

UNIVERSITÀ DI PAVIA Dipartimento di Scienze della Terra e dell'Ambiente

> ACADEMIC REGULATIONS (Article 12, Ministerial decree no. 270 of 22/10/2004)

MASTER'S PROGRAMME IN AGRI-FOOD SUSTAINABILITY

Category LM-69

Enrolment cohort of academic year 2022-2023

Approved by the meeting of the Council of the Department of Earth and Environmental Sciences 30 November 2021



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PART ONE – GENERAL PROVISIONS

Article 1 – Programme name, category, teaching institution and duration

1. The Master's Programme in Agri-Food Sustainability, activated by the Department of Earth and Environmental Sciences of the University of Pavia, belongs to the LM-69 category - Agricultural sciences and technologies, pursuant to the Ministerial decree of 16 March 2007.

2. The duration of the Master's Programme in Agri-Food Sustainability is two years.

Article 2 – Regulatory reference texts

1. The organisation and implementation of the academic activities for the Master's Programme in Agri-Food Sustainability (hereinafter "the Master's Programme") are conducted in conformity with the principles of freedom of academic and the rights and duties of the teachers and the students and are regulated by the present text, by the Statute of the University of Pavia, by the University General Regulations, by the Academic Regulations of the University, (https://web.unipv.it/ateneo/statuto-regolamenti/), by the Academic Regulations of the University, by the Regulations for Part-Time Enrolment and by the Student Regulations (https://web.unipv.it/ateneo/statuto-regolamenti/statuto-regolamenti-didattica/) as well as by the Regulations of the Department of Earth and Environmental Sciences:

(https://terraeambiente.dip.unipv.it/it/dipartimento/organizzazione).

2. For all matters not expressly provided for in these Regulations, the provisions of the law in force apply.

Article 3 – Body responsible for academic and organisational coordination

1. The Department of Earth and Environmental Sciences administers the academic and organisational coordination of its degree programmes.

2. The Departmental Council appoints the Quality Assurance Management Group, which is responsible for supervising and promoting the quality policy on the Master's Programme in Agri-Food Sustainability. The Quality Management Group coordinates the compilation of the Annual Programme Plan (Scheda Unica Annuale, SUA). It also acts as a review group, and therefore prepares the Annual Monitoring Plan.

3. The academic and organisational coordination of the Master's Programme activities are conducted in conformity with the general programming and all other directions of the Departmental Council, and for this purpose a special Academic Council is established, with membership of the professors responsible for academic in the Master's Programme.

4. The organisational responsibilities for the academic activities of the Master's Programme Sustainability are assumed by the President of the Academic Council and by a professor appointed for this purpose by the Council and named in the SUA, without prejudice to the collegiality of decisions and guidelines of the Council.

Article 4 – Administrative services

1. The Academic Secretariat of the Department of Earth and Environmental Sciences provides support for all academic activities. In particular, this secretariat prepares the appropriate administrative acts for the assignment of roles, as well as managing classrooms, preparing course timetables, managing the ESSE3 system for booking exams and managing the Department's website, which contains all the information relevant to the Master's Programme. (https://terraeambiente.dip.unipv.it/it)

2. The Student Academic Career Office, the Enrolment and Student Information Procedures Office and the Admissions Office are responsible for matters and practices relating to the student's academic career (enrolment, transfers, etc.).

3. The University Orientation Centre (Centro di Orientamento, COR) manages activities and projects to support students in the choice of university studies, the student's career, and the graduate's entry into the world of work. To this end, it organises collective and individual actions, counselling services and orientation meetings. The services offered by the COR can be consulted at: <u>http://www-orientamento.unipv.it/</u>.

PART TWO - ORGANISATION OF ACADEMIC ACTIVITIES



Article 5 - Annual Programme Plan

An Annual Programme Plan (Scheda Unica Annuale, SUA) is drawn up in conformity with the Quality Assurance System. The SUA is a management tool serving in the design, implementation, self-evaluation and re-design of the course of study. It can be consulted at: https://sonl.unipv.it/ava/index.php/2022SUA08418.pdf

Article 6 - Requirements for admission

1. For admission to the Master's Programme, students must hold a bachelor's degree (which may be a bachelor's degree obtained according to the regulations in force prior to Ministerial Decree 509/99), or a three-year university diploma, or another qualification obtained abroad, recognised as suitable by the competent bodies of the University.

2. Students applying for admission to the Master's Programme must also meet certain curricular requirements and have an adequate personal background. The curricular requirements are automatically recognised for those who hold a bachelor's degree in one of the following categories:

CATEGORY L25 - Agricultural and forestry sciences and technologies, or CATEGORY L26 - Agrifood sciences and technologies (and in the corresponding categories of the previous national education system, pursuant to Ministerial Decree 509/99).

Given the specific interdisciplinary nature of the Master's Programme, candidates who have acquired sufficient training to undertake the programme outlined in this Regulation may also be admitted.

In any case, the minimum curricular requirements are to have acquired at least 45 university credits (CFUs) in five different scientific-disciplinary sectors among those listed below:

- AGR/01 Economics and rural appraisal
- AGR/02 Agronomy and field crops
- AGR/03 Arboriculture and fruit crops
- AGR/04 Vegetable and ornamental crops
- AGR/05 Forest management and silviculture
- AGR/07 Agricultural genetics
- AGR/08 Agricultural hydraulics and watershed protection
- AGR/09 Agricultural machinery and mechanisation
- AGR/10 Rural buildings and agri-forest land planning
- AGR/11 General and applied entomology
- AGR/12 Plant pathology
- AGR/13 Agricultural chemistry
- AGR/14 Paedology
- AGR/15 Food science and technology
- AGR/16 Agricultural microbiology
- BIO/01 General botany
- BIO/02 Systematic botany
- BIO/03 Environmental and applied botany
- BIO/04 Plant physiology
- BIO/05 Zoology
- BIO/07 Ecology
- BIO/09 Physiology
- BIO/10 Biochemistry
- BIO/18 Genetics
- BIO/19 Microbiology
- CHIM/03 General and inorganic chemistry
- CHIM/06 Organic chemistry
- CHIM/10 Food chemistry
- GEO/04 Physical geography and geomorphology
- GEO/05 Applied geology
- ICAR/01 Hydraulics
- ICAR/02 Hydraulic and marine constructions and hydrology
- ICAR/03 Sanitary-environmental engineering
- ICAR/06 Topography and cartography



In addition, for admission to the Master's Programme, the candidate must possess knowledge of the English language, in written and oral forms, corresponding to at least level B2 of the Common European Framework of Reference for Languages as established by the Council of Europe.

3. Possession of the requirements and the adequacy of the preparation referred to in the previous paragraph are assessed by means of an interview with a committee, appointed annually by the Academic Council. The candidate must demonstrate knowledge of the English language at level B2 through the presentation of certification from among those listed in article 19 below, or other certification at a higher level. In the absence of certification, the preliminary interview serves for assessment of knowledge of the English language.

4. Access to the Master's Programme is also open to students who are in the process of obtaining a relevant degree ("Conditional enrolment"), and who have acquired at least 150 credits by the deadline date set by the University for submission of the application. These candidates may only enrol once they have passed the admission test.

5. Candidates may also enrol during the academic year, as long as the timing is sufficient to permit their attendance at educational activities consistent with the general structure of the Master's Programme, and in any case within the time limits annually decided by the Academic Senate.

6. Graduates of bachelor's programmes who do not meet the curricular requirements for admission to the Master's Programme may supplement their education through individual courses, thereby completing the curricular requirements specified by the committee referred to in paragraph 3 above. In this case, the graduate may also take subjects contributing to the Master's Programme, up to a maximum of 30 CFU (University Credits).

7. The Master's Programme is not subject to regional or national limits on access.

Article 7 – Academic organisation

1. Students participating in the educational activities comprising the Master's Programme acquire university credits (CFUs), in accordance with the regulations in force.

2. The average total learning commitment for a student engaged one year of full-time university studies is nominally set at 60 CFU.

3. Each CFU corresponds to an average of 25 hours of effort per student, of which at least 50% are devoted to personal study or other individual training activities (unless the CFU involves a high content of experimental or practical education). For each Master's Programme CFU, the division between hours of face-to-face teaching and hours devoted to individual study is as follows:

a) for core academic activities: 8 hours dedicated to face-to-face instruction and 17 hours dedicated to individual study;

b) for exercises, seminars and laboratories: 12 hours dedicated to academic activities and 13 hours dedicated to individual study;

c) for academic activities of a mainly practical nature, such as field activities: 14 hours dedicated to the activities and 11 hours dedicated to individual study;

d) for internships and thesis preparation activities: 25 hours.

4. The student receives the CFUs corresponding to each educational activity after passing an examination or completing another form of assessment of the preparation or skills acquired.

5. The academic activities are organised in two semesters per year: October-January and March-June.

6. There are three examination sessions: January-February, June-July and September. The student must book at least one examination for each session, and not less than six examinations in a year.

7. If the examination is conducted in both written and oral form, the two tests together are considered as a single booking.

8. The interval between two examinations in the same course must comply with the provisions of the University Academic Regulations.

9. Students who have already complied with the attendance requirements for all courses of Master's Programme may book examination sessions that overlap with their ongoing courses.

10. Students who are athletes (Article 15, paragraph 1, letter c) may obtain ad hoc examination bookings in agreement with the relevant professors, in the case of conflicts with sporting commitments (competitions, training and related travel).

11. The calendar of lessons, appeals and final exams is published in accordance with the ministerial deadlines, as reported in the SUA. The calendar of examinations is published at the beginning of each calendar year.



12. Completion of the Master's Programme requires participation in at least five academic sessions, which take place in the following periods, indicatively: June-July, September-October, December, March and April.

13. Beginning with academic year 2022-2023, students may enrol in the Master's Degree Plus (Laurea Magistrale Plus, LM+) programme, in the context of a collaboration project regulated by a specific agreement with a network of partner institutions and companies.

Starting in the second year, students in the LM+ programme undertake two semesters of training at affiliated organisations/companies as an integral part of their education, with the aim of acquiring specific professional skills coherent with the Master's Programme. The organisations/companies included in the network agreement and the relative education programmes will be communicated over the course of the year, and meetings will be organised for communication with the interested students.

On an annual basis, the Master's Programme Academic Council will appoint a committee for the purpose of selecting from candidates who apply for the LM+ programme. The selection will be in keeping with a number of students defined by the Academic Council and in consideration of the education opportunities offered by the organisations/companies. The selection will be based on the candidate's curricular achievements, supplemented by the results of an individual interview. For assessment purposes, the Academic Council may request a non-binding opinion from the LM+ Steering Committee, composed of representatives of the University of Pavia and the partner organisations/companies.

Students enrolled in the LM+ have the option of enrolling in the Master's Programme on a part-time basis, in keeping with the relevant regulations.

In carrying out their activities at the host organisation/company, students will be followed by an organisation/company tutor and a university tutor, who will interact constantly in monitoring the ongoing achievement of the objectives defined in the education project. Assessments will be conducted twice during the educational path: one at mid-point and one final.

The student will be reimbursed for expenses incurred during the educational period with the organisation/company.

Students enrolled in the LM+ programme may obtain up to 18 CFUs in consideration of their experience at the company/organisation, as part of their final degree examination. Any such CFUs will be recognised: as part of "supernumerary activities" (12 CFUs of traineeship experience, 3 CFU of other knowledge useful in the working context); as part of their elective activities (12 CFUs), and potentially as supernumerary CFUs, as specified in the following articles of these regulations.

Article 8 – Study plans

1. The term "standard study plan" refers to a study plan complying with the scheme in Attachment 1 of these regulations.

2. All students are required to submit their study plan within the deadlines indicated annually by the University.

3. Study plans that comply with the scheme in Attachment 1 of these Regulations shall be approved ex officio. Any elective educational activities chosen by the student, as per letter a), paragraph 5 of Article 10 of Ministerial Decree n. 270 of 22 October 2004 are considered coherent with the study plan and are also approved ex officio.

4. The term "individual study plan" refers to any study plan not in conformity with the standard one. 5. A student intending to follow a different course of study from the one set out in these Regulations may submit an individual study plan, within the deadline established annually by the University, in compliance with the constraints of the programme classification and the Master's Programme academic regulations.

6. The individual study plan, presented in its entirety, must be approved by the Academic Council, which will take into account the student's needs for cultural education and professional preparation in relation to the academic offer, and may suggest changes to make the educational path more consistent with the specific educational objectives of the Master's Programme.

7. In addition to the activities established for achievement of the degree, the study plan may include supernumerary educational activities up to a maximum of 24 CFUs per academic year.

8. The student is not required to complete supernumerary educational activities as a condition of obtaining the degree.



9. Students enrolled in the Master's Programme may choose elective and/or supernumerary courses at the bachelor's level, however their study plans may not include courses taken previously during their academic career, unless these were specifically approved as external to the 180 CFU required for a first-level degree (in keeping with the decision of the Academic Senate of 23 January 2012).

10. Students who are close to obtaining their degree may be allowed to change one course/examination (no more than 12 CFU) of their current study plan, prior to the next deadline for presentation of new study plans, even in default of enrolment in the new academic year. To this end, the student must submit an application to change the study plan most recently approved by the Academic Council, which will decide on acceptance of the request.

11. Students may submit study plans for enrolment on a part-time basis, corresponding to the standard study plan and spread over not more than twice the conventional number of years.

12. Students participating in the LM+ programme may opt for part-time enrolment beginning in the second year of the programme, in accordance with the relevant University regulations.

Article 9 - Joint or double degree programmes

1. The Master's Programme in Agri-Food Sustainability course does not provide for the award of joint or double degrees.

Article 10 – Prerequisites and attendance obligations

1. Attendance at courses is the student's right and duty. Students are strongly recommended to attend face-to-face education activities, academic activities in the field and other practical and laboratory activities.

2. No courses/examinations are subject to prerequisites.

Article 11 – Student electives

1. Students enrolled in the Master's Programme are allowed to include 12 elective university credits in their study plan (so-called "Type D" educational activity, TAFD, in keeping with Article 10, paragraph 5.a of Ministerial Decree 270/2004). The electives may be chosen from the courses offered by the University, including from a series of educational activities offered or recommended by the Academic Council.

2. The elective activities referred to in Paragraph 1 may include courses from master's programmes and/or courses subject to limited access at local or national level, with the exception of courses in the medical area subject to limited access at national level.

3. Students may not select courses already taken during their previous university studies as electives, unless these were specifically approved as external to the 180 CFU required to obtain their bachelor's degree. The competent offices will verify the correct application of this rule during the stage of checking the student's academic career, prior to admission to the final degree examination. In the event of violation of the above rule, the student will not be admitted to the degree examination and will be obliged to modify the study plan.

4. Students enrolled in the LM+ program may request recognition of up to 12 CFUs within the framework of their elective credits. For these students, the Academic Council may also recognise the educational activity carried out in the organisation/company as supernumerary credits. Such recognition will be calculated on the basis of hours of attendance in addition to the curricular hours, as documented by the tutors, in accordance with Article 16, paragraph 5, letter c of the University Academic Regulations.

Article 12 – Internships and traineeships

1. The study plan provides for a curricular traineeship of 12 CFUs aimed at promoting knowledge of and entry into the working context. Such internships are an integral part of the training course and must contribute to the achievement of the Master's Programme educational objectives.

2. The curricular practical traineeship may be carried out in the context of the laboratories of the Department of Earth and Environmental Sciences of the University of Pavia.

3. The student may also be able to obtain recognition of internships carried out on a voluntary basis in facilities outside the Department of Earth and Environmental Sciences, within the CFUs reserved for internship activities or as supernumerary credits. The recognition and identification of the number of such CFUs is subject to assessment of the activity by the Academic Council.



4. The study plan also includes an educational activity of 3 CFUs entitled "Other knowledge useful for integration in the working context". Alternatively, foreign students lacking adequate knowledge of the Italian language will include the activity "Italian language for foreign students" (3 CFUs) in their study plans.

5. Students enrolled in the LM+ programme may be awarded 12 CFUs of curricular training and 3 CFUs of "Other knowledge useful for integration in the working context". The Academic Council may also recognise the training activity carried out in an organisation/company as supernumerary credits. Such recognition will be calculated on the basis of hours of attendance in addition to the curricular hours, as documented by the tutors, in accordance with Article 16, paragraph 5, letter c of the University Academic Regulations.

Article 13 – Final examinations and assessments

1. For the purposes of the Master's Programme, the student may not take more than 12 final examinations.

2. The final examinations or assessments taken must cover: the core educational activities, the related or supplementary activities, and the elective activities chosen by the student. The final examinations or assessments concerning the elective activities are considered in the count as corresponding to one unit (even if the credits assigned involve more than one final examination or assessment).

3. None of the educational activities referred to in letters c), d), paragraph 5 of Article 10 of Ministerial Decree 270/2004 are included in the calculation of the maximum number of final examinations or assessments. In any case, these activities must not be subject to more than five examinations, including the final examination for award of the degree.

4. Examinations are conducted in written or oral form or both, according to the academic requirements of each course. The examination procedures for each course are published on a specific page of the Department's website (https://terraeambiente.dip.unipv.it/it/didattica). In the case of written examinations, the student may withdraw during the course of the examination. In the case of oral examinations, students are allowed to withdraw until the moment before recording of the final assessment. In the case of a student who withdraws, any annotation in the examination report may be used for statistical purposes, but shall not be recorded in the student's report of university studies nor in the student's academic career.

5. Examinations are marked in thirtieths, except in the case of traineeships and transversal skills, where only a pass mark is awarded and this is recorded in the minutes. Educational credits are deemed to have been acquired if the mark is equal to or higher than 18/30. In the case of a maximum mark of 30/30, the examining committee may award *laude* honours by unanimous decision. An assessment of insufficiency is not accompanied by a grade. Any annotation in the examination report in this regard may be used for statistical purposes, but shall not be recorded in the student's report of university studies nor in the student's academic career.

6. In the case of courses comprising two modules, the professors responsible for the different modules participate collectively in the overall assessment of the student's performance.

Article 14 - Final degree examination and award of the qualification

1. The student is awarded the degree after passing a final examination, designed to verify the achievement of the Master's Programme educational objectives.

2. The student may enrol for the final examination after having acquired at least 102 CFUs, and through the examination may acquire a further 18 CFUs. The examination consists in the presentation and discussion of a dissertation written in an original manner under the guidance of a rapporteur, either a tenured professor or a lecturer within the University of Pavia, and possibly one or two co-rapporteurs, who may also be external to the University of Pavia.

3. The thesis is discussed in public session before a Degree Examination Committee, appointed by the Director of the Department, composed of at least five professors, at least four of whom are professors or researchers in role at the University of Pavia. The President of the Academic Council appoints a counter-rapporteur, who must be a member of the Examination Committee, to whom the student must submit the thesis at least five days before the final examination session. Subject to the same deadline, the student must also send a summary of the thesis to the Committee members. The student must also email a pdf copy of the thesis to the Academic Secretariat.



4. The final examination takes place through a public presentation by the student, using electronic media, which may be followed by a brief discussion.

5. At the end of the public discussion, the Committee proceeds to grading of the degree examination. 6. The degree grade (from a minimum of 66 points to a maximum of 110, with possible *laude*) is awarded collectively by the Degree Examination Committee, in public session, and takes into account the student's entire study path. In particular, the degree score is obtained from the sum of a basic score, proportional to the average of the marks obtained in the exams taken, weighted by the CFUs of each course, and a score established by the Committee. The average is weighted and rounded off arithmetically. A mark of 30 *cum laude* for an examination counts as 30 for the purposes of the average. Scores obtained in supernumerary educational activities are not taken into account for the calculation of the basic score. The mark established by the Committee is based on an assessment proposed by the Tapporteur, an assessment proposed by the counter-rapporteur and an assessment proposed by the Degree Examination Committee. The President of the graduation session proposes to the Committee the awarding of *laude* if the sum of the base score and the score established by the Commission is equal to at least 110/110.

7. The student may withdraw from the final examination up until the moment of being dismissed by the President for initiation of the grading process by the Committee, which takes place without the presence of the student or outsiders.

8. Students enrolled in the LM+ programme may request approval for a thesis topic linked to the specific training experience carried out at the host organisation/company.

9. Students enrolled in the LM+ programme may be awarded up to 18 CFUs at the time of their final examination. The Academic Council may also recognise the training activity carried out in an organisation/company as supernumerary credits. Such recognition will be calculated on the basis of hours of attendance in addition to the curricular hours, as documented by the tutors, in accordance with Article 16, paragraph 5, letter c of the University Academic Regulations.

PART THREE - PROVISIONS CONCERNING STUDENT ACADEMIC CAREERS

Article 15 – Criteria for the recognition of duly certified extra-university knowledge and skills

1. The Academic Council may validate duly certified knowledge and skills up to a maximum of 12 CFUs, recognising them as examinations of the Master's Programme:

a) for professional knowledge and skills, individually certified in accordance with the relevant regulations in force, up to 12 CFUs;

b) for knowledge and skills acquired in post-secondary educational activities planned with the participation of a university, up to 12 CFUs.

c) for sports activities recognised by the competent authorities, up to a maximum of 12 CFUs according to the following schedule: i) sport practised at Olympic, world and European level, up to 6 CFUs; ii) sport practised at Italian level and intermediate categories up to 3 CFUs; iii) qualification in the "medal zone" at the University Championships, or the performance of competitive activities for the sections of Pavia University Sports Centre (CUS), including in the context of competitions at regional and national level, up to 6 CFUs;

d) up to 1 CFU for recognition of the Training Course "Safety and health in the workplace", pursuant to Legislative Decree 81/2008.

2. Any recognition of the knowledge and skills referred to in the previous paragraphs shall be decided by the Academic Council.

Article 16 – Criteria for recognition of previous credits

1. At the time of enrolment, students who have already obtained a degree at higher level than a bachelor's from the University of Pavia or another Italian or foreign university may request an abbreviation of their studies, which may be granted subsequent to the assessment, validation and recognition of CFUs in relation to the Master's Programme, as determined by the Academic Council. Any CFUs acquired on the basis of Article 49 of the University Academic Regulations, i.e. relating to the certified passing of examinations for individual courses, will also be recognised.

2. Pursuant to Article 46 of the University Academic Regulations, in the case of transfer from other courses of study or from other universities, the potential recognition of students' careers and of any CFUs considered shall be decided by the Academic Council.



3. A share of not less than 50% must be in any case be assigned for university credits directly accrued by the student in degree programmes of the same category and the same scientific-disciplinary sector.

4. The period of validity of the CFUs acquired is equal to the number of years foreseen in the Student Regulations concerning the forfeiture of student status (Article 31). After this period, the Academic Council may provide for verification of the CFUs acquired in terms of the continuing validity of the cognitive contents.

Article 17 – Criteria for recognition of educational activities during study at foreign universities

1. Periods of study carried out by Master's Programme students at foreign universities within the framework of the EU Erasmus Study and Erasmus Placement Programmes are recognised as educational activities analogous to those offered within the Master's Programme, provided that the demands on the student are equal and the contents are coherent with their educational path.

2. The Learning Agreement is the document that defines the project of the educational activities referred to in paragraph 1, which may be followed abroad and replace some of the activities provided for the Course of Study. The student must draft the Learning Agreement without overemphasis on pursuit of the same content as the Degree Programme, but rather aim at full consistency with the educational objectives.

3. The possibility of recognising credits acquired abroad is established in advance through the Learning Agreement, which is approved by signature of the professor designated by the Academic Council as their rapporteur for study activities carried out abroad. It is the responsibility of the rapporteur to ensure that the Learning Agreement is consistent with the educational objectives of the Master's Programme.

4. The regulations concerning the criteria for recognition of educational activities within the EU Erasmus Study Programme are further described in Article 47 of the University Academic Regulations and article 19 of the Student Regulations. The Academic Council decides on recognition by means of a resolution. The conversion of the final grades obtained abroad is carried out on the basis of the "Table of ECTS grades" (European Credit Transfer and Accumulation System), and if this is not applicable, on the basis of criteria decided by the Academic Council.

5. Within the framework of the EU Erasmus Placement Programme, the Academic Council decides, on a case-by-case basis, which activity and criteria will be applied for the recognition of work placement experience abroad. This educational experience may be recognised as curricular educational activity, research activity for thesis (if the educational content is inherent to the thesis project), or supernumerary educational activity.

6. For the preparation of their dissertation, students may undertake periods of study abroad in contexts not provided for by the regulations on mobility programmes, provided that they have the prior written approval of their dissertation rapporteur, which must be sent to the Student Secretariat for regularisation of the student's insurance position.

Article 18 – Admission to subsequent years

1. For students enrolled in the first year, admission to subsequent years is not subject to acquiring a minimum number of CFUs.

Article 19 – Certifications

1. Admission to the Master's Programme is subject to certification of knowledge of English at level B2 (defined in the Common European Framework of Reference for Languages established by the Council of Europe). The language certifications considered as corresponding to level B2 and approved by the University are the following:

- BEC Vantage
- B2 First (Cambridge English Qualification)
- IELTS 5.5-6.5 'Academic'
- TrackTest English Test B2
- ILEC Pass
- TOEFL iBT 72-94
- Trinity College ISE II, GESE 7, GESE 8, GESE 9
- Oxford Test of English level B2



• LCCI EfB level 3.

2. The committee appointed for the purposes of conducting admission interviews may assess the suitability of other certifications of English language proficiency at level B2.



Attachment 1 – Study plan

Curriculum 1 - Agroecology and sustainable farming (ASF)

Core educational activity (57 CFUs)	Year	Semeste r	CFUs	Scientific Disciplinary Sector (SSD)
Plant nutrition and quality of agri-food production	1	1	6	BIO/04
Conservation and promotion of plant genetic resources	1	1	6	AGR/07
European agri-food law	1	1	6	IUS/14
Food marketing	1	2	6	SECS-P/08
Local horticultural production chains	1	2	6	AGR/04
Agroecology and biodiversity conservation	1	2	6	BIO/03
Sustainable grass crops, integrated production, organic farming	1	2	9	AGR/02
Sustainable management of water resources in agriculture	1	2	6	AGR/08
Plant pathology	1	1	6	AGR/12

Related and supplementary educational activities (18 CFUs)	Year	Semester	CFUs	SSD
One course/examination chosen from:				
Forest ecosystems and ecology of farming systems (3	2	1		
modules)			(total 9)	
 Forests and mitigation of climate change 			3	AGR/05
- Ecology of farming system			3	BIO/07
- Game management			3	BIO/05
Forests and environmental sustainability in agriculture (3	2	1		
modules)			(total 9)	
- Forests and mitigation of climate change			3	AGR/05
- Sustainable use of pesticides			3	AGR/02
 Next generation agrochemicals 			3	CHIM/06
One course/examination chosen from:				
Soil conservation and precision agriculture (3 modules)	2	1		
- Remote sensing for agricultural applications			(total 9)	ING-
- Geomatics for precision agriculture			3	INF/03
- Soil conservation			3	ICAR/06
			3	GEO/05
Soil geochemistry and precision agriculture (3 modules)	1	1		
- Remote sensing for agricultural Applications			(total 9)	ING-
- Geomatics for precision agriculture			3	INF/03
- Soil and water contamination by intensive farming			3	ICAR/06
			3	GEO/08

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Elective educational activities chosen from: (12 CFUs)*	Year	Semester	CFUs	SSD
Spectroscopic methods for food safety	2	1	6	FIS/01
Weed systematics	2	1	6	BIO/02
Agronomic utilisation of residuals	2	2	3	ICAR/03
Soil microbiology	2	2	3	AGR/16
Local livestock breeds at risk of genetic erosion or extinction	2	2	3	BIO/05
Lithology and agri-food production	2	2	3	GEO/02
Seeds for sustainable agriculture	2	2	3	BIO/04
Soil science	2	1	6	GEO/04

* Students have the option of bringing six of the 12 elective CFUs forward to the first year. For the current academic year, please note the availability of the following additional elective courses:

Conservation and use of biodiversity, from genes to landscapes	1	1	3	BIO/03
Organic rice production systems	1	1	3	AGR/02
From food heritage to sustainable rural development	1	2	3	M- DEA/01
Seed ecology and use	1	2	3	BIO/03

Supernumerary activities:	Year	CFUs
Supernumerary activities ** ** As an alternative to this educational activity, foreign students who lack adequate knowledge of the Italian language will insert the "Italian language for foreign students" activity in their study plan (3 CFUs)	1	3
Traineeship	2	12
Final exam	2	18



Curriculum 2 – Food quality and nutrition (FNQ)

Core educational activities (51 CFUs)	Year	Semester	CFUs	SSD
Plant nutrition and quality of agri-food production	1	1	6	BIO/04
Conservation and promotion of plant genetic resources	1	1		AGR/0
Conservation and promotion of plant genetic resources			6	7
European agri-food Law	1	1	6	IUS/14
Food marketing 1	1 2	6	SECS	
			-P/08	
Local barticultural production chains	1	2	6	AGR/0
Local horticultural production chains	I		0	4
Agroecology and biodiversity conservation	1	1	6	BIO/03
Sustainable grass grass	1	4 4	6	AGR/0
Sustainable grass crops 1	I	0	2	
Fundamentals of food to abralagy	1	1 2	9	AGR/1
Fundamentals of food technology	I		3	5

Related and supplementary educational activities (24 CFUs)	Year	Semester	CFUs	SSD
The following two compulsory courses (18 CFUs):				
Vegetable foods and agrochemicals for plant defence:	2	1		
chemistry and toxicology (3 modules)			(total 9)	
- Vegetable food chemistry			3	CHIM/10
- Chemistry of agrochemicals			3 3	CHIM/08
- Toxicology of agrochemicals			3	BIO/14
Integrated course on nutrition and human health (2	1	2		
modules)			(total 9)	BIO/09
- Nutrition physiology			3	MED/49
- Healthy diets from sustainable food systems			6	
One course/examination chosen from:				
Secondary plant metabolism and medicinal plants (2	2	1		
modules)			(total 6)	
- Secondary plant metabolism			3	CHIM/06
- Medicinal plants			3	BIO/15
Secondary plant metabolism and nutritional and	2	1		
nutraceutical properties of mushrooms (2 modules)			(total 6)	
- Secondary plant metabolism			3	CHIM/06
- Nutritional and nutraceutical properties of			3	BIO/02
mushrooms				

Elective educational activities chosen from: (12 CFUs)*	Year	Semester	CFUs	SSD
Spectroscopic methods for food Safety	2	1	6	FIS/01
Weed systematics	2	1	6	BIO/02

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Agronomic utilization of residuals	2	2	3	ICAR/03
Soil microbiology	2	2	3	AGR/16
Local livestock breeds at risk of genetic erosion or extinction	2	2	3	BIO/05
Lithology and agri-food production	2	2	3	GEO/02
Seeds for sustainable agriculture	2	2	3	BIO/04
Soil science	2	1	6	GEO/04

* Students have the option of bringing six of the 12 elective CFUs forward to the first year. For the current academic year, please note the availability of the following additional elective courses:

Conservation and use of biodiversity, from genes to landscapes	1	1	3	BIO/03
Organic rice production systems	1	1	3	AGR/02
From food heritage to sustainable rural development	1	2	3	M- DEA/01
Seed ecology and use	1	2	3	BIO/03

Supernumerary activities:	Year	CFUs
Supernumerary activities** ** As an alternative to this educational activity, foreign students who lack adequate knowledge of the Italian language will insert the "Italian language for foreign students" activity in their study plan (3 CFUs)	1	3
Traineeship	2	12
Final exam	2	18

For further information on the course program and on the methods for assessing the student's learning outcomes, as well as indications of the course professors and their curriculum vitae, see: https://terraeambiente.dip.unipv.it/it/didattica