



**UNIVERSITA' DEGLI STUDI DI MILANO**  
**PROGRAMME DESCRIPTION - ACADEMIC YEAR 2024/25**  
**BACHELOR**  
**FOOD SERVICE AND RETAIL SCIENCES (Classe L-26)**  
**Enrolled from academic year 2024/2025**

### HEADING

<b>Degree classification - Denomination and code:</b>	L-26 Food industry
<b>Degree title:</b>	Dottore
<b>Length of course:</b>	3 years
<b>Total number of credits required to complete programme:</b>	180
<b>Years of course currently available:</b>	1st
<b>Access procedures:</b>	Open, subject to completion of self-assessment test prior to enrolment
<b>Course code:</b>	G35

### PERSONS/ROLES

#### Head of Study Programme

Prof.ssa Claudia Picozzi

#### Tutors - Faculty

Tutor per i piani di studio:

lettera iniziale cognome studenti A-BE: Prof. Alberto Giuseppe Barbiroli

lettera iniziale cognome studenti BF-BZ: Prof. Matias Pasquali

lettera iniziale cognome studenti C-CL: Prof. Dimitrios Fessas

lettera iniziale cognome studenti CM-DE: Prof.ssa Gabriella Giovanelli

lettera iniziale cognome studenti DF-F: Prof. Riccardo Guidetti

lettera iniziale cognome studenti G-L: Prof.ssa Sabrina Dallavalle (Responsabile docenti Tutor per i piani di studio)

lettera iniziale cognome studenti M-O: Prof.ssa Carola Cappa

lettera iniziale cognome studenti P-S: Prof.ssa Daniela Martini

lettera iniziale cognome studenti T-Z: Prof.ssa Monica Laureati

Tutor per la mobilità internazionale e l'Erasmus:

Prof.ssa Monica Laureati (Responsabile Erasmus)

Referente DSA: Prof.ssa Sara Limbo

#### Degree Course website

<https://risda.cdl.unimi.it>

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

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

#### Degree programme head

Phone Tel. 0250319174 Email: [presidenza.risto@unimi.it](mailto:presidenza.risto@unimi.it)

#### Student registrar

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

### CHARACTERISTICS OF DEGREE PROGRAMME

#### General and specific learning objectives

The Bachelor's degree program in Food Service and Retail Science aims to prepare graduates with specific knowledge and professional skills tailored to the needs of companies and organizations operating in the food service and retail sectors, as well as related fields. To meet these demands, the curriculum includes scientific, technical, and managerial aspects that are specified in the particular areas of interest for the professional profile. Throughout the educational journey, students gain a solid basic training in mathematics, physics, chemistry, biology, and computer science. They develop a comprehensive understanding of activities and issues related to food administration, mastery of chemical, physical, sensory,

microbiological, and nutritional methods for food control and assessment, and the ability to intervene with measures ensuring safety, quality, and sustainability of products and processes, taking into account legal, economic, and ethical aspects. The acquired education enables graduates to progress to higher levels of university education (Master's degree, first-level master's programs) in related cultural areas.

### **Expected learning outcomes**

Knowledge and Understanding:

The graduate knows and understands:

- The mathematical, computer science, and physics principles and tools necessary for understanding and managing specific processes in the sector.
- Biological, chemical, and biochemical aspects related to raw materials and food products, aimed at evaluating quality, stability, and safety.
- Characteristics of microbial cells and their metabolism, as well as the characteristics and role of contaminants in relation to the shelf-life and hygienic safety of foods.
- Principles of human physiology and nutritional characteristics of foods for the promotion and protection of health.
- Analytical methods for quality control (chemical, microbiological, nutritional, and sensory) of products.
- Operations and processes characteristic of food service and retail systems, in terms of operational flows, material and energy balances, layouts, logistics principles, and sustainability.
- Quality management systems, environmental management, hygienic safety of products, and worker safety.
- Legislative principles and tools for economic management and marketing of business activities and companies in the sector.

The basic educational activities (disciplinary areas of mathematical, physical, computer, statistical, chemical, biochemical, and biological sciences) and characteristic activities (disciplines of food technology, safety and assessment of foods, and economic and legal disciplines), as well as related integrative activities, allow students to achieve the expected knowledge and understanding goals, assessed through proficiency exams. Assessment methods include oral and/or written exams and practical tests (numerical problem-solving, evaluation of dietary programs, application of analytical techniques, production of reports on specific topics).

Ability to Apply Knowledge and Understanding:

Students in Food Service and Retail Science acquire skills to understand the needs of companies in the food service and retail sector, as well as those of consumers, and to implement targeted interventions to meet these needs. In particular, they develop practical skills related to:

- Organization and design of production and retail facilities.
- Design and implementation of management systems to ensure the quality and safety of products and services in the field of foodservice and retail.
- Application of economic management techniques and principles of food legislation.
- Application of methods for evaluating the quality and safety of processes and products.
- Planning and evaluation of menus.

Moreover, students become familiar with scientific methodologies for investigation, analysis, data processing, and management to optimize processes and products. They develop the necessary skills to collaborate with various internal and external components in the production and retail environment. The ability to apply acquired knowledge is developed and assessed throughout the training process through theoretical and practical approaches to sector-specific issues (during lectures, classroom exercises, and laboratory activities), during internships, and in the preparation and discussion of the final thesis.

Judgment autonomy

Graduates in Food Service and Retail Science possess autonomy of judgment, expressed through the ability to:

- Make operational decisions.
- Organize work based on objectives and available resources.
- Take responsibility and be accountable for actions during work activities, in accordance with ethical and legal standards.
- Make decisions using a scientific problem-solving approach.

The acquisition of autonomy of judgment is achieved through traditional and innovative teaching tools (collaborative learning strategies such as Think/Pair/Share and the organization of debates) that stimulate engagement and interaction with students during educational activities. Autonomy of judgment is assessed through the completion of theoretical-practical activities in the course of studies, evaluating the ability to organize experimental or practical activities, collect and process obtained results, write scientific reports, and coordinate thematic debates on current issues in the field of foodservice and retail.

Communication Skills:

The degree program trains graduates capable of:

- Using appropriate technical-scientific language to communicate verbally and/or in writing with stakeholders in the sector at various levels.
- Using suitable methods and tools for writing and presenting technical reports.
- Collaborating in the drafting of protocols, procedures, manuals, and guidelines.

- Conducting teaching and professional training activities.
- Engaging in communication activities in journalism and eno-gastronomic tourism.

Communication skills are assessed through proficiency exams, scientific reports, and the final thesis, where students are required to fully acquire presentation and communication skills, as well as appropriate language proficiency.

Learning ability:

The graduate possesses the cognitive tools necessary to develop self-learning skills aimed at deepening and updating knowledge, also through consulting bibliographic material, databases, and official sector websites. The graduate also can interact and share knowledge within a work group, both for ordinary professional activities and for problem-solving activities.

Such learning ability is acquired throughout the entire course of studies through participation in lectures, laboratories, seminars, and educational visits; passing exams represents the moment when this ability is assessed. The internship experience and the drafting of the final paper are further opportunities for developing learning skills as students must demonstrate the ability to retrieve the necessary information for the completion of the training project and to re-elaborate this information for the completion and discussion of the internship project.

In particular, the internship train the students in a professional context by involving them in operational, managerial, and experimental activities. It also aims to introduce the students to the work environment and to train them in managing interpersonal relationships, developing transversal skills such as problem-solving, teamwork, communication, and autonomously deepening and updating knowledge.

### **Professional profile and employment opportunities**

Food Service and Retail Technician

Role in a Work Context:

The graduate in Food Service and Retail Science operates at various levels of the food chain, with a focus on the preparation and administration of meals, as well as the marketing of food and beverages. Graduates can take on operational and managerial roles in various food service and retail activities. They can also collaborate with other professionals involved in the production, preparation, and retail of food (e.g., food technologists, nutritionists, engineers, architects, chefs, sales and logistics personnel) and with official control bodies (e.g., ATS, NAS, ISS, EFSA).

Skills Associated with the Role:

- Development and control of food preparation and preservation processes.
- Evaluation of the quality and chemical, physical, sensory, microbiological, and nutritional characteristics of finished products, as well as semi-finished and raw materials.
- Preparation and administration of meals in public and private collective catering facilities and in activities related to the promotion of the food and wine sector.
- Control and management of hygiene-sanitary aspects, quality, food safety, and sustainability in food service and retail companies.
- Inspection, evaluation, and certification activities in certification bodies and control entities.
- Training and personnel selection in the food service and retail sector.

Furthermore, the multidisciplinary training acquired allows them to collaborate:

- In the organization and management of nutritional interventions with healthcare entities and structures to propose suitable solutions for proper nutrition.
- In the study, design, and management of agro-food development programs with community and international agencies.
- In the formulation of menus for different consumer categories.
- In the management of contracts in the field of collective catering.
- In the management of logistics and points of sale in the retail sector.
- In the design of food service and retail businesses.
- In activities related to communication, journalism, and eno-gastronomic tourism.

Career Opportunities:\*\*

The professional opportunities for graduates in Food Service and Retail Science include:

- Catering companies.
- Organized retail companies.
- Service companies for catering and retail (installations and equipment, sanitation, design).
- Logistics centers for food supply.
- Consulting firms and certification bodies for the food sector.
- Public supervision and inspection bodies.
- Laboratories for microbiological, chemical, and sensory analysis of food.
- Companies in the food and wine sector and agritourism.

### **Initial knowledge required**

Qualifications and knowledge required for admission

Applicants to the degree programme must hold a high school diploma or another qualification obtained abroad and

recognized as suitable. Adequate initial preparation is also required, specifically a sufficient level of knowledge in basic scientific disciplines (mathematics, physics, chemistry, biology) and an understanding of logic.

#### Admission assessment

The Bachelor's degree program has open access with a mandatory, but non-selective, knowledge verification test before enrollment. The test valid for admission to the degree program is the TOLC-AV (Online Test administered by CISIA <https://www.cisiaonline.it/>), aimed at assessing students' initial preparation in terms of minimum requirements of knowledge in basic scientific disciplines (mathematics, physics, chemistry, biology) and understanding of elementary logic.

The TOLC-AV can be taken at the University of Milan or at any other university adhering to CISIA. The calendar with available locations and dates is published on <https://tolc.cisiaonline.it/calendario.php>. Enrollment procedures and deadlines are indicated in the call for application published on <https://www.unimi.it/it/studiare/immatricolarsi-e-iscriversi>

#### Compulsory attendance

Course attendance is strongly recommended.

#### Internship criteria

The training course includes a mandatory internship of 12 CFUs corresponding to 300 hours. The final internship can only start after passing all exams of the first year and obtaining English language proficiency and computer skills certificates. Internship activities can be carried out in a private company, a public institution, or a University facility.

#### Degree programme final exams

The final exam consists of the presentation and discussion in front of a Commission of a written paper, prepared by the student under the guidance of a supervising professor. The paper is related to the activities carried out by the student during the internship, such as operational activities in a company, managerial activities, and experimental laboratory activities. The paper can be written in English, and the final exam can also be conducted in the same language. During the final exam, the Commission evaluates the student's commitment during the internship and the writing of the paper, the quality of the activities performed in terms of autonomy and personal contribution, acquired skills and competencies, and developed or demonstrated relational skills. To be admitted to the final exam, which includes acquiring 3 CFUs, the student must:

- Have passed the exams related to basic, characterizing, and related or integrative teachings, totaling 147 CFUs, and acquired the 12 CFUs related to elective activities.
- Have demonstrated knowledge of the English language, earning 3 CFUs.
- Have demonstrated computer skills, earning 3 CFUs.
- Have completed the internship for a total of 12 CFUs.
- Have prepared a written paper on the internship activity.

The score assigned by the Commission will take into account the candidate's presentation and the judgment expressed by the supervising professor. The Regulation for the assignment of the degree grade is published on the page <https://www.unimi.it/it/corsi/facolta-e-scuole/scienze-agrarie-e-alimentari>

#### 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. 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 or fail the end-of-course exam six times must obtain the necessary certification privately before graduating.

Students who are supposed to earn 3 credits (CFU) for basic computer skills, as provided by their degree programme, have to attend the "Computer Science Course 3CFU".

It is a blended course with a compulsory final exam.

The first exam session is scheduled for January, and more will follow according to a calendar to be made available on the course delivery platform.

Students who have already fulfilled an ICT Assessment during their previous studies should submit the related certification to their Academic Board, seeking its acknowledgement: it will be evaluated and they will receive a positive or negative feedback.

The "Computer Science Course 3CFU" course is managed by the CTU - Teaching and Learning Innovation and Multimedia Technology Centre.

### **EXPERIENCE OF STUDY ABROAD AS PART OF THE TRAINING PROGRAM**

The University of Milan supports international mobility by providing its students with the opportunity to spend study and

internship periods abroad. It is a unique chance to enrich your educational path in a new exciting environment.

The agreements entered into by the University with over 300 universities from the 27 EU member countries under the European Erasmus+ programme allow regularly enrolled students to carry out part of their studies at one of the partner universities or to undertake internships at companies, training and research centres and other organizations. Similar international mobility opportunities are provided outside Europe, through agreements with a number of prestigious institutions.

### Study and internships abroad

Students enrolled in the degree program have the opportunity to spend periods of study and internships abroad, a unique opportunity to enrich their educational curriculum in an international context.

Within the European Erasmus + program, the European geographical areas where partner universities are located are mainly in France, Germany, Norway, the Netherlands, the United Kingdom, Portugal, Spain, and Sweden.

Erasmus+ Traineeship, on the other hand, allows students to carry out a training internship abroad at research centers, institutions, and laboratories.

Information on international mobility is available at the following page: <https://www.unimi.it/it/internazionale/studiare-allestero>

### How to participate in Erasmus mobility programs

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

Ad hoc commissions will evaluate:

Academic career

the candidate's proposed study programme abroad

his/her foreign language proficiency

the reasons behind his/her application

Call for applications and informative meetings

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

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

Erasmus+ scholarship

The European Union grants the winners of the Erasmus+ programme selection a scholarship to contribute to their mobility costs, which may be supplemented by the University funding for disadvantaged students.

Language courses

Students who pass the selections for mobility programmes can benefit from intensive foreign language courses offered each year by the University Language Centre (SLAM).

<https://www.unimi.it/en/node/8/>

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

For assistance, please contact:

International Mobility Office

Via Santa Sofia 9 (second floor)

Tel. 02 503 13501-12589-13495-13502

Contacts: InformaStudenti; [mobility.out@unimi.it](mailto:mobility.out@unimi.it)

Student Desk booking through InformaStudenti

<b>1st COURSE YEAR Core/compulsory courses/activities common</b>		
<b>Learning activity</b>	<b>Ects</b>	<b>Sector</b>
Calculus	6	MAT/02
Elements of Basic Biology	6	(2) BIO/10, (2) BIO/05, (2) BIO/01
Elements of Chemistry and Physical Chemistry	8	CHIM/02
Elements of Economics and Statistics	8	AGR/01
Elements of Physics	6	FIS/03
English assessment B1 (3 ECTS)	3	ND
Organic Chemistry	6	CHIM/06
	Total compulsory credits	43
<b>2nd COURSE YEAR (available as of academic year 2025/26) Core/compulsory courses/activities common</b>		
<b>Learning activity</b>	<b>Ects</b>	<b>Sector</b>
Animal based foods	8	AGR/19
Basics of Microbiology and Food Microbiology	10	AGR/16
Biochemistry and Biochemical Analysis of Foods	8	BIO/10
Biotic Contamination of Foods and Environments and Residues	8	(3) AGR/11, (2)

		VET/04, (3) AGR/12
Food Chemical Analysis	8	AGR/15
Food Science and Human Nutrition	8	(4) BIO/09, (4) MED/49
Plant-based foods	6	AGR/03
Sensory Analysis of Foods	6	(2) M-PSI/05, (4) AGR/15
	Total compulsory credits	62

### ***3rd COURSE YEAR (available as of academic year 2026/27) Core/compulsory courses/activities common***

<b>Learning activity</b>	<b>Ects</b>	<b>Sector</b>
Business Economics and Elements of Food Legislation	10	(1) IUS/15, (1) IUS/13, (8) AGR/01
Community Nutrition and Hygiene	9	(3) BIO/09, (3) MED/49, (3) MED/42
Design, Logistic and Sustainability for Foodservices and mass market retail	9	AGR/09
Quality Management in the Food System	6	(2) SECS-P/13, (4) AGR/15
Technologies and processes of foodservice and mass market retail	11	AGR/15
	Total compulsory credits	45

### ***COURSE YEAR UNDEFINED Core/compulsory courses/activities common***

<b>Learning activity</b>	<b>Ects</b>	<b>Sector</b>
Computer Science Course	3	INF/01
	Total compulsory credits	3

### ***Further elective courses***

The student can acquire 12 CFU through elective courses offered by the University of Milan, provided they are recognized as consistent with the educational path by the Teaching Board, or by attending seminars, conferences, or training courses organized by the University or other institutions, annually proposed under the name 'Professional updates in foodservice and distribution', always with the Teaching Board approval.

Upon completion of activities within the scope of 'Professional updates in foodservice and distribution', students may be awarded a minimum of 1 CFU up to a maximum of 4 CFU. The Teaching Board proposes a series of elective courses among those offered in the Faculty.

### ***End of course requirements***

Final exam	3	NA
Stage	12	NA
	Total compulsory credits	15