



UNIVERSITA' DEGLI STUDI DI MILANO
PROGRAMME DESCRIPTION - ACADEMIC YEAR 2023/24
BACHELOR
Agricultural Sciences and Technologies (Classe L-25)
Enrolled from 2019/20 academic year

HEADING

Degree classification - Denomination and code:	L-25 Agriculture and forestry industry
Degree title:	Dottore
Curricula currently available:	
Length of course:	3 years
Total number of credits required to complete programme:	180
Years of course currently available:	3rd
Access procedures:	Cap on student, student selection based on entrance test
Course code:	G28

PERSONS/ROLES

Head of Study Programme

Prof. Alberto Tamburini

Tutors - Faculty

Tutor per i piani di studio:

A-B Prof.ssa Maria Cristina Bellucci

C Prof. Aldo Calcante

D-E-F Prof.ssa Arianna Facchi

G Prof. Pietro Marino Gallina

I-K-L Prof.ssa Noemi Negrini

M Prof.ssa Luisa Maria Pellegrino

N-O-P Prof.ssa Alessia Perego

R Prof. Roberto Pilu

S Prof. Giorgio Ragolini

T Prof. Luca Rapetti

U-V-Z Prof.ssa Maddalena Enrica Zucali

Degree Course website

<https://scienzeagricarie.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 0250316499 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

As foreseen by the class L-25 "Agricultural and Forest Sciences and Technologies", the degree course aims at training bachelors with adequate basic skills in the main agrarian sectors, and able to use a scientific approach to solve practical problems. They will be able to perform technical, managerial and professional tasks in activities dealing with crop and livestock systems, and related technologies. They will be able to promptly fit into the work market, both in Europe and outside Europe, being able to use a foreign language, and being able to efficiently communicate and utilize information. The degree course is made of two curricula: a first "Agrarian", more general, and a second one "Agro-Livestock", more specific for animal husbandry.

Expected learning outcomes

Graduates in Agriculture Sciences and Technologies, having a knowledge of both basic and professional (biology, chemistry, engineering, technic and economic) disciplines, will be able to professionally act on all agriculture sectors such as: technical and economic farm management; conservation, transformation and commercialization of plant and animal commodities; management of the rural territory and environment; adequately communicate and use information; autonomy in team working, with a rapid involvement in the operative work; efficiently use a European language, besides Italian. Graduate in Agriculture Sciences and Technologies will be ready to enroll in the master degrees of the Agrarian sector and will have the skills to face the future studies with a high level of autonomy.

Professional profile and employment opportunities

The learning structure of the degree, integrated with some choice courses, will give the graduate different possible professional profiles related to the following activities: management of agro-livestock farms; farm and territory agro-mechanization; management of water resources; design/planning of livestock buildings; economic and administrative farm management. Graduates in Agriculture Sciences and Technologies will be able to work in the following sectors: crop-livestock productions, extension service, public and private administration, research and teaching. Skills: technical and economic management of the crop-livestock resources; organization of the extension services; integrated rural development projects; monitoring and safeguard of the rural territory; choice and set up of technical production plants; machine, plant and structure check and safety; energy management in renewable energy systems; practices for environmental protection and sustainable agriculture; commercialization and marketing of agriculture commodities.

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 200 places available for enrolment in the first year, plus 10 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 upper 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://scienzeagricarie.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 2023.

The outcome will be notified via e-mail by 15 July 2023.

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

Students may earn 10 credits for other training experiences through an external or internal internship as established by the Academic Board.

The Internship cannot start before the student has passed all first-year exams.

Internship activities are usually as follows:

- experimental laboratory or field activities, or monitoring of physical processes or production activities with data collection and processing;
- bibliographic and documentary in-depth research.

Degree programme final exams

Upcoming graduates must pass a final exam consisting in the defence of a written paper before a board of faculty members. The students will write the final paper under the guidance of a Supervisor, and possibly a Co-supervisor, focussing on their internship or a subject covered by one of the three laboratory courses at the student's choice. You can find internship and thesis guidelines on the degree programme website: <https://scienzeagricole.cdl.unimi.it/studiare/laurearsi>. For candidates to be admitted to the final exam, they must have earned 175 credits and completed their internship or passed the three laboratory courses.

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:

- By submitting a language certificate attesting B1 or higher level in English and issued no more than three years before the date of submission. You will find the list of language certificates recognized by the University at: <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>;

- By taking a placement test offered by the University Language Centre (SLAM) between October and December of the first year (or in January for single-cycle programmes). Students who fail the test will be required to take a SLAM course.

The placement test is mandatory for all those who do not hold a valid certificate attesting to B1, B2, or higher level.

Those who have not taken the placement test by the end of December (end of January for single-cycle programmes) or fail the end-of-course exam six times must obtain the necessary certification privately before graduating.

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 Sciences and Technologies 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 learning agreement is outlined in collaboration with the person in charge for the Erasmus of the degree program, as regards both the choice of courses and the organization of the internship at the partner university. Students must obtain the formal approval of the examinations that they intend to carry out at the host university from professors who hold equivalent or similar teachings at the University of Milan before completing the learning agreement. As regards experimental activities abroad, which can constitute part or the entire program of the internship, a letter of agreement from a professor of the partner university is required, along with the formal approval on the objectives, on the program and on the term of the internship by a professor of the degree program, who will also act as supervisor. Other possibilities exist in terms of cultural exchange with non EU universities (in China, Japan, Latin America) not involved in the Erasmus programme.

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 to all curricula		
Learning activity	Ects	Sector
Animal anatomy and genetics	8	AGR/17, VET/01
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		53
2nd COURSE YEAR (disactivated from academic year 2023/24) Core/compulsory courses/activities common to all curricula		
Learning activity	Ects	Sector
Agricultural industries	6	AGR/15
Computer technology and statistics knowledge	6	NA
Farm structures	6	AGR/10
General Agronomy	8	AGR/02
Microbiology	6	AGR/16
Soil and plant science	12	AGR/13
Total compulsory credits		44
3rd COURSE YEAR Core/compulsory courses/activities common to all curricula		
Learning activity	Ects	Sector
Agricultural Economics	8	AGR/01
Total compulsory credits		8
COURSE YEAR UNDEFINED Core/compulsory courses/activities common to all curricula		
Learning activity	Ects	Sector
Other educational experiences	10	NA
Total compulsory credits		10
Further elective courses common to all curricula		
<p>The study program includes 12 CFUs that the student may elect to allocate to selected coursework within the degree program, or towards other degree programs within the faculty and university, or towards other creditable training activities. The training activities that are creditable include seminars, conferences, advanced courses, or other activities organized by the university or another institution, as long as they are consistent with the student's educational path, up to a maximum of 4 CFUs.</p> <p>The recognition of credits for these activities must be agreed upon in advance with the academic tutor. In order to acquire the 12 credits that can be freely chosen, the Teaching Board proposes the following courses listed below:</p>		
Alcoholic beverage technology	4	AGR/15
Beekeeping	4	AGR/11
Farming in the Alps	4	AGR/19

Floriculture and turfgrasses	6	AGR/04
History of Agriculture	4	AGR/02
Morphological evaluation and ethnology in animal production	4	AGR/17
Ornamental arboriculture and urban forestry	6	AGR/03
Postharvest physiology and quality of horticultural commodities	6	AGR/03
Survey, map drawing and materials for green areas	6	AGR/10
Valorisation of the agricultural biomass and management of the environmental impact	6	AGR/13
Vegetables production	6	AGR/04
Viticulture	6	AGR/03
End of course requirements common to all curricula		
Final exam	5	NA
Total compulsory credits		5

ACTIVE CURRICULA LIST

AGRICULTURE Course years currently available: 3°
 AGRI-LIVESTOCK Course years currently available: 3°

CURRICULUM: [G28-A] AGRICULTURE

2nd COURSE YEAR (disactivated from academic year 2023/24) Core/compulsory courses/activities Curriculum-specific features AGRICULTURE		
Learning activity	Ects	Sector
Agricultural hydraulics	6	AGR/08
Animal husbandry	8	AGR/19, AGR/18
Total compulsory credits		14
3rd COURSE YEAR Core/compulsory courses/activities Curriculum-specific features AGRICULTURE		
Learning activity	Ects	Sector
Agricultural genetics and herbaceous crops	10	AGR/07, AGR/02
Agricultural machinery	6	AGR/09
Fruit tree production	6	AGR/03
Plant pathology	12	(6) AGR/11, (6) AGR/12
Total compulsory credits		34

CURRICULUM: [G28-B] AGRI-LIVESTOCK

2nd COURSE YEAR (disactivated from academic year 2023/24) Core/compulsory courses/activities Curriculum-specific features AGRI-LIVESTOCK		
Learning activity	Ects	Sector
Animal husbandry	7	AGR/19
Animal nutrition and feeding	8	AGR/18
Total compulsory credits		15
3rd COURSE YEAR Core/compulsory courses/activities Curriculum-specific features AGRI-LIVESTOCK		
Learning activity	Ects	Sector
Agricultural Machinery and livestock plants	9	AGR/09
Animal welfare and sustainable animal production	7	AGR/19
Basic crop protection	8	AGR/11, AGR/12
Forage and grain cropping systems	9	AGR/02
Total compulsory credits		33

COURSE PROGRESSION REQUIREMENTS

You can take exams for years subsequent to Year I only after you have passed the Maths exam or completed Maths OFA (additional learning requirements). The internship can only be started after passing all the exams required in Year I.