONT pole fosters 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. In this way students can effectively connect 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.

Career prospects

The graduates in Valorization and sustainable development of mountain areas is a specialist in the enhancement and sustainable development of mountain areas. They will operate 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 restoration and conservation actions, protection and production functions including ecosystem services; collaboration in defining natural resource management plans, enhancing agrobiodiversity, etc.). The graduates 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 graduates will use their training for the identification of business strategies and resource enhancement in relation to specific governance and development policies and regulations, and will participate 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 graduates will 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 mountain territories, and the dynamic phenomena related to change (climatic and demographic). In this way, they will be able to plan interventions towards ecological and digital transitions, with the definition of new sustainable development models.

Professional opportunities include entrepreneurial activities, freelance consultant or employee, with coordination and responsibility roles in private or public, national or international companies. Graduates will be able to work in all the strategic sectors for the mountain economy, such as environment, environmental tourism, agro-forestry, energy and project management for the development of mountain areas, such as:

- 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.

Of course, they can also candidate themselves for a Philosophy Doctor (Ph.D.) program in Italy or abroad, or an Italian second level master's degree.

Degree syllabus

I year

COMPULSORY LEARNING ACTIVITIES	ECTS
Applied statistics for mountain agri-environmental analyses	6
Bioresources for innovation in mountain products	12
Environmental geology for mountain areas	6
European union law	6
Geographic and historical development of the mountain in the long run	6
Mountain ecosystems and biodiversity valorization	12
Sustainable management and bioeconomy of mountain forests	8

II year

COMPULSORY LEARNING ACTIVITIES	ECTS
Economics, management and valorization of mountain goods and services	8
Renewable energy and mountain sustainable environment management	6
Infrastructures and landscape planning for sustainable tourism in mountain areas	6
Web communication theories and techniques	6

Elective courses

The teaching plan includes 8 self-chosen ects, to be acquired with modules offered by the University of Milan: attendance of seminars, conferences, refresher courses, or other activities organized by the university or another body, always following a favorable assessment from the Academic Board, and can usually allow students to acquire up to a maximum of 4 ects.

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.

COMPULSORY LEARNING ACTIVITIES	ECTS
Co-creation for policy: challenge-based learning & outdoor education as tools to connect people and places	3
Current issues in mountain tourism management	2
Mountain biodiversity conservation and protected areas	4

Further Elective courses

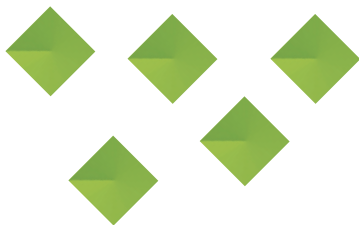
Students have to acquire an additional 4 ects.







- Additional Language Skills: Italian (3 ects), compulsory for foreign students. To obtain the degree, students without an Italian degree or diploma are required to attain an Italian language proficiency at level A2 within the Common European Framework of Reference for Languages (CEFR).
- Other training activities (5 ects)

Elective activities

- 6 ects for Internship
- Final exam (20 ects)

INFO



-  **Disciplinary classification:** Forestry and environment (LM-73)
-  **Duration:** 2 years (120 ects)
-  **Attendance:** Attendance of the training activities is strongly recommended.
-  **Location:**
UNIMONT pole of the University of Milan
c/o Centro didattico di via Morino, 8 - Edolo (BS)
-  **For information:**
corso.edolo@unimi.it
-  **Websites:**
mountainside.cdl.unimi.it



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