



UNIVERSITÀ
DEGLI STUDI
DI TERAMO

Area Didattica e Servizi agli Studenti
Coordinamento Servizi agli Studenti

University of Teramo

**Teaching regulation of the
Degree**

Academic year 2024/25

UNIVERSITÀ DEGLI STUDI DI TERAMO

Teaching regulation of the MSc Degree in FOOD SCIENCE AND TECHNOLOGY

Class LM-70 DM 22.10.2004 n. 270 and subsequent adjustments

Academic Year 2024/2025

Art. 1 – General information on the course	
University:	Università degli Studi di Teramo (University of Teramo)
Name of the course in Italian:	Scienze e Tecnologie Alimentari
Name of the course in English:	Food Science and Technology
Class:	LM-70 – MSc Food Science and Technology
Access programming:	- National no - Local no
Language of the course:	English
Method used for the training activities:	- Conventional Degree
Legal duration of the course of study:	2 years
Title issued:	Master degree in Food Science and Technology
Department of affiliation:	Bioscience and Technologies for Food, Agriculture and Environment
Teaching site of the course :	Teramo, via R. Balzarini 1
Coordinator of the Course:	Prof. Giampiero Sacchetti
Collegiate management body of the Course:	Council of the degree course
Website of the course:	https://www.unite.it/UniTE/Food_Science_and_Technology_2022_2023
Art. 2 – Brief description of the course	
<p>The Master's Degree Course (MDC) in Food Science and Technology of the University of Teramo (UniTE), delivered in English, aims to provide advanced knowledge and to train professional skills suitable for carrying out coordination and guidance activities related to the agri-food sector, as well as the ability to guarantee, also through the use of innovative methodologies, the safety, quality and wholesomeness of food. It is characterized by an interdisciplinary and international approach aimed at acquiring transversal knowledge and personal skills that can enable graduates to evaluate and solve complex problems related to the agri-food sector in its various aspects.</p> <p>The MDC has a duration of two years and corresponds to the achievement of 120 credits (ECTS – European Credits Transfer System).</p> <p>The curriculum also implies the development of an experimental thesis, whose research activity can be carried out in a University facility or in another public or private institution, either Italian or foreign, to be presented and discussed during the final exam for the achievement of the qualification Master's Degree.</p> <p>The master's degree course in Food Science and Technology trains professionals who carry out planning, design, management, control, coordination and training activities relating to the production, preservation, distribution and administration of food and beverages. The fundamental objective of their activity is the management of professional functions aimed at the constant and progressive improvement of food products in an economic and qualitative perspective, in the guarantee of the sustainability and eco-compatibility of industrial activities. The professional activity of these figures takes place mainly in agri-food companies and in all companies that integrate the production, transformation, conservation and distribution chain of food products, in companies of large-scale retail trade, in collective catering, in public and private bodies that they carry out planning, analysis, control, certification activities, as well as in those who carry out scientific investigations for the protection and enhancement of food production, in</p>	

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training institutions and in the freelancer profession.

Graduates in Food Science and Technology will also be able to practice the profession of Food Technologist in Italy after passing the State Exam and being registered in the Professional Register of Food Technologists of the corresponding region.

The transmission of knowledge is achieved through conventional teaching approaches supported by innovative teaching methodologies inspired by promoting an active role of the student who uses new technologies, integrated e-learning methods and online teaching support.

The teachings of the study program may include tests, verifications and in-depth study communities that will allow the student to respect the march times and to be up to date with the exams, thus optimizing his time, in line with what is established in the three-year program.

The Degree Course promotes the internationalization of students' scientific and professional training through the promotion of student exchange programs at European and international level and by implementing the stipulation of cooperation agreements for the development of joint international study programmes.

The Degree Course includes a curriculum which, through a training path developed within the cooperation agreements, allows the issue of the Double Degree Master's Degree awarded jointly with Chulalongkorn University (CU, Bangkok, Thailand) and recognized in both countries. To this end, students must attend 9 months of the training course at the associated university, acquiring credits valid for the training course by attending and passing exams as well as carrying out the thesis project. UniTE-CU graduates who have obtained the Double degree in Food Science and Technology can enter the world of work without the need for other recognition of the purchase title and can regularly take the state exam for registration in the Order of Food Technologists.

Art. 3 – Specific training objectives and description of the training course

The master's degree course in Food Science and Technology aims to provide advanced knowledge and to train professional skills suitable for carrying out complex coordination and addressing activities related to the agri-food sector, as well as the ability to guarantee, even with the use of innovative methodologies, the safety, quality and wholesomeness of food in national and international contexts.

Graduates in Food Science and Technology carry out planning, management, control, coordination and training activities relating to the production, conservation, distribution and administration of food and beverages. The fundamental objective of his activity is the management of professional functions aimed at the constant improvement of food products in an economic and qualitative sense, in the guarantee of the sustainability and eco-compatibility of industrial activities. Graduates are therefore able to implement, propose and manage innovations relating to the various professional activities in the sector. His professional activity takes place mainly in agri-food companies and in all companies that integrate the production, transformation, conservation and distribution chain of food products, in companies of large-scale retail trade, in public and private bodies that conduct business of planning, analysis, control, certification, as well as in those who carry out scientific investigations for the protection and enhancement of food production, in training institutions, in professional studios and in the freelance profession.

Graduates from the University of Teramo will have a preparation based on a generalist approach to Food Science and Technology through transversal teaching to the agri-food chains. The contents of the courses will be aimed at an integration both with the territory and at a European and international level also through collaboration with companies and organizations in the agri-food sector; this will make it possible to enhance the excellence of some specific research sectors of the Department and the University which are developed in a national and international context.

Individual case studies relating to research conducted by the teachers will then be highlighted and dealt with on topics relating to the quality and chemical and microbiological safety of foods, the design and production of functional and innovative foods, the study of aromatic components, the treatment of wastewater, the microbial ecology, the sustainability of production and development, genetically modified foods, etc. This will allow Teramo graduates to face both the profession of Food Technologist and a possible PhD in Food Science or similar areas with a good chance of success.

The introduction of teaching in English also aims to encourage student exchanges with foreign universities in the context of the Erasmus+ program, making it possible to improve not only cultural knowledge, but also personal and professional skills in international settings.

In order to promote the internationalization of teaching and training, starting from the first year, students can also opt for the international path/curriculum developed in collaboration with Chulalongkorn University (Bangkok,

Thailand) which allows them to acquire a double degree master's degree in Food Science and Technology recognized in both countries.
Scientific contents, teaching methods and training objectives adopted in the Master's Degree Course reflect the European guidelines and the minimum requirements identified within the ISEKI_Food network as well as the EQAS harmonization and certification criteria (https://www.iseki-food.net/EQAS_Food_Award)

**Art. 4 – Expected learning outcomes expressed through the European descriptors
of the degree**

<ul style="list-style-type: none"> - Knowledge and understanding - Ability to apply knowledge and understanding 	<p>Graduates in Food Science and Technology must demonstrate that they have acquired the appropriate scientific and technical knowledge characterizing and professionalizing a Food Technologist. In particular, he/she will have to know and understand the conceptual, technical, regulatory, ethical, environmental and economic tools involved in the production of goods and services in the agri-food sector. They must also be able to develop original ideas relating to specific occupational contexts of the sector at national and international level. In particular, the main expected learning outcomes concern those of the Disciplines of Food Technology and the Disciplines of Production and Management. Knowledge and understanding will be achieved through: frontal lessons in English, monothematic seminars, classroom analysis and commentary of scientific publications, study of recommended texts in Italian and English. The assessment of knowledge acquisition can take place through oral proficiency tests, also preceded by written tests, written tests in itinere on specific topics, summaries of technical and scientific articles, written individually or in small groups.</p> <p>Graduates in Food Science and Technology must have perfected their professional skills from an international point of view and be able to plan and manage autonomously and with an interdisciplinary approach interventions aimed at improving the quality and efficiency of food production, also in terms of environmental sustainability and eco-compatibility as well as the activities related to process and product innovation in the agri-food sector and the related control procedures for quality and safety assurance. The ability to apply knowledge and understanding will be achieved through exercises in the classroom, in the laboratory and in the field, project development (individual or in groups), case studies, internships and periods of training and tutoring in companies and the experimental activity object of the final thesis work. The verification of the acquisition of the ability to apply the knowledge involves the evaluation, also during the exam, of written reports, presentations and working reports on the cases analyzed and on the tutoring experiences carried out, as well as the analysis of the projects of different degree of complexity written individually or in small groups and finally the evaluation of the paper written during the graduation session.</p>
<ul style="list-style-type: none"> - Autonomy of judgement - Communication skills - Learning ability 	<p>Graduates in Food Science and Technology must be able to integrate knowledge to manage the complexity of the entire agri-food process, from production to consumption. In this context, he will be able to formulate judgments even in the absence of complete information, to make decisions and to undertake actions to control the wholesomeness and quality of food products, taking into consideration ethical and social aspects. The student must also be able to evaluate the innovative approaches and research concerning the sector and adapt them to specific occupational areas by combining: scientific rigor, technical effectiveness, economic advantage and sustainability.</p> <p>Mode of achievement The individual interpretation of technical-scientific articles, the commentary of</p>

	<p>seminars, conference reports and experimental results, will be required of students within each single course. Teachers will be invited to present, when possible, various interpretative theses of a theme, soliciting discussion in the classroom or electronically, after further study.</p> <p>Direct observation and/or participation in specific activities of the entire agri-food chain carried out during practical activities or internship periods will be important for autonomously developing one's decision-making and judgment skills.</p> <p>Verification teaching tools</p> <p>Judgment independence will be verified through written or oral reports, presentations relating to projects as well as through responses to requests on specific topics and during the final exam and discussion of the final degree thesis.</p> <p>Graduates in Food Science and Technology must be able to express themselves correctly and with scientific rigor, also in English, in order to communicate in the academic-scientific and social fields both to an expert public and, in adequately understandable but equally rigorous terms, to a non-specialist public in national and international contexts. They must be able to communicate their assessments by clearly expressing the underlying arguments and reasoning. They must also have acquired interpersonal skills such as to manage, even partially, teamwork, even in an international context.</p> <p>Mode of achievement</p> <p>Communication skills are cultivated by urging students to present individual and group papers written in English orally, in writing and with the use of their own electronic tools. Participation in internships, internships at other universities, research centers, company and industrial laboratories, stays abroad and internationalization activities are tools considered useful for the development of the individual student's communication skills. In this regard, the Degree Course Council has developed ad hoc agreements concerning internship activities in companies and research and training centers both nationally and internationally.</p> <p>Verification teaching tools</p> <p>In the final evaluations of the individual papers and of the exams, the quality and effectiveness of the communication contribute independently to the formation of the overall judgement. Particular importance to communication skills will be reserved for the evaluation of the presentation of the final thesis experimental activity.</p> <p>Graduates in Food Science and Technology must be able to acquire information relating to the agri-food sector in a completely autonomous way, using appropriate technical and IT tools in an appropriate manner. Will be able to autonomously understand and be constantly updated on everything related to production, process, control, distribution and marketing of the food chain including aspects relating to human health and sustainability. They will also be able to design innovative and original paths with technical and scientific rigour, both to address existing problems and to build new lines of development in their field of action.</p> <p>Mode of achievement</p> <p>The learning skills will be achieved in the complex of the educational activities foreseen by the course of study. In particular, seminars and short supplementary courses will be held on technological, analytical and instrumental innovations in the agri-food sector, as well as on innovation in other technical-scientific fields connected to agri-food sciences and technologies, with the aim of pursuing continuous updating of the contents of the courses already carried out. Participation in these initiatives will also make it possible to evaluate the individual learning ability outside the training project. Furthermore, the reading and processing of recent scientific publications</p>
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necessary for carrying out the experimental activity and for the preparation of the final thesis work will represent an important moment of self-assessment of the student's learning abilities.

Verification teaching tools

The verification of learning ability will be carried out during the exams and the seminar and supplementary activity will always be subject to written or oral verification. On the other hand, during the final graduation exam, the individual contribution to the experimental activities and to the thesis report by the thesis supervisor, and the learning and information processing skills are evaluated by the Degree Commission.

Art. 5 – Expected occupational fields

Thanks to their specific technical-scientific training and wide-ranging skills, the Master's degree in Food Science and Technology can operate in various working environments at national and international level and with different roles, including individual consultancy (freelance) within a production and control compartment, with subordinate or managerial duties.

It can represent a reference figure for dealing with all aspects relating to the food production chain, in particular:

- Functions of management, administration and management of companies operating in the sector of production, transformation, preservation and marketing of food.
- Study, design, management of plants and manufacturing processes on related food and organic products.
- Conducting chemical, physical and microbiological analyzes on raw materials, semi-finished and finished food products to control their quality and to define the standards and specifications for their production.
- Research and development of processes and products in the food sector.

Graduates also have skills that can be used to carry out catering activities in company canteens, public canteens and hospital canteens in collaboration with other professional figures.

Following the qualification to the State Exam and registration in the Order of Food Technologists (L.59/94) the Master's degree in Food Science and Technology acquires the right to assume responsibility for certain activities (eg. analysis) and can perform some additional activities such as expert and arbitration functions in the courts and participation in food planning activities in collaboration with other professionals.

The main skills of the graduate in Food Science and Technology are:

- a) a solid cultural foundation relating to basic knowledge in the fields of mathematics, physics, statistics, information technology, chemistry and biology, with particular reference to application aspects;
- b) a solid cultural and scientific, multidisciplinary foundation concerning the production, process, control, distribution and marketing of the food chain including aspects relating to human health and sustainability;
- c) an adequate knowledge of the scientific method, which allows to solve with scientific rigor, technical effectiveness, economic advantage and sustainability the multiple application and forecasting aspects of the food production sector within the entire production chain, the development and optimization of food products and their quality and safety;
- d) adequate technical-scientific knowledge for the application of innovative approaches and research concerning the food sector and to adapt them to specific occupational fields;
- e) technical and laboratory knowledge and skills in the food and beverage sector with particular reference to the assessment of quality, safety and technological functionality;
- f) appropriate assessment of the environmental impact of food production and transformation plants;
- g) knowledge of professional and ethical responsibilities;
- h) knowledge of business contexts and the related economic, managerial and organizational aspects of the food sector;
- i) cognitive tools for the continuous updating of one's knowledge by using adequate technical and IT tools in an appropriate manner;
- l) effective use, in written and oral form, of at least one language of the European Union, in addition to Italian, in the specific area of competence and for the exchange of general information;
- m) skills and tools for communication and information management;
- n) ability to work in a group and to operate independently;
- o) knowledge of the English language.

Employment opportunities:

The professional opportunities for graduates in Food Science and Technology concern all production areas of the food sector, public administration, research and teaching institutions at national and international level.

With reference to the professional activities classified by ISTAT, graduates of this course of study will be able to find adequate employment opportunities as "Food product technician" and "Food production technician", "Food biotechnologist", and finally, as "Entrepreneur, manager of small companies" and in these roles they can carry out activities of:

management of food production, transformation, preservation and commercialization and marketing processes; study, design, management of the manufacturing processes of raw materials and semi-finished food products, including the processes of purification of effluents and the recovery of by-products; distribution and procurement operations of raw materials, finished products, ingredients, food additives and technological adjuvants; analysis of food products, quality and quantity control of raw materials, finished products, additives, technological aids, semi-finished products, packaging and everything else related to the production and transformation of products, definition of standards and specifications for the aforementioned products; market research and related activities in relation to food production; research and development of processes and products in the food sector.

Graduates can also carry out:

- teaching activities, subject to qualification, in schools of all types and levels of technical-scientific subjects concerning the food sector and those related to it;
- expert and arbitration functions in relation to the attributions listed in the previous points.

After passing the state exam for the qualification to the profession of food technologist, the Master's graduate can also have access to enrollment in the Order of Food Technologists (L.59/94) and carry out freelance activities as a Technologist food, professional activity classified by ISTAT.

Art. 6 – Knowledge required for access - Verification methods

(and possible OFA recovery – only for single-cycle bachelor's and master's degrees)

Curricular requirements:

To be admitted to the LM70 master's degree course in Food Science and Technology, it is necessary to hold a degree obtained in the class of Food Science and Technology Degrees (class L26 – Ministerial Decree 270 or class 20 pursuant to Ministerial Decree 509/99), or equivalent (pursuant to the Ministerial Decree of 9 July 2009) (as specified below) or an equivalent qualification obtained abroad.

Graduates who have obtained qualifications in the following classes can also enroll in the master's degree programme:

- Ministerial Decree 509/99: 1 (Biotechnology), 12 (Biological Sciences), 20 (Agricultural, Agri-Food and Forestry Sciences and Technologies), 21 (Chemical Sciences and Technologies), 24 (Pharmaceutical Sciences and Technologies), 27 (Sciences and Technologies for the environment and nature) and 40 (Zootechnical and Animal Production Sciences and Technologies);
- Ministerial Decree 270/04: L-2 (Biotechnology), L-13 (Biological Sciences), L-25 (Agricultural and Forestry Sciences and Technologies), L-27 (Chemical Sciences and Technologies), L-29 (Sciences and Technologies pharmaceuticals), L-32 (Science and technology for the environment and nature) and L-38 (Zootechnical science and animal production technology).

and have a number of university credits (ECTS - European Credits Exchange System) documented by a degree certificate or by exams taken as indicated below:

- minimum 80 university credits (ECTS) acquired in the following scientific-disciplinary sectors: Mathematics (MAT/01-09); Physics (FIS/01-08); Biochemistry (BIO/10-11); Chemistry (CHIM/01, CHIM/03, CHIM/06); Agriculture Economics (AGR/01); Agronomy (AGR/02); Food Science and Technology (AGR/15); Food and Agricultural Microbiology (AGR/16); Animal production (AGR/19), Food Hygiene (VET/04), Industrial Engineering (ING-IND/25), of which at least 20 ECTS of AGR/15 and AGR/16.

Any curricular integrations in terms of credits must be acquired before the verification of individual preparation (art. 6 paragraph 1 of the Ministerial Decree 03/16/2007).

For foreign students from countries that do not have English as their official language, in addition to the requirements for access listed above, certified knowledge of the English language at a minimum level of B2 according to the Common European Framework of Reference for Languages is required (CEFR) or equivalent levels (for example,

Academic IELTS or TOEFL/IBT).

In addition to the curricular requirements, students who intend to enroll in the course must possess specific knowledge, skills and abilities:

- knowledge of the main biochemical chemical reactions and biological and technological processes that occur during the production, transformation and preservation of food products;
- knowledge of the main transformation processes of the food industry and the interactions between the production process - product quality and safety;
- the possession of logical and cognitive tools to understand the meaning and implications of the main operations and processes of food technology;
- the ability to consciously and profitably use analytical techniques, even non-instrumental ones, for the characterization of typicality, quality and safety of food products;
- knowledge of the main economic theories of supply, demand, production and trade;
- knowledge and ability to interpret the main legal provisions in the food sector;
- understanding of concepts and methods of quality in agri-food companies;
- knowledge of the basic concepts of animal and vegetable primary productions.

Pursuant to art. 6, paragraph 2, of the D.M. 270/04, in addition to the curricular access requirements mentioned above, the adequacy of personal preparation is verified through a written test. The procedures for carrying out the same and the calendar of tests are indicated starting from the month of June on the website of the Department and of the Study Programme.

https://www.unite.it/UniTE/Didattica/Corsi_di_studio_2022_2023/Food_Science_and_Technology_2023_2024.

Art. 6a – Selection criteria for the attainment of the Double Master's Degree in Food Science and Technology curriculum

From the A.Y. 2020-21, students (maximum 5 students per academic year) who intend to obtain a double degree in Food Science and Technology (International Master degree) issued jointly by the University of Teramo (UNITE) with the University of Chulalongkorn (Thailand) (CU) must participate in the selection that takes place every year after the end of the 2nd semester of the 1st year.

In order to obtain the double degree title, UniTE students must carry out a mobility of at least 9 months at the CU as envisaged by the UniTE-CU Cooperation Agreement.

The selection of students of the CU who enter the training path for the achievement of the Double Degree Master's Degree is carried out by the coordinators of the Degree Course jointly of the CU who guarantee the minimum level of knowledge of the English language equal to B2 in addition to their acquired skills which they will be evaluated on the basis of the number of credits already acquired and their mark.

At the end of the first semester of the first year, a call for applications will also be published for UniTE students who intend to access a scholarship for mobility at the CU. The number of scholarships will depend on the funds available and will be equal to or greater than 2 for each academic cycle.

The selection is carried out by the MDC contact person jointly and by the teachers who are members of the QA commission and will take place on the basis of the following criteria:

1. the number of credits acquired;
2. the level of knowledge of the English language.

Likewise, students of Chulalongkorn University who enter the training path for the attainment of the double degree International Master degree will be selected at their location according to the criteria established by the representatives of the MDC jointly of the University to which they belong, in accordance to the provisions of the Cooperation Agreement.

Art. 7 – Calendar and type of teaching activities and frequency

The training course is divided into 2 teaching periods (semesters). The articulation and duration of the courses are established according to the indications of the Department. The teaching activities (lessons and exams) take place according to the calendar established annually by the Department Council.

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In general, each course envisages that approximately 30% of the hours is dedicated to training activities aimed at integrating frontal teaching (in addition to the above mentioned group work, the collective evaluation of self-assessment tests, case studies addressed individually or in groups, etc.).

Each frontal lesson credit corresponds to a number of 8 hours or equal to 10 hours if the teaching is carried out entirely with laboratory activities; the credits relating to the curricular professional internship correspond to 37.5 hours of student activity.

In addition to the training activities, the Degree can organize external workshops and internships in collaboration with Italian or foreign public and private institutions, according to the needs, since there is concrete practicability and the training opportunity arises; these activities must be approved individually by the Degree Program Board and be carried out under the didactic responsibility of a teacher of the course.

There are no mandatory prerequisites.

Attendance at the various training activities is not mandatory.

For each training activity indicated, a final assessment is required at the end of the period in which the activity was carried out. For the training activities divided into modules, the final evaluation of the profit is unitary and collective. By passing the exam or test, the student obtains the credits attributed to the educational activity in question.

The final assessments can consist of: oral exam, or written assignment, or written or oral report, or test with free choice or multiple choice questions, or computer exercise. The methods of the final assessment may also include more than one of the forms indicated above.

The procedures for carrying out the assessment must be the same for all students and must comply with what is reported in the individual teaching sheet.

The period for carrying out the exam sessions is set at the beginning of each academic year and is included in the teaching activities calendar.

The exam calendar is established by the Department Council.

The calendar of teaching activities is established annually by the Department Council, after consultation with the Degree Course and advertised on the Degree Course web page: https://www.unite.it/UniTE/Didattica/Corsi_di_studio_2023_2024/Food_Science_and_Technology_2023_2024.

If, for a justified reason, an exam session has to be rescheduled or the planned teaching activity cannot be carried out, the teacher must promptly notify the students and the head of the teaching structure for the appropriate measures.

Exam dates, once published, cannot be brought forward in any case; the exams take place according to a timetable set by the teacher on the day of the session.

The interval between two successive appeals is at least ten days.

The examining commissions for the profit exams are appointed by the Director of the Department.

The student is required to register online according to the University procedure shown on the website.

UniTE students who have opted for the curriculum leading to the UniTE-CU double-degree (international) Master's Degree in Food Science and Technology, and who have subsequently been selected, must carry out at least 9 months of mobility at the CU, following the didactic activity foreseen by the study plan established by the memorandum of agreement and accompanied by an individual study plan and carrying out the experimental and research activity for the degree thesis. Likewise, for CU students enrolled in the same educational path to obtain the (international) Master's Degree with double title, a 9-month mobility at UniTE is envisaged following the didactic activity envisaged by the study plan established by the memorandum of agreement and carrying out the experimental and research activity for the degree thesis.

Art. 8 – Self-chosen activity of the student

The elective courses chosen by the student can concern all the courses activated in the University, as long as they are consistent with the educational project.

The assessment of coherence is the responsibility of the Degree Program Board.

Art. 9 – Tutoring

The ongoing orientation activity is carried out by tutor teachers in collaboration with the Department secretariat. In particular, Department secretariat facilitates the training processes by interacting with teachers, students, administrative offices, secretariat, orientation and tutoring offices, external companies, social partners and local authorities. Furthermore, it takes care of carrying out all those actions necessary for the orientation and assistance of students, as well as the organizational aspects of teaching, internship activities and new training activities, in close collaboration with the University Orientation and Tutoring Commission.

The master's degree program receives support from the International Welcome Office for reception and support activities for foreign and non-EU students enrolled or potentially interested.

The course also offers support to international students by providing teaching materials and promoting other activities for the alignment of knowledge characterizing the study path.

UniTE and CU students enrolled in and selected for the curriculum leading to the award of a double degree (international) Master's Degree will have the support of two tutors, one for each university site (UniTE, CU) who are identified at the time of application. admission to the curriculum itself. The tutors have the task of monitoring the activities carried out by the student during the mobility and favoring the overcoming of any critical issues relating to the training and research path. Tutors will also be able to play the role of thesis supervisor.

Art. 10 – Stage and traineeship

The student has the obligation to carry out a curricular professionalizing traineeship (TCP) aimed at increasing his/her knowledge and technical and vocational skills as well as transversal and personal skills, with a total teaching load equal to 4 ECTS (= 150 hours) .

The TCP can be performed with:

- a. Food companies or enterprises
- b. Public or private analysis or research laboratories not belonging to the Department of Biosciences of the University of Teramo
- c. Public or private organizations in the sector

The internship provides for the identification of the institution/company where the student will carry out the internship and of the tutors (one from the Degree and one from the company). The internship activity must be planned before the start with an indication of the training objectives and the activities that will be carried out.

In particular, in the case of a TCP in the company, the student's main educational objective is to deepen the practical knowledge of aspects related to process technology as well as other company activities in which the professionalism of the food technologist is required (e.g. control Quality, Research and Development, Quality Assurance, Purchasing Department, Marketing Department). During this activity the student will:

- critically analyze the context in which he/she worked from a professional point of view
- analyze the company process or role in which he is involved
- verify the theoretical preparation acquired in a productive context
- critically analyze one's own skills in the light of the activity carried out.

In the case of a TCP carried out in an analysis or research laboratory, the master's student has as main educational objective the deepening of the practical knowledge of one or more laboratory techniques, of scientific investigation methodology, whether or not framed in an experimental context, of which it must include, also through an in-depth study:

- the theoretical foundations of the technique, methodology or process
- the use of the technique, methodology or process within a quality control or quality assurance context
- the utility and applicability in the field of Food Science and Technology
- the utility and applicability in the current production context.

At the end of the TCP, the student must write a final report no longer than 10 pages including the following sections: planned activity and objectives; description of the activities carried out; Main results; meaning of the activity carried

out in relation to the profession of food technologist.

The university tutor acts as a guide in drafting the document but is not responsible for inaccuracies contained in the text. The report must be countersigned by the tutors who attest to the activities carried out and sent to the Coordinator of the Degree Course who evaluates and approves the acquisition of the relative credits.

Link description: The list of agreements stipulated with external structures (about 250), periodically updated, can be consulted at the following link:

[http://www.unite.it/UniTE/Corsi di laurea Bioscienze e tecnologie agro-alimentari e ambientali/Tirocini curriculari Bioscienze e tecnologie agro-alimentari e ambientali](http://www.unite.it/UniTE/Corsi%20di%20laurea%20Bioscienze%20e%20tecnologie%20agro-alimentari%20e%20ambientali/Tirocini%20curricolari%20Bioscienze%20e%20tecnologie%20agro-alimentari%20e%20ambientali)

Art. 11 – Thesis and final dissertation

The master's degree in Food Science and Technology is achieved by passing a final dissertation, consisting in the presentation and discussion of the experimental degree thesis, drawn up by the student under the guidance of a supervisor, in front of a degree committee.

To be admitted to the final test, the student must: have passed all the exams relating to the characterizing and related or supplementary courses, and acquired at least n. 8 credits related to free choice training activities and n. 4 credits related to the professionalizing curricular internship.

The degree thesis consists of a written paper that describes a developed experimental project with a scientific approach, including its general aspects, the methodologies used for development, the results and their discussion and the main conclusions.

The degree thesis must be the result of an original experimental study carried out for at least 6 months in the laboratories of the University or in public or private research centers or laboratories or companies affiliated through specific agreements. The experimental work foresees the supervision by a professor of the Degree Course or, after approval, of the Department of Biosciences and Technologies for Food, Agriculture, and Environment. The research activity for the thesis can be started when the student has passed the exams of all the subjects of the study plan of the first year of the course.

The candidate presents and discusses his degree thesis in an allotted time, highlighting with methodological rigor the state of the art of the subject addressed, the purpose of the work he has carried out, the experimental procedures, the results he has obtained, highlighting the innovative and multidisciplinary aspects of the completed experimental project. The thesis must be written in English and the final exam can be taken in the same language subject to agreement with the Graduation Commission.

The Commission evaluates the candidate's presentation and, taking into account the judgment expressed by the supervisor, the student's cultural maturity and personal intellectual processing capacity, assigns a final score between a minimum of 2 and a maximum of 10 points. The final overall score available to Commission members includes: a maximum of 4 points assigned by the tutor, any 2 reward points for carrying out periods abroad through European and international exchange and training programs and 1 reward point for graduation in progress.

At the end of the test, the members of the Commission express and agree on an overall judgment (between poor, mediocre, sufficient, good, fair and excellent) of the degree thesis drawn up on the basis of criteria including the methodological approach, scientific rigor and quality of the manuscript, which is attached to the minutes of the Graduation Commission.

UniTE and CU students participating in the curriculum leading to the (international) double degree Master's Degree discuss their degree thesis at their home institution following the rules (in terms of presentation, discussion time, scores, etc.) already approved in the corresponding master's degree course.

It is also envisaged that the CU tutor/thesis supervisor is officially a member of the commission and can follow the graduation session even remotely through virtual systems.

Art. 12 – Final and transitional rules

For anything not provided for in these Regulations, please refer to the law, the Statute and the University Regulations

Corso di Studio: 81 - FOOD SCIENCE AND TECHNOLOGY							
Ordinamento: 81-20 ANNO: 2020/2021							
Regolamento: 81-20-24 ANNO: 2024/2025							
1° Anno							
Attività Formativa	CFU	Settore	TAF/Ambito	Propedeuticità	Mutuazioni	Ore Att. Front.	Tipo insegnamento
6672 - EXPERIMENTAL DESIGN AND CHEMOMETRICS IN FOOD	5	CHIM/01	Caratterizzante / Discipline delle tecnologie alimentari			LEZ:40	Obbligatorio
6638 - FOOD TECHNOLOGY I	9	AGR/15	Caratterizzante / Discipline delle tecnologie alimentari			LEZ:72	Obbligatorio
6653 - INDUSTRIAL MICROBIOLOGY	10					LEZ:80	Obbligatorio
Unità Didattiche							
6654 - MICROBIOLOGICAL ANALYSIS OF FOODS	5	AGR/16	Caratterizzante / Discipline delle tecnologie alimentari			LEZ:40	Obbligatorio
6729 - MICROBIAL PROCESSES	5	AGR/16	Caratterizzante / Discipline delle tecnologie alimentari			LEZ:40	Obbligatorio
6652 - MARKETING AND AGRI-FOOD BUSINESS	6	AGR/01	Caratterizzante / Discipline della produzione e gestione.			LEZ:48	Obbligatorio
6640 - NUTRITIONAL AND APPLIED BIOCHEMISTRY	7	BIO/10	Caratterizzante / Discipline delle tecnologie alimentari			LEZ:56	Obbligatorio
6641 - SUSTAINABLE PRIMARY PRODUCTION	10					LEZ:80	Obbligatorio
Unità Didattiche							
6642 - CROP PRODUCTION FOR AGRI-FOOD CHAIN	5	AGR/03	Caratterizzante / Discipline della produzione e gestione.			LEZ:40	Obbligatorio
6643 - SUSTAINABLE LIVESTOCK PRODUCTION	5	AGR/19	Caratterizzante / Discipline della produzione e gestione.			LEZ:40	Obbligatorio
6644 - FOOD ENGINEERING	9					LEZ:72	Obbligatorio
Unità Didattiche							
6645 - FOOD PROCESS ENGINEERING	5	ING-IND/25	Affine/Integrativa / Attività formative affini o integrative			LEZ:40	Obbligatorio
6646 - WASTEWATER ENGINEERING	4	ING-IND/25	Affine/Integrativa / Attività formative affini o integrative			LEZ:32	Obbligatorio
A SCELTA DELLO STUDENTE	4	NN	A scelta dello studente / A scelta dello studente				Obbligatorio
1642 - EVENTI FORMATIVI	4	NN	A scelta dello studente / A scelta dello studente			LEZ:32	Opzionale

2° Anno							
Attività Formativa	CFU	Settore	TAF/Ambito	Propedeuticità	Mutuazioni	Ore Att. Front.	Tipo insegnamento
6648 - FOOD ANALYSIS	6	CHIM/01	Caratterizzante / Discipline delle tecnologie alimentari			LEZ:48	Obbligatorio
6639 - FOOD MICROBIOLOGY	6	AGR/16	Caratterizzante / Discipline delle tecnologie alimentari			LEZ:48	Obbligatorio
6649 - FOOD TECHNOLOGY II	10					LEZ:80	Obbligatorio
Unità Didattiche							
6650 - SHELF-LIFE CALCULATION AND ESTIMATION	5	AGR/15	Caratterizzante / Discipline delle tecnologie alimentari			LEZ:40	Obbligatorio
6651 - ADVANCED TECHNOLOGIES	5	AGR/15	Caratterizzante / Discipline delle tecnologie alimentari			LEZ:40	Obbligatorio
6647 - FOOD LEGISLATION	6	VET/04	Affine/Integrativa / Attività formative affini o integrative			LEZ:48	Obbligatorio
A SCELTA DELLO STUDENTE	4	NN	A scelta dello studente / A scelta dello studente				Obbligatorio
1642 - EVENTI FORMATIVI	4	NN	A scelta dello studente / A scelta dello studente				Opzionale
6664 - MASTER'S PROJECT/THESIS	24	PROFIN_S	Lingua/Prova Finale / Per la prova finale				Obbligatorio
6665 - OTHER ACTIVITIES/TIROCCINIO	4	NN	Altro / Tirocini formativi e di orientamento			TIR:150	Obbligatorio