

UNIVERSITA' DEGLI STUDI DI MILANO PROGRAMME DESCRIPTION - ACADEMIC YEAR 2025/26 BACHELOR SUSTAINABLE AGRICULTURE (Classe L-25 R) Enrolled in the 2025/26 academic year

HEADING	
Degree classification - Denomination	L-25 R
and code:	
Degree title:	Dottore
Length of course:	3 years
Total number of credits required to	180
complete programme:	
Years of course currently available:	1st
Access procedures:	Open, subject to completion of self-assessment test prior to enrolment
Course code:	GAD

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. Luca Rapetti D-E-F Prof.ssa Arianna Facchi G Prof. Pietro Marino Gallina H-I-J-K-L Prof.ssa Noemi Negrini M Prof.ssa Maddalena Enrica Zucali N-O-P Prof.ssa Alessia Perego Q-R Prof. Roberto Pilu S Prof. Giorgio Ragaglini T Prof. Luca Rapetti U-V-W-X-Y-Z Prof.ssa Maddalena Enrica Zucali

Tutor per la mobilità internazionale e l'Erasmus:

Prof. Stefano Corsi

Tutor per trasferimenti:

Prof. Alberto Tamburini

Tutor per riconoscimento crediti:

Prof. Alberto Tamburini

Degree Course website

https://agricoltura-sostenibile.cdl.unimi.it

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

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Degree programme head

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Student registrar

CHARACTERISTICS OF DEGREE PROGRAMME

General and specific learning objectives

The structure of the degree course is functional to a solid preparation both regarding the basic subjects and regarding the subjects characterizing the profession of the agronomist in the current context.

The received training provides a multidisciplinary preparation characterized by a high level of competence and consequently allows a high adaptability towards the world of work. The same training also represents an adequate basis for continuing the training path in a master's degree course.

The training aims to provide students with the knowledge and tools to design and manage production processes (plant and animal) that are compatible with the growing awareness that characterizes the consumer in terms of product quality and environmental sustainability, without neglecting economic sustainability.

Furthermore, the training is also oriented towards aspects not necessarily linked to primary production activities, such as the management of natural resources with particular reference to water and forestry, land management, management of public and private green areas, production of renewable energy, transformation and valorization of by-products in agriculture.

Among the training objectives, those relating to the acquisition of the concepts of bio-economy and circular economy are not secondary, in order to allow the graduate in Sustainable Agriculture to manage the entire production process and foreseeing or facilitating the use of by-products.

To achieve these objectives, the training path initially addresses the study of basic subjects, such as mathematics, physics, chemistry, biology, statistics and computer science. Subsequently, typical topics of agricultural sciences are addressed, providing knowledge on agro-ecosystems from a productive and sustainability perspective.

The in-depth study of chemical, biochemical and microbiological topics aims to provide tools for understanding the typical processes of plant and animal production.

The engineering disciplines (agricultural mechanics, agricultural hydraulics and rural constructions), and economics together with the previous ones, allow the graduate to be trained in the rational and sustainable use of technical means and techniques for managing the agricultural company.

The training continues with the in-depth study of specific topics, contained in dedicated training courses, in which further critical and applicative skills are developed.

The free-choice courses of the student will finally allow the training to be completed by also strengthening different skills, taking into account the student's aptitudes.

The student will achieve the training objectives through differentiated teaching methods. Depending on the training and professional characteristics, the teaching courses are divided into lectures, laboratory and field exercises, seminars on topics of specific interest, educational visits, and so on.

The student, in addition, will have to carry out a period of internship, externally to the Faculty (Institutions, Research Institutes, companies, public administration, third sector organizations, other Italian or foreign universities) or at a university laboratory, in order to acquire practical skills in a topic of the training course. The internship activity constitutes the subject of the final exam.

Expected learning outcomes

Knowledge and understanding

The expected outcomes will be acquired through a training path that, starting from the basic subjects, continues with the characterizing and similar ones, through diversified methods: lectures, laboratory exercises, educational trips and participation in seminars. The acquisition of the knowledge described above will be verified during the course itself in the exam for the various disciplines and discussion of the final paper.

The graduate in Sustainable Agriculture will be able to know and understand:

- the physical and chemical processes and factors involved in the production and environmental processes of Agricultural Sciences, also using the mathematical skills acquired.

- the morphology and physiology of living beings present in agricultural systems (microorganisms, plants, animals), their evolution and their classification.

- the genetic bases that underlie plant and animal genetic improvement.

- descriptive and inferential statistics and the main functions of productivity and data analysis software.

- the processes that occur in the soil-plant-atmosphere-water system and the interactions between these compartments, from a production and environmental and natural resources protection perspective.

- environmental resources and agro-techniques for the cultivation of the most important crops, their inclusion in supply chains, biology and methods of prevention and control of harmful organisms, and their influence on the characteristics of the products obtained.

- the techniques and systems of breeding and feeding of the main livestock species, and their influence on the characteristics of the products obtained.

- the dynamics, processes and subjects of the economy in general, and of the agricultural economy in particular.

- the techniques for the design of rural structures and in particular zootechnical ones and related equipment, and topographic techniques for the survey of the territory and the representation of the landscape.

- methods for the hydraulic design of simple infrastructures, artifacts and irrigation systems, and to address problems of water use for irrigation purposes, hydraulic defense of the territory, protection of water resources and hydraulic-forestry systems.

- the structure and operation of tractors, operating machines and systems, and be able to optimize their use to maximize the profitability of the farm, protecting the environment and ensuring worker safety.

Ability to apply knowledge and understanding (applying knowledge and understanding)

The expected results are achieved through exercises (conducted in class, in the laboratory or in the context of production activities) and internships.

The verification of the ability to apply knowledge and understanding will be assessed on the basis of practical tests carried out in laboratories, in courses that include the study of real problems, in the evaluation of the internship training path and in the discussion of the final paper.

The graduate in Sustainable Agriculture acquires the ability to:

- use the language and tools of mathematics and physics to address and solve problems related to the chemical, physical, biological, mechanical and economic aspects of interest in agricultural and environmental sciences.

- apply stoichiometric principles related to the main chemical reactions (acid/base, oxidation-reduction).

- recognize and classify living organisms or their parts (cellular components, cells, tissues and organs).

- use microorganisms in transformation processes of agricultural interest, in biotechnology, and in their interaction with plants and animals.

- describe, analyze and interpret genetic data and use statistical methods for the formulation and validation of hereditary models.

- understand the laws that underlie plant biodiversity and the role of plants within natural or cultivated ecosystems.

- know the relationships between animals and other living beings (symbiosis, competition, parasitism, predation) within an ecosystemic vision of the problems, for a correct management of agricultural systems, for the aspects concerning the production and protection and of natural environments for the conservation and management of biodiversity.

- understand the fundamental biochemical and physiological processes underlying the life cycle of plants.

- estimate and manage the environmental impact of plant and animal production in relation to the different characteristics of the environment (climate, soil and related interaction).

- define the most appropriate agrotechniques in terms of soil processing, fertilization, irrigation, cultivation management, defense of biotic and abiotic adversities, in relation to the environmental characteristics of the cultivation site and the genetic choices made, in order to optimize production and reduce environmental impact.

- identify the most suitable cultivation and agricultural systems for the sustainability of the agricultural production process, in relation to the resilience of agroecosystems, the conservation of non-renewable resources and the improvement of environmental impact.

- obtain useful information from the anatomy and physiology of different animal species to improve animal health and wellbeing.

- apply breeding and feeding strategies for the main livestock productions, respecting animal well-being and the environment.

- apply the knowledge acquired to the design process for the construction and renovation of rural buildings, taking into account both the functional needs derived from the production system of the company and the consequences of the design choices on the management of the company, the environment and the territory.

- address and solve problems of hydrostatics and hydrodynamics of currents in uniform motion and be able to apply them to the verification and hydraulic design of simple infrastructures, artifacts and systems.

- apply the criteria for evaluating the performance of agricultural machinery, with a view to technical-economic optimization of the choices relating to the mechanization of the agricultural company.

- identify the plant solutions to support the agricultural company, for the use of by-products and for the production of renewable energy.

- understand and interpret the economic system and the characteristics of the markets.

- analyze the agri-food supply chains and the role of the actors from an economic point of view.

Autonomy of judgment (making judgments)

Graduates in Sustainable Agriculture acquire the ability to understand data from analysis, databases, experiments and observations, and to identify the relationships between facts and information to formulate autonomous judgments, also taking into account economic, regulatory, social and ethical aspects, and to propose innovative solutions with particular reference to actions aimed to improving the quality and economic and environmental sustainability of the agricultural production.

The acquisition of skills related to autonomy of judgment is encouraged throughout the training course also thanks to the use of innovative teaching methods, but in particular it is stimulated through the experience of the internship and the drafting of the final paper, during which the student is generally put to acquire data and information through analysis, experiments and observations or through the use of databases. The information collected is then processed, interpreted and discussed in the final paper, in light of the results reported in the scientific bibliography, in order to reach original conclusions.

The methods and tools with which this autonomy of judgment will be assessed are essentially represented by the profit exams and the drafting of the final paper.

Communication skills

Graduates in Sustainable Agriculture are able to communicate clearly and effectively information, ideas, problems and solutions relating to the scientific areas of their expertise, even using a European Union language other than their own,

usually English, and using the potential of the most modern communication tools, including multimedia.

This skill is exercised and verified throughout the training course, in particular through oral or written exams with open questions. Communication skills are also encouraged by proposing the participation of students in seminars and conferences, including in English, held by specialists in the sector and by encouraging students to have study experiences abroad. Communication skills find an important moment of strengthening and verification in the drafting, illustration and discussion phase of the final paper.

The internship represents a formative moment for the maturation of relational skills (in relations with the productive world, with the teaching and technical staff of the university, with other students) and, in many situations, also the ability to work in group.

Learning skills

Graduates in Sustainable Agriculture develop the learning skills necessary to undertake further studies as well as maintain adequate and continuous professional updating with a high degree of autonomy.

They acquire the ability to deepen and update their knowledge to address scientific, technical and operational problems in their scientific and professional field through the personal and autonomous collection and processing bibliographic material and databases.

These skills are acquired throughout the entire course of studies but are developed in particular through the experience of writing the final paper, during which students acquire skills in consulting bibliographic material and databases and in the personal re-elaboration of information, for the purposes of interpreting and discussing the topic of the internship.

Professional profile and employment opportunities

Agricultural technologist

Function in a work context:

The graduate in Sustainable Agriculture carries out planning, management and executive functions in the agricultural, livestock and environmental sectors and in the supply chains connected to them. The graduate manages the main aspects of herbaceous and arboreal plant production (processing, fertilization, crop, defense, irrigation, harvesting) and animal production (breeding and feeding systems in compliance with animal welfare, management of housing and production structures and effluents) applying planning, management and executive knowledge to combine profitability needs with environmental sustainability and the quality of the products obtained.

The graduate supports the marketing actions of the products obtained from plant and animal production as well as the management of the marketing of the products.

The graduate actively participates in research and development actions related to the tools needed for plant production (fertilizers, pesticides, agricultural machinery) and animal production (feed, supplements, technological systems) and deals with their sale by exploiting the technical knowledge of the product.

The graduate participates in the development of agricultural businesses by providing technical assistance services to the agricultural company, both in the field of plant and animal production, according to the company's technical and administrative procedures.

In addition, the graduate also deals with aspects not directly linked to primary production activities, such as the management of natural resources, land management, the production of renewable energy, the transformation of products in the company and the management of by-products. He participates in environmental monitoring activities, in the implementation of projects for the recovery of polluted areas and in the management of plants for the transformation of biomass with a high environmental impact.

skills associated with the function:

The skills acquired during the course of studies, which will allow the above functions to be carried out, refer directly to the characterizing and related teachings of the course of study and specifically concern: cultivation techniques, agronomic techniques for the production and defense of plant crops, animal feeding and breeding techniques, technical and applicative knowledge of engineering disciplines relevant to the agricultural area (mechanics, agricultural machinery, construction and systems, hydraulic works), the principles of economics and the analytical bases for the economic management of the agricultural system also with technical functions of environmental protection, recovery and enhancement of natural resources.

employment opportunities:

The above functions will be carried out within:

? Agricultural companies, including those that provide environmental services.

? Agritourism companies and companies oriented towards the transformation and direct sale of their products.

? Public agencies for agriculture, land and the environment (e.g. Regions, Municipalities, Mountain Communities, Water Authorities, National and Regional Environmental Agencies, Land Reclamation and Irrigation Consortia, Mountain Catchment Basin Consortia, Parks and Protected Areas).

? Professional associations.

? International and non-governmental organizations involved in development projects in the agricultural field.

? Freelance professionals, individually or within professional firms operating in the field of agricultural, livestock and natural systems.

? Service companies and laboratories operating in the enhancement and protection of the environment and the territory, in environmental monitoring and recovery, in wastewater management, in environmental remediation, in the creation and maintenance of green areas and soil protection works and interventions.

? Companies providing services for agriculture and livestock (e.g. administrative assistance, agronomic consultancy,

agromechanical companies).

? Companies supplying technical instruments for agriculture and livestock farming (e.g. fertilizers, pesticides, feed and food supplements).

? Companies supplying structures and systems for agriculture and livestock farming (e.g. irrigation systems, milking systems).

? Companies supplying agricultural machinery.

- ? Agricultural consortia, producer associations, trade associations, agricultural cooperatives.
- ? Companies processing, marketing and distributing agri-food products.

Initial knowledge required

Admission requirements

Applicants to this degree programme must hold an upper secondary-school diploma or equivalent qualification obtained abroad, and adequate knowledge. In particular, candidates must have a good understanding of basic scientific subjects (mathematics, physics, chemistry, biology), as provided by upper-secondary school, as well as reasoning skills and written and oral presentation skills in Italian. The students' background will be assessed in accordance with academic regulations for the degree programme. Any additional learning requirements resulting from the aforementioned assessment must be met within the first year of the programme.

Admission assessment

Admission to this Bachelor's degree programme is open, subject to a mandatory, non-selective, assessment test before enrolment. The test will 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 InterUniversity 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-agrariaveterinaria/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://agricolturasostenibile.cdl.unimi.it/it/iscriversi The test results will be notified to each student individually, highlighting any additional learning requirements. To meet any additional learning requirements, the Faculty offers students remedial online courses and extracurricular tutoring at the beginning of classes. We strongly recommend that anyone with additional learning requirements use these services.

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, they will have to submit aspecific request for prior assessment of their academic records using the online service as shown in the call for applications. These candidates must provide a full transcript of records (listing exams, subject areas, credits, grades) and attach the course syllabi. For more details and dates, please refer to the call for applications. Students admitted to the first year must take the test.

Additional learning requirements (OFA) and remedial activities

Students who are admitted with a score lower than or equal to 4 in the Mathematics section of the TOLC-AV test will have to fulfil additional learning requirements (OFA). Remedial activities will be organized for students with OFA (in the period October-December), both as online exercises on an e-learning platform and as discussion sessions with a tutor. After participating in remedial activities, new students will have to take a final assessment test. Mathematics OFA are prerequisites for all second- and third-year exams. For students who have not passed the OFA final test during the first year, passing the Mathematics exam is a prerequisite for all second- and third-year exams. Learn more at https://agricolturasostenibile.cdl.unimi.it/it/studiare/le-matricole.

Compulsory attendance

Course attendance is strongly recommended.

Internship criteria

The internship can be carried out on or off campus, 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;

- in-depth bibliographic and documentary research of a technical or scientific nature.

Degree programme final exams

For candidates to be admitted to the final exam, they must have earned 177 credits and completed their internship. 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. In awarding the degree mark, the board will consider the weighted average of exam grades (with 30 cum laude counting as 33), as well as how the candidate worked during the internship and how they presented their paper, whether they graduate on-track, and whether

they have successfully completed an Erasmus internship abroad. Regulations for the awarding of degree marks is posted on the page https://www.unimi.it/en/education/faculties-and-schools/agricultural-and-food-sciences

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/39322). 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 Master?s degree 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 or higher level.

Those who have not taken the placement test by the end of December (end of January for Master?s degree 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 organisations.

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

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

Study and internships abroad

The Course of study in Sustainable agriculture 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 atthe 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: https://drive.google.com/drive/folders/1-u48xSaV9eR9Vg-vU9YRT_DAcYCcI50K

How to participate in Erasmus mobility programs

How to participate in Erasmus+ mobility programmes

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

- Ad hoc commissions will evaluate:
- Academic career
- the candidate's proposed study programme abroad
- his/her foreign language proficiency
- the reasons behind his/her application

Call for applications and informative meetings

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

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

Erasmus+ scholarship

The European Union grants the winners of the Erasmus+ programme selection a scholarship to contribute to their mobility

costs, which may be supplemented by the University funding for disadvantaged students.

Language courses

Students who pass the selections for mobility programmes can benefit from intensive foreign language courses offered each year by the University Language Centre (SLAM). https://www.unimi.it/en/node/8/

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

For assistance, please contact: International Mobility Office Via Santa Sofia 9 (second floor) Tel. 02 503 13501-12589-13495-13502 Contacts: InformaStudenti; Student Desk booking through InformaStudenti

1st COURSE YEAR Core/compulsory courses/activities common		
Learning activity	Ects	Sector
Basic Statistics with Computer Applications	6	NA
English assessment B1 (3 ECTS)	3	ND (8) BIO/01 (4)
Fundamental Biology and Botanics for Agriculture	12	BIO/04
Fundamental Economics	6	AGR/01
General and Inorganic Chemistry Mathematics	6	CHIM/03 MAT/07
Organic Chemistry	6	CHIM/06
Physics	6	FIS/07
Total compulsory cr	edits 51	J
2nd COURSE YEAR (available as of academic year 2026/27) Core/compulsor	ry courses/act	ivities common
Learning activity	Ects	Sector
Agricultural Genetics	6	AGR/07
Agricultural Hydraulics	6	AGR/08
Agricultural Machinery Agricultural Machinery	6	AGR/09 AGR/02
Animal Husbandry	12	(4) AGR/19, (4)
	12	ÀGR/18, (4) VÉT/01
Microbiology Soil and Plant Science	6 14	AGR/16 AGR/13
Total compulsory cr	edits 56	101015
	50	J
3rd COURSE YEAR (available as of academic year 2027/28) Core/compulsor	y courses/act	ivities common
		-
Learning activity	Ects	Sector
Learning activity Agricultural, Agro-Food and Agro-Environmental Economics Farm Structures	Ects	Sector AGR/01
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Learning activity Agricultural, Agro-Food and Agro-Environmental Economics Farm Structures Field Crops and Fruit Tree Production Fundamentals of Entomology and Plant Pathology Total compulsory cr Elective courses Courses within a specialization track The student must choose one of the following specializ multidisciplinary courses of 10 CFU each. Agro-environmental track: Interaction of Agrochemicals with the Environment Renewable energy and biomass reuse track:	Ects 8 6 10 8 edits 32 zation tracks co 10 10 10 10 10 10 10 10 10 10 10 10 10	Sector AGR/01 AGR/10 (5) AGR/02, (5) AGR/03 (4) AGR/11, (4) AGR/12 nsisting of two (4) AGR/16, (6) AGR/13 (2) AGR/07, (3) BIO/07, (5) CHIM/06
Learning activity Agricultural, Agro-Food and Agro-Environmental Economics Farm Structures Field Crops and Fruit Tree Production Fundamentals of Entomology and Plant Pathology Total compulsory or Elective courses Courses within a specialization track The student must choose one of the following specializ multidisciplinary courses of 10 CFU each. Agro-environmental track: Interaction of Agrochemicals with the Environment Renewable energy and biomass reuse track: Biomass Valorisation and Emissions Reduction	Ects 8 6 10 10 8 edits 32 zation tracks co 10 10 10 10 10 10 10 10 10	Sector AGR/01 AGR/10 (5) AGR/02, (5) AGR/03 (4) AGR/11, (4) AGR/12 nsisting of two (4) AGR/16, (6) AGR/13 (2) AGR/07, (3) BIO/07, (5) CHIM/06 (4) AGR/10, (6) AGR/13
Learning activity Agricultural, Agro-Food and Agro-Environmental Economics Farm Structures Field Crops and Fruit Tree Production Fundamentals of Entomology and Plant Pathology Total compulsory cr Elective courses Courses within a specialization track The student must choose one of the following specializ multidisciplinary courses of 10 CFU each. Agro-environmental track: Interaction of Agrochemicals with the Environment Renewable energy and biomass reuse track: Biomass Valorisation and Emissions Reduction Green Chemistry and Renewable Energy in Agriculture	Ects 8 6 10 10 8 edits 32 zation tracks co 10 10 10 10 10 10 10 10 10 10 10 10 10	Sector AGR/01 AGR/10 (5) AGR/02, (5) AGR/03 (4) AGR/11, (4) AGR/12 (4) AGR/12 (4) AGR/16, (6) AGR/13 (2) AGR/07, (3) BIO/07, (5) CHIM/06 (4) AGR/10, (6) AGR/13 (4) AGR/09, (6) AGR/09, (6) AGR/03
Learning activity Agricultural, Agro-Food and Agro-Environmental Economics Farm Structures Field Crops and Fruit Tree Production Fundamentals of Entomology and Plant Pathology Total compulsory cr Elective courses Courses within a specialization track The student must choose one of the following specialize multidisciplinary courses of 10 CFU each. Agro-environmental track: Interaction of Agrochemicals with the Environment Renewable energy and biomass reuse track: Biomass Valorisation and Emissions Reduction Green Chemistry and Renewable Energy in Agriculture Animal husbandry track:	Ects 8 6 10 10 8 edits 32 zation tracks co 10 10 10 10 10 10 10 10 10 10 10 10 10	Sector AGR/10 (5) AGR/02, (5) AGR/03 (4) AGR/11, (4) AGR/12 (4) AGR/16, (6) AGR/13 (2) AGR/07, (3) BIO/07, (5) CHIM/06 (4) AGR/10, (6) AGR/13 (4) AGR/09, (6) AGR/13
Learning activity Agricultural, Agro-Food and Agro-Environmental Economics Farm Structures Field Crops and Fruit Tree Production Fundamentals of Entomology and Plant Pathology Total compulsory or Elective courses Courses within a specialization track The student must choose one of the following specializes multidisciplinary courses of 10 CFU each. Agro-environmental track: Interaction of Agrochemicals with the Environment Renewable energy and biomass reuse track: Biomass Valorisation and Emissions Reduction Green Chemistry and Renewable Energy in Agriculture Animal husbandry track:	Ects 8 6 10 8 edits 32 zation tracks co 10 10 10 10 10 10 10 10 10 10 10 10 10	Sector AGR/01 AGR/10 (5) AGR/02, (5) AGR/03 (4) AGR/11, (4) AGR/12 (4) AGR/12 (4) AGR/16, (6) AGR/13 (2) AGR/07, (3) BIO/07, (5) CHIM/06 (4) AGR/10, (6) AGR/13 (4) AGR/09, (6) AGR/13 (7) AGR/19, (3) AGR/18
Learning activity Agricultural, Agro-Food and Agro-Environmental Economics Farm Structures Field Crops and Fruit Tree Production Fundamentals of Entomology and Plant Pathology Total compulsory cr Elective courses Courses within a specialization track The student must choose one of the following specializ multidisciplinary courses of 10 CFU each. Agro-environmental track: Interaction of Agrochemicals with the Environment Renewable energy and biomass reuse track: Biomass Valorisation and Emissions Reduction Green Chemistry and Renewable Energy in Agriculture Animal husbandry track:	Ects 8 6 10 8 edits 32 zation tracks co 10 10 10 10 10 10 10 10 10 10 10 10 10	Sector AGR/01 AGR/10 (5) AGR/02, (5) AGR/03 (4) AGR/11, (4) AGR/12 nsisting of two (4) AGR/16, (6) AGR/13 (2) AGR/07, (3) BIO/07, (5) CHIM/06 (4) AGR/10, (6) AGR/13 (4) AGR/19, (3) AGR/18 (4) AGR/18, (6) AGR/18, (6) AGR/1
Learning activity Agricultural, Agro-Food and Agro-Environmental Economics Farm Structures Field Crops and Fruit Tree Production Fundamentals of Entomology and Plant Pathology Total compulsory cr Elective courses Courses within a specialization track The student must choose one of the following specializ multidisciplinary courses of 10 CFU each. Agro-environmental track: Interaction of Agrochemicals with the Environment Renewable energy and biomass reuse track: Biomass Valorisation and Emissions Reduction Green Chemistry and Renewable Energy in Agriculture Animal husbandry track: Animal Production	Ects 8 6 10 8 edits 32 2ation tracks co 10 10 10 10 10 10 10 10 10 10 10 10 10	Sector AGR/01 AGR/10 (5) AGR/02, (5) AGR/03 (4) AGR/11, (4) AGR/12 (4) AGR/12 (4) AGR/16, (6) AGR/13 (2) AGR/07, (3) BIO/07, (5) CHIM/06 (4) AGR/10, (6) AGR/13 (4) AGR/19, (3) AGR/18 (4) AGR/18, (6) AGR/20
Learning activity Agricultural, Agro-Food and Agro-Environmental Economics Farm Structures Field Crops and Fruit Tree Production Fundamentals of Entomology and Plant Pathology Total compulsory cr Elective courses Courses within a specialization track The student must choose one of the following specializ multidisciplinary courses of 10 CFU each. Agro-environmental track: Interaction of Agrochemicals with the Environment Renewable energy and biomass reuse track: Biomass Valorisation and Emissions Reduction Green Chemistry and Renewable Energy in Agriculture Animal Production Short supply chain for agri-food production track: Farm Processing and Marketing of Agri-Food Products	Ects 8 6 10 8 edits 32 zation tracks co 10 10 10 10 10 10 10 10 10 10 10 10 10	Sector AGR/01 AGR/10 (5) AGR/02, (5) AGR/03 (4) AGR/11, (4) AGR/12 (4) AGR/12 (4) AGR/16, (6) AGR/13 (2) AGR/07, (3) BIO/07, (5) CHIM/06 (4) AGR/10, (6) AGR/13 (4) AGR/109, (6) AGR/13 (7) AGR/19, (3) AGR/18 (4) AGR/18, (6) AGR/20 (4) AGR/09, (2)

	AGR/10, (4) AGR/01			
Technologies for Produce Processing	10 AGR/15			
The study program includes 12 CFUs that the student may elect to allocate to selected cour	rses within the degree program, or			
towards other degree programs within the faculty and university or towards other credita	hle training activities See also the			
towards outer degree programs within the faculty and university, or towards outer electric				
paragraph Structure of the course - Presentation of the study plan. The training activities	that are creditable			
includeseminars, conferences, advanced courses, or other activities organized by the univer	rsity or another institution, as long			
as they are consistent with the student's educational nath, up to a maximum of 4 CEUs. Th	e recognition of credits for these			
as they are consistent with the state of a cut of a particular to a maximum of 4 circles in	12 and its that say he finale			
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:				
	4 AGR/19			
	4 AGR/11			
	4 AGR/17			
Floriculture and Turfgrasses	6 AGR/04			
GIS (Geographical Information System) for Rural Land	4 AGR/10			
History of Agriculture	4 AGR/01			
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			
Sustainability and enhancement of sheep, goat, buffalo and camelid farming	4 (2) AGR/19, (2)			
	AGR/18			
Viticulture	6 AGR/03			
End of course requirements				
	6 NA			
	3 NA			
Total compulsory c	redits 9			

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). Passing the exams of the first year of the course is strongly recommended before enrolling in the second year and, in any case, before taking subsequent exams. The internship can only be started after passing all the exams required in Year I.