UNIVERSITA' DEGLI STUDI DI MILANO
PROGRAMME DESCRIPTION - ACADEMIC YEAR 2022/23
BACHELOR
Agrotechnologies for the Environment and the Territory (Classe L-25)
Enrolled from 2019/20 academic year

HEADING

Degree classification - Denomination and code:	L-25 Agriculture and forestry industry
Degree title:	Dottore
Length of course:	3 years
Total number of credits required to complete programme:	180
Years of course currently available:	2nd , 3rd
Access procedures:	Cap on student, student selection based on entrance test
Course code:	G26

PERSONS/ROLES

Head of Study Programme

Prof. Luca Bechini

Tutors - Faculty

Tutor per i piani di studio:
lettera iniziale cognome studenti A-C: Prof.ssa Lucia Cavalca
lettera iniziale cognome studenti D-G: Prof.ssa Maria Laura Deangelis
lettera iniziale cognome studenti H-P: Prof. Gianluca Galassi
lettera iniziale cognome studenti Q-S: Prof.ssa Anna Spinardi
lettera iniziale cognome studenti T-Z: Prof. Guido Sali

Degree Course website

https://aat.cdl.unimi.it/

Course management for the Faculty of Agricultural and Food Sciences (Science and Technology area)

via Celoria 2 - Milano Città Studi Phone 0250316511-0250316512 Lunedì, mercoledì e venerdì dalle 10.30 alle 12.30; martedì e giovedì dalle 14 alle 16. https://informastudenti.unimi.it/saw/ess?AUTH=SAML

Degree programme head

Phone 0250316590 Email: didattica.disaa@unimi.it

Student registrar

via Celoria 18 - Milano Città Studi Phone 0250325032 https://www.unimi.it/it/node/360 https://www.unimi.it/it/node/359

CHARACTERISTICS OF DEGREE PROGRAMME

General and specific learning objectives

The Degree Course in Agro-Technologies for the Environment and the Landscape aims to train professionals endowed with interdisciplinary skills capable to apply agro-technologies to the several issues related to the efficient and sustainable use of natural resources, to the planning and physical management of landscape and environment, and to the containment of the undesirable environmental effects of agricultural activities. These objectives are pursued by emphasizing the multi-functionality of agricultural activities that nowadays appears the most up-to-date interpretation of their economic and social roles. Therefore, the Degree Course is characterized by the strong attention to the issues typical of the supra-enterprise scale as well as to the interactions among agricultural activities and other uses of the territory.

Expected learning outcomes

After completing the studies, the Bachelor will be able to:
• work in the fields of protection and valorization of the rural territory and of the management of protected areas;
• work in the field of the development of agricultural services devoted to environmental protection and land requalification;
• perform activities of environmental monitoring and analysis by means of up-to-date techniques for the detection, representation and analysis of territorial data;
• perform sector surveys for the assessment of the environmental impact of plans and works and for the evaluation of the resources of the rural territory according to the guidelines of the European Union;

• contribute to the planning and implementing of the urban and territorial plans and of the agro-territorial developmental programs foreseen by the current national and regional regulations. The Bachelor will also have gained awareness and independent judgement that will make possible to acquire the necessary information and evaluate its implications, in a production and market context, in order to implement interventions aimed at improving the quality and efficiency of the agricultural activities and production, also under the points of view of environmental sustainability and eco-compatibility. The Bachelor will also be able to communicate effectively, orally and in writing, with people of equal or lesser skills, also by the use, within the specific disciplinary area, of a language other than his/her own, usually English among those spoken in the European Union. The Degree Course will provide, also by means of new communication and computer technologies, the basic cognitive tools required for the continuous updating of knowledge of the specific sector(s).

Professional profile and employment opportunities

The professional profile of the Bachelor in Agro-Technologies for the Environment and the Landscape merges knowledge of chemistry, biology and plant and animal physiology with that of agro-technology and agricultural economy and engineering, so characterizing a professional able to respond to the needs of Administrations and Public Bodies as well as to those of enterprises and professional services. The career opportunities of the Bachelor in Agro-Technologies for the Environment and the Landscape lie in the fields of protection and management of the rural territory resources, environment protection, analysis and monitoring of agro-environmental systems and processes. In particular, thanks to the acquired skills, the Bachelor will find career opportunities in:

• national and regional services for the protection and development of the environment and territory (Government technical services, national and regional environmental agencies, basin authorities, regional, provincial and municipal technical services and departments, reclamation and irrigation consortia, mountain communities, consortia of mountain catchment);
• professional offices, service companies and laboratories active in the environmental and territorial valorization and safeguard and in environmental monitoring and recovery;
• professional offices and companies operating in the management and disposal of waste, environmental remediation, construction and maintenance of green areas, soil protection works and interventions;
• freelance activities.

Initial knowledge required

Admission requirements

Applicants to the degree programme must hold a secondary-school diploma, or other equivalent qualification, and a baseline of knowledge in scientific subjects (mathematics, chemistry, physics and biology).

Admission assessment

Admission into this Bachelor's degree programme is capped in order to meet high-quality teaching standards relative to the available resources. There are 80 places available for enrolment in the first year, plus 5 places for non-EU students residing abroad.

Access to the programme is regulated by a compulsory, selective test to ascertain that the candidate meets admission requirements, i.e. knowledge of key science subjects as provided by secondary school, and an understanding of elementary logic.

The test required for admission into the degree programme is TOLC-AV, an online test provided by the Consortium of Inter-University Integrated Access Systems (CISIA - https://www.cisiaonline.it).

For test topics and details, please review the page https://www.cisiaonline.it/en/area-tematica-tolc-agraria-veterinaria/struttura-della-prova-e-syllabus/.

You may sit for the TOLC-AV test at the University of Milan or any other member university of CISIA.

The calendar with available venues and dates is posted to the page https://tolc.cisiaonline.it/calendario.php?l=gb.

Registration procedures and deadlines are set out in the call for applications posted to the page https://aat.cdl.unimi.it/it/iscriversi

Only students high enough in the merit ranking will be eligible for enrolment.

Admission of transfer or graduate students

Transfer students from a degree programme of the University of Milan, or another university, and graduate students will be waived from the test requirement only if admitted to years subsequent to Year I.

To this end, a specific request for prior career assessment must be submitted online at: http://studente.unimi.it/ammissioni/a/abbreviazioni/checkLogin.asp

These candidates must provide a full transcript of records (listing exams, subject areas, credits, grades) and attach the course syllabi.

The request for prior career assessment must be submitted from 16 May to 30 June 2022.

The outcome will be notified via e-mail by 15 July 2022.

Students admitted to years subsequent to Year I must comply with the following by the enrolment deadline:

- in case of enrolment in a second degree programme or transfer from another University: enrol by the deadline using the online service at http://studente.unimi.it/immatricolazioni/primoLivello/.
- in case of internal transfer from another degree programme: apply for transfer at: http://studente.unimi.it/trasfInterno/

The student will receive an email (to their University email address) confirming the transfer.

THE PROGRAMME WILL BE GRADUALLY TERMINATED STARTING FROM THE ACADEMIC YEAR 2022/23.

Students who are not admitted to years subsequent to Year I can take the TOLC-AV test and enrol in the new degree programme in Sustainable Agriculture or another programme of the Faculty of Agricultural and Food Sciences, namely those in class L-25: Production and Protection of Plants and Green Areas, Development and Protection of Mountain Environment, Viticulture and Enology.

Compulsory attendance

Course attendance is strongly recommended.

Internship criteria

The internship can only be started after passing all the exams required in Year I.

Degree programme final exams

Upcoming graduates are required to pass a final exam, consisting in the discussion of a written paper on the internship experience before an examining board. The student will write the paper under the guidance of a supervisor, and possibly a co-supervisor. You can find internship and thesis guidelines on the degree programme website: https://aat.cdl.unimi.it/it/studiare/laurearsi. For candidates to be admitted to the final exam, they must have earned 175 credits and completed their internship.

Notes

In order to obtain their degree, students must be proficient in English at a B1 level under the Common European Framework of Reference for Languages (CEFR). This proficiency level may be certified as follows:

- Through a language certificate, earned within three years prior to the date of submission, at a B1 level or higher. For the list of language certificates recognised by the University, please review: https://www.unimi.it/en/node/297/). The certificate must be uploaded during the enrolment procedure, or subsequently to the portal http://studente.unimi.it/uploadCertificazioniLingue;
- Through a Placement Test, which is delivered by the University Language Centre (SLAM) during year I only, from October to December. Students who fail the test will be required to take a SLAM course.

The Placement Test is mandatory for all students who do not hold a valid certificate.

Those who do not sit the Placement Test by December, or who fail to pass the end-of-course test within six attempts, must obtain a paid certificate by graduation.

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 organizations.

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

Study and internships abroad

The Course of study in Agricultural Technology for the Environment gives many opportunities for stages abroad mainly through the Erasmus+ programme. About 30 foreign Universities of the EU are involved in this students exchange. The areas of study which can be followed by the students abroad are almost all those included in this course of study. In general, students who make a stage abroad attend local courses or participate in research for the preparation of their thesis. The examination scores and the related UFC obtained in the partner universities are almost entirely acknowledged by our university for the curriculum studies. More information at https://drive.google.com/drive/folders/1-u48xSaV9eR9Vg-vU9YRT_DAcYCcI50K

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

1st COURSE YEAR (disactivated from academic year 2022/23) Core/compulsory courses/activities common

Learning activity	Ects	Sector
Biology	12	BIO/05, BIO/03
English assessment B1 (3 ECTS)	3	ND
Essentials of economics	6	AGR/01
General and inorganic chemistry	6	CHIM/03
Mathematics	6	MAT/02
Organic chemistry	6	CHIM/06
Physics	6	FIS/07
Total compulsory credits	45	

2nd COURSE YEAR Core/compulsory courses/activities common

Learning activity	Ects	Sector
Agroecology and cropping systems	8	AGR/02, AGR/03
Computer technology and statistics knowledge	6	NA
Farm structures and the environment	6	AGR/10
Fundamental of ecology and forestry	8	(4) AGR/05, (4) BIO/07
General agronomy	8	AGR/02
General and environmental microbiology	6	AGR/16
Livestock Farming System	6	AGR/18
Soil sciences and plant physiology	16	(4) AGR/14, (12) AGR/13
Stage	6	NA
Total compulsory credits	70	

3rd COURSE YEAR Core/compulsory courses/activities common

Learning activity	Ects	Sector
Agricultural mechanics and mechanization for the environment safeguard	6	AGR/09
Agri-environmental evaluation of cropping systems	6	AGR/02
Environmental analysis and monitoring	6	CHIM/06
Environmental economics and appraisal	8	AGR/01
Principles of hydraulics and hydrology	10	AGR/08
Principles of plant protection	8	(4) AGR/11, (4) AGR/12
Total compulsory credits	44	

Further elective courses

Equal opportunities and scientific careers	3	SPS/09
Extensive and organic animal husbandry	4	AGR/19
Health and safety in the workplace (T.U. 81/08)	2	AGR/09
Ornamental arboriculture and urban forestry	6	AGR/03
Soil and subsoil microbiology *Not activated in the 2022/2023 academic year*	4	AGR/16
Soil-Plant interactions: nutrients and pollutants in the agricultural system	6	AGR/13
Survey, map drawing and materials for green areas	6	AGR/10
Technologies and plants for renewable energy in agriculture	4	AGR/09
Valorisation of the agricultural biomass and management of the environmental impact	6	AGR/13

End of course requirements

Final exam	5	NA

	Total compulsory credits	5	