

# UNIVERSITA' DEGLI STUDI DI MILANO PROGRAMME DESCRIPTION - ACADEMIC YEAR 2022/23 BACHELOR

## Foodservice Science and Technology (Classe L-26) Enrolled from 2017/18 academic year

HEADING	
Degree classification - Denomination	L-26 Food industry
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, 2nd, 3rd
Access procedures:	Cap on student, student selection based on entrance test
Course code:	G30

#### 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 Maria Grazia Fortina lettera iniziale cognome studenti P-S: Prof.ssa Daniela Martini

lettera iniziale cognome studenti T-Z: Prof.ssa Monica Laureati (Responsabile Erasmus)

Referente DSA: Prof.ssa Sara Limbo

#### **Degree Course website**

https://scienzeristorazione.cdl.unimi.it/

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

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

#### Degree programme head

Phone 0250319174 Email: presidenza.risto@unimi.it

#### Student registrar

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

## CHARACTERISTICS OF DEGREE PROGRAMME

#### General and specific learning objectives

The bachelor degree in Foodservice Science and Technology aims at preparing graduates with specific professional knowledge and skills for the needs of companies and organizations operating in the catering field.

To meet these demands, training focuses on the safety and quality aspects of food preparation, storage and distribution for communities, and on the management of foodservice and catering companies.

The degree course is provided by the Department of Food, Environmental and Nutritional Sciences (DeFENS) in cooperation with the Department of Agricultural and Environmental Sciences - Production, Landscape, Agroenergy (DISAA).

## **Expected learning outcomes**

Graduates in Foodservice Science and Technology will have acquired knowledge, skills and competences related to:

- food processing, storage and distribution in foodservice companies;
- quality and safety of catering services;
- planning of meals and diet according to the nutritional needs of the target consumers;
- design and layout of foodservice facilities
- economic management and marketing of catering services and companies;
- inspection, planning and control of catering services in public administrations;
- chemical-physical, nutritional, sensorial, microbiological and entomological analyses of foodstuffs;
- development of diagnostic tests to evaluate food quality and safety;
- surveys on food consumption and hygiene of populations and specific segments of the population;
- historical, motivational, sociological and psychological investigations on food consumption and preferences;
- publishing and technical-scientific dissemination on food consumption;
- food legislation and promotion of traditional gastronomic products and the "Mediterranean diet".

At the end of the studies the graduates will have autonomy of judgment which will allow him/her to acquire the information necessary to implement measures to improve the quality and efficiency of catering systems and related activities. In addition, the graduates will be able to communicate effectively, also using an European language, usually English, in the foodservice field.

## Professional profile and employment opportunities

Graduates in Foodservice Science and Technology have a good basic training in microbiology, nutrition, chemistry, technology and economy related to foodservice and are familiar with survey, analysis, processing and data management methodologies, aimed at the optimization of processes and products and the minimization of food-related risks.

The multidisciplinary approach of the training, which includes basic knowledge and professional skills, allows to develop a job profile able to cover the requirements of foodservice and related production activities.

The job opportunities for graduates in Foodservice Science and Technology are in catering companies.

Activities will include technical management and control tasks in food and meals production and distribution companies, as well as in public supervisory authorities and offices, in public institutions devoted to planning, control and certification of production activities and in analysis laboratories.

They can also be employed in agro-food companies, in small and large retail activities, in agritourism and in the communication field.

They can collaborate in design and layout of foodservice facilities and in the activities of consulting companies.

According to the ISTAT classification of professions (2011), the most relevant job opportunities are those indicated as professions in the management of the production processes of goods and services (Food preparation technicians - Technicians of food production - Service production technicians - Food product technicians).

For instance, the graduates have skills for: production management and quality control in catering and banqueting companies; development, innovation and research in the area of quality assurance; training and selection of staff involved in collective and commercial foodservice; certification of production processes and food safety control systems applied to collective catering; participation in the management of public procurement for foodservice; management and supervision of food supply and food analysis in large-scale retail; development of processes and products in the foodservice system.

#### Initial knowledge required

Qualifications and knowledge required for admission

Applicants to the degree programme must hold a secondary-school diploma, or other equivalent qualification, and a basic knowledge in scientific subjects (mathematics, chemistry, physics and biology).

#### Admission assessment

Admission to this Bachelor's degree programme is limited in order to meet high quality teaching standards with respect to available resources. There are 100 places available for enrolment in the first year, plus 10 places for non-EU students residing abroad.

Access to the course is governed by a compulsory and selective test aimed at ascertaining the candidate's possession of the admission requirements, i.e. knowledge of the main scientific subjects as provided by upper secondary school and an understanding of elementary logic.

The test required for admission to the degree programme is TOLC-AV, an online test provided by the Consortium of Inter-University Integrated Access Systems (CISIA - https://www.cisiaonline.it).

For topics and details of the test, please view the page https://www.cisiaonline.it/en/area-tematica-tolc-agraria-veterinaria/struttura-della-prova-e-syllabus/

It is possible to sit the TOLC-AV test at the University of Milan or any other member university of CISIA.

The calendar with available locations and dates is published on the page https://tolc.cisiaonline.it/calendario.php?l=gb.

The procedures and the deadlines for registration are set out in the call for applications published on the page https://scienzeristorazione.cdl.unimi.it/it/iscriversi

Students will be eligible for enrolling on the basis of the merit ranking.

### 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 only if admitted to years subsequent to the first.

To this end, they will have to submit a specific request for prior evaluation of their academic records using the online service as shown in the call for applications.

These candidates must provide a full transcript of records (exams lists, 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 will be required to take the test and register for the call.

Additional learning requirements (OFA) and remedial activities

Students 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), within the first year of the programme. In order to fulfil their OFA, students will be offered a remedial Mathematics course with a final assessment test. Students who do not pass the OFA test within the deadline are not allowed to take second- or third-year exams. Alternatively, students may fulfil their learning requirements by passing the Mathematics exam in the study plan. Learn more at https://scienzeristorazione.cdl.unimi.it/it/studiare/lematricole

#### **Compulsory attendance**

Course attendance is strongly recommended.

#### Internship criteria

Students are required to complete an internship awarding 14 credits (CFU).

The internship can only be started after passing all first-year exams and obtaining foreign language proficiency and computer skills certificates.

Internship activities may include the following:

- operational activities in a corporate function;
- management activities:
- inspection and control activities;
- communication and training activities;
- experimental laboratory activities for learning technical skills and/or method and process validation;
- data processing and application of physical, statistical and/or review models;
- in-depth bibliographic and documentary research on a specific topic.

#### Degree programme final exams

The final exam consists in the discussion of a paper on the internship in front of a board of faculty members. The student will write the paper under the guidance of a supervisor.

The final exam awards 3 credits (CFU). Upcoming graduates must comply with the following:

- pass all exams for core and supplementary courses, for a total of 144 CFU, and earn 13 CFU for electives;
- earn 3 credits for foreign language proficiency;
- earn 3 credits for computer skills;
- carry out a practical internship in a public or private organization, or on campus, for a total of 14 CFU;
- write a report on the internship.

During the final exam, candidates will present their final paper, highlighting the purpose and findings of their work, and skills learned.

The paper can be written and discussed in Italian or English.

The score awarded by the board will take into account the candidate's presentation and the supervisor's assessment.

#### **Notes**

Computer skills

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.

#### For-credit assessment

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:

- Through a language certificate, earned within three years prior to the date of submission, at a B1 level or higher. For the list of language certificates recognised by the University, please review: https://www.unimi.it/en/node/297/). The certificate

must be uploaded during the enrolment procedure, or subsequently to the portal http://studente.unimi.it/uploadCertificazioniLingue;

- Through a Placement Test, which is delivered by the University Language Centre (SLAM) during year I only, from October to December. Students who fail the test will be required to take a SLAM course.

The Placement Test is mandatory for all students who do not hold a valid certificate.

Those who do not sit the Placement Test by December, or who fail to pass the end-of-course test within six attempts, must obtain a paid certificate by graduation.

## 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 internship abroad. This is a unique opportunity to enrich their curriculum in an international context. For the European Erasmus+ program, the geographical areas where the partner universities reside are mainly in France, Germany, Norway, the Netherlands, the United Kingdom, Portugal, Spain and Sweden. Otherwise, The Erasmus + Traineeship allows you to accede a training internship abroad at research centers, institutions and laboratories. Information on international mobility is available on the page https://www.unimi.it/en/international/study-abroad

#### 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 interinstitutional agreement or to find a traineeship position on their own.

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

#### Erasmus+ scholarship

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

## Language courses

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

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

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

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

Ects	Sector
8	MAT/05
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Elements of physics			FIS/05, FIS/03
English assessment B1 (3 ECTS)			ND
Fundamentals of chemistry and physical chemistry Introductory economics and statistics			CHIM/02 AGR/01
Organic chemistry			CHIM/06
Principles of biology		6	BIO/10, BIO/05,
1 0,	Total compulsory credits	47	BIO/01
	Total compulsory credits	47	J
2nd COURSE YEAR Core/compulsory courses/activi	ties common		
Learning activity			Sector
Biochemistry and biochemical analysis of food		8	BIO/10
Biotic contamination of food and environments		8	AGR/11, VET/04, AGR/12
Catering technology		8	AGR/15
Food chemical analysis		9	AGR/15
Food of animal and plant origin		10	(5) AGR/19, (5) AGR/03
Human nutrition			BIO/09, MED/49
Microbiology I			AGR/16
Sensory analysis of food	I 1		M-PSI/05, AGR/15
	Total compulsory credits	63	J
3rd COURSE YEAR Core/compulsory courses/activit	ies common		
Learning activity		Ects	Sector
Business economy and elements of food legislation		8	IUS/15, IUS/13,
Community nutrition		6	AGR/01 BIO/09, MED/49
Design, logistic and sustainability for foodservices			AGR/09, AGR/15
Food microbiology and hygiene			AGR/16
Quality management systems in food service		6	SECS-P/13, AGR/1
	Total compulsory credits	37	]
COURSE YEAR UNDEFINED Core/compulsory cou	rses/activities common		
Learning activity		Ects	Sector
Computer Science Course			INF/01
	Total compulsory credits	3	
Further elective courses		1 2	Langua
Equal opportunities and scientific careers Food Law			SPS/09 IUS/03
Health and safety in the workplace (T.U. 81/08)			AGR/09
Inspection of Foods of Animal Origin			VET/04
-			(1.5) SPS/04, (0.25
Laboratory: Sustainability and Sustainable Development		4	IUS/01, (0.75) SEC P/01, (0.5) AGR/13
			(1) ND
Mass Market Retailers: Organization, processes and food safety	•		AGR/15
Packaging for foodservice			AGR/15 AGR/20, VET/04
Safety of fish products and derivatives			BIO/09
			_10,00
		3	
Supplier's planning and food quality			
Supplier's planning and food quality  End of course requirements  Final exam		3	NA
Safety of fish products and derivatives Supplier's planning and food quality  End of course requirements  Final exam Stage	Total compulsory credits	3	NA