

Why studying this Master Degree?

In terms of gross domestic product, the Spanish food industry is the most important one. This factor is creating a growing demand for PhD graduates in Food Engineering specialized in these fields, both by universities, research centres, technology centres, or food companies.

At the national level, studies show that the low inclusion of researchers in the business R&D sector is one of the main reasons for the lack of own technological development and productivity, according to the Inter-Ministerial Commission on Science and Technology. On the international stage, the demand for PhD graduates in these MSc fields is even higher due to the food industry relevance in developed countries and the importance of food health implications.

Besides, the training of public and private technicians in the food and health industry is another career opportunity for these MSc graduates. Due to the complexity and dynamism of current policies of the EU in these issues, both public administrations (national and regional) and companies of the food and health sector increasingly demand specialized technicians able to respond properly to the new demands of European guidelines.

B2 level of the English language, according to the Common European Framework of Reference for Languages, is required to get enrolled in this MSc Degree.

Goals:

Train specialists able to work in research, development, and innovation in the food and health fields. Provide multidisciplinary training in topics related to food and health of society.

Assess and apply current methodologies in the area of health and consumption food manufacturing. Promote coordination between universities, RDI centres, companies in this field, and the competent public administrations.

Target group:

Students in possession of an official university degree (Bachelor's Degree or BSc Degree in Engineering), ideally BSc graduates in Food Engineering and related degrees.

Branch: Engineering and Architecture
Area: Agroforestry Engineering and Environment
Orientation: Academic / Professional / Research
Credits: 60 ECTS
Duration: Two semesters (September - July)
Education: Attendance-based
Number of places: 30
Language: Spanish

Contact details:

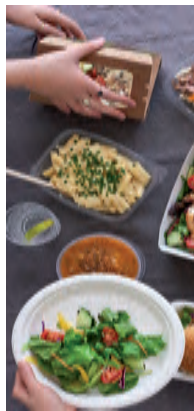
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For more information and registration:
www.etsiaab.upm.es/docencia/masteres

** The courses will be taught in Spanish if all the students are Spanish-speaking.*



Escuela Técnica Superior de Ingeniería
Agronómica, Alimentaria y de Biosistemas

MSc Degree in Food Engineering Applied to Health

SALINA



Facultad de Ciencias de la
Actividad Física y el Deporte

ice.

Instituto de Ciencias
de la Educación



CAMPUS
DE EXCELENCIA
INTERNACIONAL



ETS de Ingeniería
Agronómica, Alimentaria
y de Biosistemas

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ETSIAAB

Structure

MODULE I	FUNDAMENTAL AND STRUCTURAL COURSES	18 COMPULSORY ECTS
MODULES II, III, IV	THREE ORIENTATIONS: - II. DOCTORATE and R+D+i - III. NUTRITION AND HEALTH - IV. FOOD COMPANY AND MANAGEMENT	At least 20 ECTS At least 19 ECTS At least 19 ECTS
MODULE V	FINAL MASTER DEGREE PROJECT	15 COMPULSORY ECTS

Curriculum

FUNDAMENTAL AND STRUCTURAL COURSES (COMPULSORY)	ECTS	SEM
Health-Food Interactions	6	1
Experimental Design and Data Analysis on Food Products	4	1
Food Toxicology	4	1
Advanced Instrumental Techniques in Food Analysis	4	1

ELECTIVE COURSES (II. DOCTORATE and R+D+i ORIENTATION)	ECTS	SEM
Applications of the Biotechnology in the Food Production	4	1
Bioinformatics and Genomics Applied to Food Analysis	4	1
Scientific Methodology	4	1
Sensometrics Applied to Food Analysis	4	1
Sensors for Product Characterization: Quality and Safety	4	2

Students must take at least 20 ECTS of this module if they want to do the Doctorate in Food Technology. The rest of the elective ECTS, up to 27, can be taken from those offered in modules III and IV.

Partners



Close cooperation with leading companies in the agri-food sector, promoting experimental and applied Final Master Degree Projects, in contact with the sector reality.

ELECTIVE COURSES (III. NUTRITION AND HEALTH ORIENTATION)	ECTS	SEM
Innovations in Meat and Dairy Fermented Foods	4	1
New Trends in Cereal Foods	4	1
Dietetics	4	2
New Trends in Nutrition and Public Health	4	2
Recent Applications of Fats in Food Industry	3	2

Students must take at least 19 ECTS from this module to achieve this orientation. The rest of the elective ECTS, up to 27, can be taken from those offered in modules II and IV.

ELECTIVE COURSES (IV. FOOD COMPANY AND MANAGEMENT ORIENTATION)	ECTS	SEM
Advanced Technologies in Food Packaging	4	1
Innovations in Wine Fermentation and Aging	4	2
Enzymes in Food Industry	4	2
Management Production and Marketing	4	2
Food Safety and Quality Management	3	2

Students must take at least 19 ECTS from this module to achieve this orientation. The rest of the elective ECTS, up to 27, can be taken from those offered in modules II and III.

FINAL MASTER DEGREE PROJECT	ECTS	SEM
Final Master Degree Project	15	Undefined

