

EQAS-Food Award

Accreditation Report

Bachelor's Degree Programme Food Science and Technology

Provided by **University of Murcia**

Version: 26 September 2025

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A About the Accreditation Process

Name of the degree programme (in original language)	(Official) English translation of the name	Label applied for	Current accreditation (issuing agency, validity)
Grado en Ciencia y Tecnología de los Alimentos	Bachelor's Degree in Food Science and Technology	EQAS-Food Award	Issued by ISEKI, valid 28 July 2020 – 30 September 2025

Type of procedure: EQAS-Food top-up accreditation

Date of the contract: 08.04.2025

Submission of the documentation: 25.03.2025

Date of the review meeting: 01.06.2025

Online

Expert panel:

Prof. Dr. Gerhard Schleining, BOKU University Vienna

Prof. Dr. Cristina Luisa Silva, Universidade Católica Portuguesa

Dr. Carmen de Vega, Basque Association of Food Science and Technology

Representative of the ASIIN headquarter: Johann Jakob Winter

Responsible decision-making committee: ASIIN Accreditation Commission for Degree Programmes

Criteria used:

European Standards and Guidelines as of May 15, 2015

EQAS Food Science and Technology Procedures, Criteria and Standards as of February 18, 2019

B Characteristics of the Degree Programmes

a) Name	Final degree (origi- nal/English transla- tion)	_	c) Corre- sponding level of the EQF ¹	d) Mode of Study	e) Dou- ble/Joint Degree	f) Duration	0.	h) Intake rhythm & First time of offer
Bachelor's Degree in Food Science and Technology	B.Sc.	-	6	Full-time	-	4 years / 8 semes- ters	240 ECTS credits	

 $^{^{1}}$ EQF = The European Qualifications Framework for lifelong learning

C Expert Report for the EQAS-Food Award

1. General Criteria

The degree programme under review is offered by the Faculty of Veterinary Medicine of the University of Murcia. The faculty has a valid institutional accreditation, currently valid until 21 October 2030, which encompasses the programme. Based on the analyses and assessment recorded in the ANECA accreditation report of 18.09.2024, the experts consider the general criteria for the award of the EQAS-Fool Award to be fully met.

2. Subject-Specific Criteria: Learning outcomes and competence profile of graduates

The central basis for the present evaluation of the Bachelor's degree programme mentioned is a comparison of the curriculum and the actual learning outcomes with the ideal-type qualification profiles of the applicable subject-specific criteria.

IFA	Reflected in the programme?	Contained in which courses?	Fulfilled
Food Safety and Microbiology • Describe the properties of common food spoilage organisms. Experimentally determine their presence and numbers	⊠ yes □ no	Microbiology (1st Course) Food Hygiene (2nd Course)	×
• Describe the properties of common food poisoning organisms, their toxins and means of detection.		Food Hygiene (2nd Course) Techniques of Food Analysis (2nd Course) Food Toxicology (3rd Course) Evaluation of the toxicological safety of foods (4th Course)	
• Recognize and describe the principles and limitations of food preservation. Exercise appropriate judgement on the suitability of different preservation methods to particular foods: give some practical examples.		Food Technology I & II (3rd Course) Physiology & Postharvest Treat- ments (3rd Course) Shelf life of foods and its pro- cessed products (4th Course)	

Food Chemistry and Analysis	⊠ yes	□ no		\boxtimes
Demonstrate understanding of the			Chemistry I & II (1st Course)	
basic concepts of organic chemistry,			Biochemistry I & II (2nd Course)	
physical chemistry and biochemistry			Food Chemistry (2nd Course)	
related to food. Demonstrate an un-			Physical Properties of Foods	
derstanding of the structure and			(2nd Course)	
function of major food components.			Techniques of Food Analysis	
Describe the physical and chemical			(2nd Course)	
properties of foods in production and			Food Biochemistry (3rd Course)	
supply chains.				
Describe the effects of at least two			Food Technology I & II (3rd	
different food process operations on			Course)	
the physicochemical properties of			Basic Operations (2nd Course)	
foods				
• Demonstrate a practical under-			Microbiology (1st Course)	
standing of health and safety in the			Chemical Analysis (1st Course)	
laboratory.			Physical Properties of Foods	
			(2nd Course)	
			Techniques of Food Analysis	
			(2nd Course)	
			Food Chemistry (2nd Course)	
Carry out an analysis of the proxi-			Techniques of Food Analysis	
mate composition of foods and of			(2nd Course)	
basic sensory properties.			Applied Bromatology (2nd	
			Course)	
Describe the masic countity and of			Food Chemistry (2nd Course)	
 Describe the main constituents of foods and their role in nutrition and 			Descriptive Bromatology (2nd	
health.			Course)	
nearn.			Applied Bromatology (2nd	
			Course)	
			Human Nutrition (3rd Course)	
			Dietetics (3rd Course)	
	_	_		_
Food Processing and Engineering	⊠ yes	⊔ no	Production of Raw Materials	⊠
Identify sources of raw material,			(1st Course)	
explain the variability and the impact			Food Technology I & II (3rd	
on food processing operations.			Course)	
			Food Industries I & II (3rd	
			Course)	
 Understand the fundamental con- 				
cepts of mass, heat, and momentum			Principles of Chemical Engi-	
transfer required in food unit opera-			neering (1st Course)	
tions. Calculate mass and energy bal-			Basic Operations (2nd Course)	
ances for a general food process.			Physical Properties of Foods	
			(2nd Course)	

	<u> </u>	Food Tochnology 1 9 II /2 zd	
Explain the principles and current		Food Technology I & II (3rd	
practices of major food processing		Course)	
operations, and understand the ef-		Culinary Technology (optional)	
fect of processing parameters on		(4rd Course)	
product quality.			
Explain characteristics and proper-		Food Technology II (3rd Course)	
ties of packaging materials for food			
products and identify appropriate			
packaging systems.			
Understand the basic principles and		Food Ungions (2nd Course)	
practices used for cleaning and sani-		Food Hygiene (2nd Course) Risk Assessment in Food Indus-	
tation of food process equipment, in-			
cluding the use of water, cleaning		tries (3rd Course)	
chemicals and waste management.		Food Contamination Manage-	
		ment in Food Industry (4th Course)	
		Course)	
Quality Management and Food	⊠ yes □ no		\boxtimes
Law			
Describe how quality management		Food Legislation and Standardi-	
systems are applied in the food in-		zation (3rd Course)	
dustry with examples.		Risk Assessment in Food Indus-	
		tries (3rd Course)	
		Applied Bromatology (3rd	
		Course)	
Describe the main organisations re-		Risk Assessment in Food Indus-	
sponsible for overseeing quality man-		tries (3rd Course)	
agement systems at a national and		Applied Bromatology (3rd	
European level.		Course)	
		Evaluation of the toxicological	
		safety of food products (op-	
		tional) (4th Course)	
Describe the principles of food leg-		Food Ungions (2nd Course)	
islation and how it is applied in the		Food Logislation and Standardi	
food industry.		Food Legislation and Standardi-	
		zation (3rd Course)	
		Applied Bromatology (3rd	
		Course)	
Describe the principles of authenti-		Food Legislation and Standardi-	
cation of food provenance and qual-		zation (3er Course)	
ity. Give an example of at least one		Risk Assessment in Food Indus-	
well known scheme.		tries (3rd Course)	
1			

Generic Competences Carry out a basic experimental work under close supervision and write a summary report using a word processing application and spreadsheet as appropriate. Communicate scientific ideas through written, oral and visual means in their native language. Work in a team, with an understanding of the different roles, time management and meetings coordination. Demonstrate self-planning in order to prioritise and manage time and resources effectively.	⊠ yes	□ no	Multiple subjects over the entire curriculum, e.g. Biology (1st Course) Microbiology (1st Course) Chemistry (1st Course) Chemical Analysis (1st Course) Final Degree Project (4th Course Food Analysis (2nd Course) Food Industry Management (3rd Course)	
Demonstrate problem solving skills, showing ability to solve practical in- terdisciplinary problems, showing ability to separate relevant and irrel- evant information and working to- wards a successful solution.			Practices at Food Companies (4th Course) Food Industries (3rd Course) Food Technology (3rd Course)	

Based on the **module descriptions**, the experts confirm that the Programme Learning Outcomes and curricular contents are appropriately aligned with the subject-specific EQAS-Food criteria. However, they recommend to shorten and reformulate the Programme Learning Outcomes in a more general, descriptive way and establish specific Course Learning Outcomes transparently derived from the Programme Learning Outcomes, as these are the basis for assessing the students.

The **final theses** submitted show that the students achieve the intended learning outcomes and are able to implement them independently at an appropriate Bachelor's level within the ISEKI/ EQAS framework.

D Summary: Expert recommendations (04.09.2025)

The experts summarize their analysis and **final assessment** for the award of the label as follows:

Degree Programme	EQAS-Food Award	Maximum duration of ac- creditation
Ba Food Science and Tech- nology	Without requirements	30.09.2031

Recommendations

- E 1. It is recommended to reformulate the Programme Learning Outcomes in a more general, descriptive way, and establish specific Course Learning Outcomes.
- E 2. It is recommended to publish all module descriptions in English language.

E Comment of the Technical Committees 08 – Agriculture, Forestry, and Food Sciences (11.09.2025)

Assessment and analysis for the award of the EQAS-Food Award:

The Technical Committee deems that the intended learning outcomes of the degree programme do comply with the EQAS-Food framework and the Subject-Specific Criteria of the Technical Committee 08 – Agriculture, Forestry and Food Sciences. It follows the recommendation of the experts without changes.

The Technical Committee 08 – Agriculture, Forestry and Food Sciences recommends the award of the seals as follows:

Degree Programme	EQAS-Food Award	Maximum duration of ac- creditation
Ba Food Science and Tech- nology	Without requirements	30.09.2031

Recommendations

- E 1. It is recommended to reformulate the Programme Learning Outcomes in a more general, descriptive way, and establish specific Course Learning Outcomes.
- E 2. It is recommended to publish all module descriptions in English language.

F Decision of the Accreditation Commission (26.09.2025)

Assessment and analysis for the award of the EQAS-Food Label:

The Accreditation Commission discusses the procedure and deems that the intended learning outcomes of the degree programme do comply with the EQAS-Food framework and the Subject-Specific Criteria of the Technical Committee 08 – Agriculture, Forestry, and Food Science.

The Accreditation Commission decides to award the following seals:

Degree Programme	EQAS-Food Award	Maximum duration of ac- creditation
Ba Food Science and Tech- nology	Without requirements	30.09.2031

Recommendations

- E 1. It is recommended to reformulate the Programme Learning Outcomes in a more general, descriptive way, and establish specific Course Learning Outcomes.
- E 2. It is recommended to publish all module descriptions in English language.

Appendix: Learning Outcomes

For the Bachelor's degree programme in <u>Food Science and Technology</u>, University of Murcia specifies the following competencies as programme learning outcomes on the programme's website:

Transversal Competences of the University of Murcia

- 1. Be able to express oneself correctly in Spanish in one's disciplinary field.
- 2. Understand and express oneself in a foreign language in one's disciplinary field, particularly English.
- 3. Be able to manage information and knowledge in your disciplinary field, including knowing how to use basic ICT tools as a user.
- 4. Consider ethics and intellectual integrity as essential values of professional practice.
- 5. To be able to project the knowledge, skills and abilities acquired to promote a society based on the values of freedom, justice, equality and pluralism.
- 6. Ability to work in a team to interact with other people from the same or different professional fields.
- 7. Develop research initiation skills.

General Competences of the Degree

Generic Instrumental Competences

- 1. Capacity for analysis and synthesis
- 2. Ability to organize and plan
- 3. General and basic knowledge of the profession
- 4. Problem solving
- Decision making

Generic Interpersonal Competences

- 1. Critical and self-critical capacity
- 2. Ability to communicate with experts from other areas
- 3. Ability to work in an international context

Generic Systemic Competences

- 1. Ability to apply knowledge to practice
- 2. Ability to learn
- Ability to adapt to new situations

- 4. Ability to generate new ideas (creativity)
- 5. Skills for working independently
- 6. Project Design and Management
- 7. Leadership, Initiative and Entrepreneurial Spirit
- 8. Motivation for quality
- 9. Sensitivity to environmental issues

Specific Competences of the Degree

Specific Competences of KNOWING

- 1. Physical, chemical and biological foundations in food sciences and nutrition
- 2. Structure and function of the human body
- 3. Biochemistry
- 4. Fundamentals of mathematics and statistics in food science and technology
- 5. Composition of foods and raw materials
- 6. Nutritional value and functionality
- 7. Physicochemical properties of foods
- 8. Food analysis techniques
- 9. Production of raw materials
- 10. Basic operations in the food industry
- 11. Food processing and modifications
- 12. Food Biotechnology
- 13. Microbiology and parasitology of food
- 14. Food Toxicology
- 15. Hygiene of food handlers, products and processes
- 16. Hygienic design of food establishments and industries
- 17. Risk analysis in the food industry
- 18. Quality Management
- 19. Food Standardisation and Legislation
- 20. Economics, market techniques and management
- 21. Environmental Management
- 22. Deontology
- 23. Human nutrition and diet therapy
- 24. Dietetics. Foundations of healthy eating
- 25. Nutritional Epidemiology
- 26. Eating habits and behaviours in the population
- 27. Pathophysiology and nutritional pathology
- 28. Methods for assessing nutritional status

- 29. Methodology of food education
- 30. Health systems and food policies
- 31. Food and culture

Specific Competences of KNOW-HOW

- 32. Manufacture and preserve food
- 33. Analyse foods
- 34. Control and optimize processes and products
- 35. Innovate and develop new food products
- 36. Innovate and apply new technological processes to food production
- 37. Manage by-products and waste
- 38. Analyse and evaluate food risks
- 39. Managing food safety
- 40. Evaluate, control and manage food quality
- 41. Implement quality systems
- 42. Marketing of food products
- 43. Identify the factors that influence nutrition
- 44. Calculate and establish healthy eating patterns for individuals and communities
- 45. Evaluate individual and community nutritional status
- 46. Design and interpret food surveys
- 47. Prepare technical-health reports on food industries
- 48. Develop menu planning for communities
- 49. Carry out food education
- 50. Plan and develop programs related to the promotion and protection of health and disease prevention
- 51. Carry out staff training tasks
- 52. Provide legal, scientific and technical advice to the food industry
- 53. Inform consumers and society in general about aspects related to food and the food sector

Specific Competences of KNOWING HOW TO BE AND KNOWING HOW TO BE

- 54. Have a realistic image of oneself, act according to one's convictions, assume responsibilities and make decisions
- 55. Possess an attitude of respect, affection and acceptance in the work environment that facilitates interpersonal relationships
- 56. Promote a positive attitude toward continuing education, understanding that the acquisition of scientific and technical knowledge in the food sector is a task that requires

continuous updating in accordance with scientific knowledge and the development of new technologies.