



# UNIVERSITÀ DEGLI STUDI DI PALERMO

Department: Agricultural, Food and Forestry Science

A.Y. 2022/2023

## DEGREE COURSE IN MEDITERRANEAN FOOD SCIENCE AND TECHNOLOGY

### Characteristics



Class of Master's Degree  
(MSc) on Food science  
(LM-70)



2 YEARS



PALERMO



FREE ACCESS



2238

### Educational objectives

The 2nd cycle Degree Course in “Mediterranean Food Science and Technology” has the specific educational objective to provide the advanced knowledge to make rational choices of the most suitable transformation processes and phases for a modern production and management of the Agrifood company.

The course specifically deals with the issues related to the technologies applied in the management of the specific raw materials and foods of the Mediterranean environment (AGR/15 - Applied Technology on Mediterranean food), with respect also to the different food distribution chains, including public catering (AGR/15 - Technology and Quality in the food supply system); to sensorial (AGR/15 - Food sensory analysis), nutritional evaluation as well as to the safety of food and of Mediterranean products (AGR/13 e BIO/10 - Enzymology and food chemical analysis); to trade and safety regulations on food (IUS/03 - Food trade and safety legislation); to the Agrifood business economics and management, marketing and, in particular to consumer behaviour analysis (AGR/01 - Food Industry Management and Entrepreneurship e Consumer Behaviour and Food Marketing).

The course pays specific attention to the sustainability of Agrifood processes (AGR/09 e ING-IND/11 - Agroindustry sustainable systems and plants), and to the biological and microbiological control of food (AGR/16 - Microbiota associated with Mediterranean Agri-food chains); (AGR/11 e AGR/12 - Pest Management and Disease Control in the Food service Industry), also of animal and marine origin (AGR/19 e BIO/07 - Animal Food and Fisheries).

### Professional opportunities

Profile:

Food technologist

Functions:

Graduates in Food Science and Technology carry out management, planning, control, coordination and training activities in the production and formulation, conservation, distribution and administration of food products. They are able to independently plan and develop innovative solutions in the food industry as well as in the private practice. Their foremost objective is the management of professional functions aiming at improving food products with a view to sustainability and waste reduction in industrial activities, as well as to the improvement of the overall quality of small and medium companies.

Skills:

The broad knowledge spectrum enables these professionals to cover all the functions useful in the food industry and in related production activities such as:

- the coordination and responsibility of processes related to food processing and marketing, to the selection of raw material suppliers, additives, adjuvants, packaging materials and equipment;
- the study, design and optimization of food processing processes: from modelling to pilot tests and subsequent scaling-up, evaluating the shelf-life of final products;
- the integrated quality management in the production chain, aimed at achieving objectives of safety and product quality, social responsibility and environmental protection;
- the ability to develop innovative analytical protocols for safety control, for the identification of emerging risks and for the evaluation of food production quality requirements;
- the expertise and arbitration functions with respect to the above mentioned issues;
- market research, consumer surveys and benchmarking in relation to food production

Professional opportunities:

The professional activity of graduates in Food Science and Technology can be carried out in the food industry and in all

Legenda: Per. = periodo o semestre, Val. = Valutazione (V=voto, G=giudizio), TAF= Tipologia Attività Formativa (A=base, B=caratterizzante, C=Affine, S=stages, D=a scelta, F=altre)

companies producing, processing and marketing food products, in large-scale retail trade, in catering, in public and private bodies carrying out research, planning, analysis, control, certification, information and communication activities as well as in those that carry out scientific investigations for the protection and enhancement of food production, in training institutions and as freelance professionals.

### Final examination features

The final exam aims at assessing the level of maturity and the critical skills of the graduating student, with respect to the acquired knowledge and skills. It consists of the presentation and discussion, in English, of an experimental thesis. The thesis, written in English, should demonstrate, through the execution of the experimental part and the elaboration of the results, the candidate's research and experimentation skills, capacity of vision and originality. The evaluation of the final exam will be carried out according to the provisions of the specific University regulations.

Subjects 1 ° year	CFU	Sem.	Val.	SSD	TAF
20220 - APPLIED TECHNOLOGY ON MEDITERRANEAN FOOD <i>Cinquanta(PO)</i>	6	1	V	AGR/15	B
20206 - FOOD INDUSTRY MANAGEMENT AND ENTREPRENEURSHIP <i>Sgroi(PA)</i>	6	1	V	AGR/01	B
20219 - FOOD TRADE AND SAFETY LEGISLATION <i>La Porta(RD)</i>	6	1	V	IUS/03	B
20218 - TECHNOLOGY AND QUALITY IN THE FOOD SUPPLY SYSTEM <i>Todaro(PA)</i>	6	1	V	AGR/15	B
21781 - ENZIMOLOGY AND FOOD CHEMICAL ANALYSIS	9	2	V		
- ENZIMOLOGY <i>Proia(PA)</i>	3	2		BIO/10	C
- FOOD CHEMICAL ANALYSIS AND SAFETY CONTROL (MOD) <i>De Pasquale(PA)</i>	6	2		AGR/13	B
20216 - AGROINDUSTRY SUSTAINABLE SYSTEMS AND PLANTS - INTEGRATED COURSE	11	2	V		
- FOOD PRODUCTION AND AGRO-INDUSTRIAL PLANTS <i>Vallone(PA)</i>	6	2		AGR/09	C
- SUSTAINABLE AGROINDUSTRY SYSTEMS <i>Guarino(RD)</i>	5	2		ING-IND/11	C
20213 - ANIMAL FOOD AND FISHERIES - INTEGRATED COURSE	9	2	V		
- ANIMAL FOOD QUALITY <i>Mastrangelo(RD)</i>	3	2		AGR/19	C
- FISHERY RESOURCES AND UTILIZATION <i>Messina(PO)</i>	6	2		AGR/20	B
Free subjects (suggested)	8				D

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Subjects 2 ° year	CFU	Sem.	Val.	SSD	TAF
20205 - CONSUMER BEHAVIOUR AND FOOD MARKETING <i>Migliore(PA)</i>	6	1	V	AGR/01	B
20204 - FOOD SENSORY ANALYSIS <i>Corona(PO)</i>	6	1	V	AGR/15	B
20207 - MICROBIOTA ASSOCIATED WITH MEDITERRANEAN AGRI-FOOD CHAINS <i>Settanni(PO)</i>	6	1	V	AGR/16	B
06634 - INTERNSHIP	12	1	G		F
20227 - PEST MANAGEMENT AND DISEASE CONTROL IN THE FOODSERVICE INDUSTRY C.I.	9	2	V		
- BIOTIC CONTAMINANTS AND FOOD CONTROL <i>Caruso(RD)</i>	3	2		AGR/12	C

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Subjects 2 ° year	CFU	Sem.	Val.	SSD	TAF
- PEST CONTROL FOR THE FOODSERVICE INDUSTRY <i>Peri(PO)</i>	6	2		AGR/11	B
16047 - THESIS	20	2	G		E
	<b>59</b>				

### OPTIONAL SUBJECTS

Free subjects (suggested)	CFU	Sem.	Val.	SSD	TAF
22468 - PRODUCT DEVELOPMENT AND FORMULATION C.I.	8	2	V		
- LABORATORY DEVELOPMENT OF NEW PRODUCTS <i>Planeta(PA)</i>	3	2	V	AGR/15	D
- DESIGN OF A NEW FOOD <i>Pollon(RD)</i>	5	2	V	AGR/15	D

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