Università di Scienze Gastronomiche di Pollenzo
University of Gastronomic Sciences of Pollenzo

ACADEMIC REGULATIONS
of the
Graduate Degree Program
in Food and Planetary Health

University	University of Gastronomic Sciences
Class	LM/GASTR R - Economic and Social Sciences of Gastronomy
Name of the course in Italian **Internal program code**	Cibo e salute del pianeta
Name of the course in English	Food and Planetary Health
Language of Instruction	English
Mode of Delivery	Conventional degree program
Program Website	https://www.unisg.it

Specific educational objectives and description of the academic program (also with reference to the Dublin Descriptors)

Graduates of the degree program in Food and Planetary Health acquire specialized knowledge centered on the interconnection between human health, the environment, and food systems, grounded in solid scientific, social, and humanistic foundations. They develop analytical, design, and managerial competencies enabling them to operate in public, private, and third-sector contexts, both nationally and internationally, contributing to the transition toward healthier, more equitable, and more sustainable food systems.

In particular, graduates are able to:

- analyze and manage complex food systems according to the principles of One Health and Planetary Health, integrating ecological, health, cultural, and socio-economic dimensions;
- hold positions of responsibility or provide consulting services in public institutions, international organizations, NGOs, and private enterprises in the design, management, and evaluation of policies and interventions related to health and food sustainability;
- contribute to strategic planning and sustainable innovation in agri-food enterprises and in the restaurant, distribution, and food service sectors, with attention to social and environmental impacts of production choices;
- develop and communicate scientific and cultural knowledge on food, health, and sustainability by operating in educational, outreach, journalistic, and training contexts;
- contribute to emerging areas of sustainable economy and global health, such as food security, public nutrition, agroecology, fair trade, territorial regeneration, and climate change adaptation.

The overall objective of the Academic program (CdS) is to provide students with the knowledge, skills, and competencies necessary to analyze, design, and manage sustainable solutions in food systems, contributing to improving both human and planetary health. The teaching approach, consistent with Planetary Health principles, integrates scientific, humanistic, and social knowledge with applied and project-based tools.

The academic program is structured into four main learning areas, each of which contributes specifically to the achievement of the objectives of the Academic program (CdS).

1. Ecology and Sustainability of Agri-Food Systems

Provides knowledge of ecological processes and agri-food systems, with particular emphasis on environmental sustainability and natural resource resilience.

Students develop the ability to:

- understand and analyze interactions between ecosystems, food production, and health;
- assess environmental impacts of food supply chains and consumption practices;
- apply agroecology, circular economy, and blue and green regeneration approaches.

2. Health, nutrition, and animal welfare

Explores relationships between diet, individual and public health, animal welfare (One Health), microbiota, and the environment.

Students develop the ability to:

- analyze relationships between diet, public health, and sustainability;
- evaluate the interdependence between animal welfare, human health, and environmental impact;
- design evidence-based health promotion and prevention strategies;
- assess health impacts of food systems and nutrition policies.

3. Humanistic and cultural studies of food

Examines the cultural, social, and communicative value of food and health through anthropological, philosophical, and pedagogical perspectives.

Students gain competencies to:

- interpret the cultural and symbolic meaning of food practices;
- analyze ethical and epistemological dimensions of food, health, and environment;
- promote scientific education and communication food and health;
- support participatory and transformative learning processes in communities.

4. Food policy e governance

Analyzes political, economic, and institutional dimensions of food sustainability.

Students acquire tools to:

- understand multi-level governance mechanisms of food systems;
- develop, evaluate, and communicate public policies and corporate strategies from a sustainability perspective;
- apply policy design, impact assessment, and co-design methods.

Transversal Skills

The entire training program aims to develop transversal skills essential for the world of work and research:

- critical and systemic thinking;
- ability to work in interdisciplinary and intercultural teams;
- technical-scientific communication and professional writing skills;
- autonomy in planning and decision-making;
- use of digital tools for research and communication.

Program Structure and Coherence

The program includes theoretical, practical, and project-based modules, integrating lectures, laboratories, fieldwork, e-tivities, and project work. A mandatory international mobility period is required at College Venlo – Maastricht University (Netherlands), strengthening the program's global and interdisciplinary perspective. The program is consistent with the objectives of LM/GASTR R program – Economic and Social Sciences of Gastronomy – and aims to train professionals with systemic competencies in sustainability, public health, food culture, and food system governance.

Knowledge and Understanding

Graduates of the Degree program in Food and Planetary Health possess advanced and interdisciplinary knowledge related to food systems, public health, environmental sustainability, and resource governance. They understand the scientific, ecological, social, and cultural foundations that govern the interaction between food, human health, and planetary health, integrating perspectives from natural sciences, humanities, and social sciences. They also acquire theoretical and methodological skills to analyze complex processes characterizing food production, distribution, and consumption in relation to climate change, ecological transition, and food justice.

Application of knowledge and understanding

Graduates of Food and Planetary Health degree program are able to apply critically and consciously the knowledge acquired in different disciplinary areas—scientific, social, humanistic, and managerial—to address complex problems related to health, the environment, and food systems:

- analyze, design, and manage integrated interventions in sustainability, health, and animal welfare in the sectors of food production, processing, and distribution, as well as in the definition of territorial and global policies and strategies;
- evaluate the environmental, social, and health impact of agri-food practices and consumption models, using impact assessment tools, sustainability indicators, and systemic evaluation approaches;
- develop operational solutions for sustainable innovation in food supply chains and food service, promoting resource efficiency, waste reduction, and equity in supply systems;
- apply interdisciplinary research methods (qualitative and quantitative) to analyze decision-making processes, food governance, and consumption behaviors, translating results into concrete improvement actions;
- design and implement public policies and business strategies in food, health, and environmental sectors, with the ability to coordinate and mediate among institutional, productive, and social stakeholders;
- communicate and transfer scientific and operational knowledge to different audiences, contributing to raising awareness among citizens, businesses, industries, and institutions on sustainability, One Health, and Planetary Health;
- collaborate effectively in interdisciplinary and multicultural working groups, taking on roles of responsibility in managing complex projects, including in international and multi-centered contexts;
- use digital and technological tools for collecting and analyzing environmental, nutritional, and socio-economic data, and for scientific and professional communication.

These applied competencies enable graduates to operate in the main sectors of public health, food education, food policy governance, sustainable innovation, and international cooperation, contributing directly to the achievement of the United Nations 2030 sustainable Development Goals.

Autonomy in Judgment

Graduates develop the ability to critically evaluate information, sources, and practices related to health, nutrition, and the sustainability of food systems. They can formulate independent and well-reasoned judgments on complex issues, balancing scientific, social, ethical, and governance aspects at both local and global levels. Furthermore, they are capable of recognizing the limitations in their knowledge, identifying further learning needs, and adopting a reflective and critical approach in strategic and design decisions, in line with the principles of One Health and Planetary Health.

Communication skills
Graduates develop the ability to critically evaluate information, sources, and practices related to health, nutrition, and the sustainability of food systems. They can formulate independent and well-reasoned judgments on complex issues, balancing scientific, social, ethical, and governance aspects at both local and global levels. They can recognize the limits of their knowledge, identifying further learning needs, and adopting a reflective and critical approach in strategic and design decisions, in line with the principles of One Health and Planetary Health.

Learning skills
Graduates possess autonomous and advanced learning skills that enable them to continuously update their knowledge and competencies in an evolving scientific and professional context. They can undertake further studies at the doctoral level or in second level master's programs, deepen their skills through research, and adapt to different cultural and professional contexts. The academic methodologies of the program—based on learning by doing, case studies, laboratories, and participatory projects—encourage active, reflective learning and is based on real world problem-solving.

Professional profile and potential career opportunities for the graduates

Profile 1 – Planetary health expert in institutional and third-sector contexts

Professional functions and skills:
- analysis, design, and implementation of strategies, policies, and interventions for ecological transition and public health;
- coordination and monitoring of projects in environmental, health, and food sectors within public sectors, international agencies, and NGOs;
- environmental, social, and health impact assessment of programs and policies;
- scientific communication and public outreach on health, environment, and food topics.

Skills associated with the function:
- ability to integrate ecological, health, and social knowledge to analyze complex systems;
- competencies in impact assessment and data analysis for public policy evaluation;
- mastery of governance, food policy, and environmental sustainability tools;
- technical-scientific communication and participatory process management skills.

Career opportunities:
- public institutions (ministries, regional and local health authorities, environmental and health agencies);
- international organizations (FAO, WHO, UNEP, UNESCO, UNDP);
- NGOs and foundations actively operating in health, sustainability, and food security;
- research institutes, think tanks, and study centers;
- third-sector organizations involved in sustainability projects.

Profile 2 – Expert in Sustainable Solutions in Food Supply Chains (Agri-food and HoReCa)

Professional functions and skills:

- analysis and management of sustainability in food and agro-industrial supply chains;
- development and implementation of innovative solutions for food production, processing, and distribution;
- coordination of corporate processes from an ESG perspective (Environmental, Social, Governance);
- design of communication and sustainable marketing strategies in the agri-food and HoReCa sectors;
- consulting in food safety, nutrition, and environmental impact of products.

Skills associated with the function:

- advanced knowledge of food technologies, nutrition, and supply chain sustainability;
- ability to plan and manage production and logistics processes sustainably;
- mastery of economic, social, and environmental analysis tools;
- communication and integrated marketing skills for sustainable products.

Career Opportunities:

- Agri-food companies, and businesses in the catering and distribution sectors (HoReCa);
- Consulting firms specializing in sustainable innovation and environmental certification;
- Startups and business projects related to the circular economy, ecological transition, and new food models;
- Public and private agencies engaged in agri-food sustainability policies;
- Business organizations and networks for food sustainability.

Admission requirements and evaluation methods

The Graduate Degree program is designed as a multidisciplinary course of study focused on the field of gastronomic sciences, approached from the perspectives of nutrition, health, and the environment, with a specific focus on Planetary Health and One Health. Applicants for admission to the Graduate Degree program will be evaluated through a review of their dossier, consisting of documents submitted by the candidate that allow for the reconstruction of their academic background. All applicants are required to demonstrate English language proficiency at the B2 level, as defined by the Common European Framework of Reference for Languages (CEFR).
A detailed description of the required entry knowledge and evaluation methods will be provided in the program regulations. The program has been designed to consider the knowledge base of students coming from different undergraduate programs who are interested in pursuing a course of study focused on gastronomic sciences.
The following applicants are eligible for admission to the Graduate degree program:
- Candidates holding an Undergraduate Degree or a single-cycle Graduate Degree in the following degree classes:
1. L-2 - Biotechnology
2. L-4 – Industrial Design
3. L-6 – Geography

4. L-5 - Philosopy
5. L-7 – Civil and Environmental Engineering
6. L-25 - Agricultural and Forestry Sciences and Technologies
7. L-13 – Biological Sciences
8. L-14 - Legal Services Sciences
9. L.-14R - Legal Services Sciences
10. L-15 – Tourism Sciences
11. L-26 - Food Sciences and Technologies
12. L-37 – Social Sciences for Development, Cooperation and Peace
13. L-38 – Animal Science and Animal Production Technologies
14. L-GASTR – Gastronomic Sciences, Cultures and Policies
15. L-40 – Sociology
16. L-36 – Political Science
17. LM-41 – Single-cycle Graduate Degree in Medicine and Surgery

Graduates from other degree classes (3 year Undergraduate or equivalent) other than those specified above may also be admitted, provided they have obtained at least 40 ECTS credits, also through First-Level professional Master, in which:
- at least 15 ECTS credits in the following academic disciplines:
AGRI-01/A – Agricultural Economics; BIOS-02/A – Plant Physiology; BIOS-03/B – Anthropology; BIOS-05/A – Ecology; GEOS-03/B – Applied Geology; GEOS-04/B – Applied Geophysics; GEOS-04/C – Oceanography; GIUR-03/B – Agricultural and Food Law; GIUR-09/A – International Law; GIUR-10/A – European Union Law; GSPS-01/A – Political Philosophy; GSPS-04/B – History of International Relations; HIST-03/A – Contemporary History; MEDS-03/A – Microbiology and Clinical Microbiology; MEDS-08/C – Food Science and Applied Dietetic Techniques; HIST-01/A – Medieval History; HIST-02/A – Modern History; HIST-03/A – Contemporary History; SDEA-01/A – Demo-Ethno-Anthropological Disciplines; PHIL-02/A – Philosophy of Science; PHIL-04/A – Aesthetics; PHIL-04/B – Philosophy and Theory of Languages; PHIL-02/A – Logic and Philosophy of Science; PHIL-02/B – History of Science and Techniques; PHIL-03/A – Moral Philosophy

- The remaining 25 credits in scientific-disciplinary sectors within the following areas:
Human, social, and legal sciences:
ECON-01/A – Political Economy; GSPS-02/A – Political Science; GSPS-05/A – General Sociology; GSPS-06/A – Sociology of Cultural and Communication Processes; GSPS-07/B – Sociology of Law and Deviance; GSPS-08/A – Sociology of Economic Processes and Labor; GSPS-08/B – Sociology of Environment and Territory; GSPS-01/B – Political Science; GSPS-06/A – Sociology of Cultural and Communication Processes; GSPS-08/A – Sociology of Economic Processes and Labor; GSPS-08/B – Sociology of Environment and Territory; MEDS-02/C – History of Medicine; GEOG-01/A – Geography; GEOG-01/B – Economic-Political Geography; GLOT-01/B – Teaching of Modern Languages

Or

Environmental, natural, and medical-veterinary sciences:
AGRI-01/A – Agricultural, Food, and Rural Economics and Valuation; AGRI-02/B – Horticulture and Floriculture; AGRI-02/A – Agronomy and Herbaceous Crops; AGRI-03/A – General

Arboriculture and Tree Crops; AGRI-04/A – Agricultural Hydraulics and Hydraulic-Forest Systems; AGRI-04/B – Agricultural Mechanics; AGRI-05/B – Plant Pathology; AGRI-04/C – Rural Constructions and Agroforestry Territory; AGRI-06/B – Agricultural Chemistry; AGRI-07/A – Food Sciences and Technologies; AGRI-08/A – Agricultural Microbiology; AGRI-09/A – General Animal Science and Genetic Improvement; AGRI-09/B – Animal Nutrition and Feeding; AGRI-09/C – Special Animal Science; AGRI-09/D – Animal Husbandry; BIOS-01/A – General Botany; BIOS-01/B – Systematic Botany; BIOS-01/C – Environmental and Applied Botany; BIOS-03/A – Zoology; BIOS-07/A – Biochemistry; BIOS-15/A – Microbiology; GEOS-01/D – Mineral Resources and Mineralogical-Petrographic Applications for Environment and Cultural Heritage; GEOS-04/C – Oceanography, Meteorology, and Climatology; IIND-07/B – Environmental Engineering Physics; MEDS-24/B – General and Applied Hygiene; MVET-01/A – Veterinary Anatomy; MVET-02/A – General Pathology and Veterinary Pathological Anatomy; MVET-02/B – Inspection of Animal-Derived Foods; MVET-03/B – Parasitology and Parasitic Diseases of Animals and Humans; PHYS-05/B – Physics of the Earth, Planetary, Space, and Climate Systems; PHYS-06/A – Physics for Life Sciences, Environment, and Cultural Heritage

Students holding a degree obtained abroad recognized as suitable by the Academic Council may also access the program.
International candidates who have obtained a valid and recognized first-cycle degree are eligible for selection. Students must hold a Undergraduate Degree (first-cycle degree) that is suitable and valid for entry into a second-cycle degree (Master of Science).
The originating degree (Undergraduate/Graduate) must meet the following characteristics:
- 180 ECTS credits;
- duration of at least 3 years;
- equivalent to an Italian degree program;
- issued by a foreign university recognized by the educational system of the issuing country, which allows continuation of studies in a postgraduate (second-level) program. The competent University bodies reserve the right to assess the suitability of candidates' degrees, even if their characteristics differ partially from those listed above.

Tuning Matrix
Area of Ecology and Sustainability of Agri-Food Systems
Knowledge and understanding Students acquire knowledge of the principles of ecology applied to food systems, the relationships between biodiversity, environment, and gastronomic practices, and the scientific foundations of sustainability. They deepen their understanding of the biological, ecological, and agroecological bases of production systems and understand the role of natural resources in the regeneration of territories and marine systems. **Ability to apply knowledge and understanding** Graduates are able to analyze and assess the environmental impact of agri-food chains and consumption practices, propose ecological transition solutions in food systems, and apply tools for sustainable resource design and management, including field experiences and project work.
Area of health, nutrition, and animal welfare
Knowledge and understanding Students acquire scientific knowledge on human nutrition, physiology, chemistry, microbiology, metabolism, the relationship between food and public health, and environmental and social factors affecting

human and animal welfare. They also understand the fundamentals of the One Health and Planetary Health approaches, with a strict focus on food safety and quality.

Ability to apply knowledge and understanding
Graduates can apply knowledge to assess nutritional status and dietary needs of populations, design health promotion and prevention strategies, analyze health risks related to food chains, and integrate animal welfare and sustainability practices into production and consumption systems.

Area of human and cultural food sciences

Knowledge and understanding
Students develop a critical understanding of the cultural, social, and symbolic value of food, and the scientific disciplines developed around food, environment, and health, through philosophical, anthropological, and communication perspectives. They acquire conceptual tools to interpret the relationship between food culture, cultural/gastronomic heritage, and health, and to understand social transformations related to contemporary eating habits.

Ability to apply knowledge and understanding
Graduates can apply Humanistic knowledge to develop educational and communication projects aimed at promoting sustainable food practices, enhancing gastronomic heritage, and fostering social awareness of the connections between food, health, and the environment, including through multimedia and participatory communication tools.

Area of food policy and governance

Knowledge and understanding
Students acquire knowledge of food policies, regulatory systems, and multi-level governance processes, both local and global, that regulate food production and distribution. They understand the relationships between public policy, economics, law, and sustainability, with reference to the main international instruments and institutions operating in the sector.

Ability to apply knowledge and understanding
Graduates can design, manage, and evaluate interventions and policies for the sustainability of food systems, critically analyze legal instruments and economic models, and contribute to defining inclusive and ethical local and global governance strategies. They are capable of operating in institutional and intergovernmental contexts, collaborating in the planning and implementation of projects at both local and global levels.

Characteristics of the final examination

The Graduate Degree is obtained by passing a final examination, consisting of the preparation of an original dissertation and its presentation before the Selection Committee. The final examination is conducted in English or Italian. The thesis is based on knowledge acquired in the disciplinary fields developed during the course of study, which may be integrated and supplemented with experiences carried out during the internship. The thesis work normally includes a theoretical part, based on the knowledge acquired in the disciplinary fields of the Degree Program, and an empirical part, which may involve various methodologies. These, for example, include the collection and processing of qualitative data, observation (possibly participatory) of social or natural phenomena, and the realization of case studies. The methods of assignment and execution of the final examination are specified in the relevant University regulations.