

**Postgraduate Diploma**  
Integrated Safety  
Management of the Food  
and Beverage Industry





## Postgraduate Diploma Integrated Safety Management of the Food and Beverage Industry

- » Modality: online
- » Duration: 6 months.
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/veterinary-medicine/postgraduate-diploma/postgraduate-diploma-integrated-safety-management-food-beverage-industry](http://www.techtute.com/us/veterinary-medicine/postgraduate-diploma/postgraduate-diploma-integrated-safety-management-food-beverage-industry)

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# 01

# Introduction

Food safety is necessary to comply with quality and safety standards in the products we consume and to avoid dangers to citizens. The student can take advantage of the opportunity and acquire a solid knowledge in this field that will allow them to become a successful professional.





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*Join our team of students and become the best in your profession to ensure food safety from primary production”*

The Postgraduate Diploma in Integrated Food and Beverage Industry Safety Management from TECH Technological University is the most complete among those offered in universities at this time because it is aimed at the integrated management of food safety.

Food legislation is a highly relevant aspect prior to the commercialization of any product derived from the food industry. Therefore, this Postgraduate Diploma offers the student a broad knowledge of the current regulations concerning food quality and safety, both nationally and internationally.

This training also develops the most important concepts of hazard, risk and safety as applied to the food industry, as well as the most commonly used methods for the control of these hazards, including allergens. It addresses the principles of safety assurance management in the food production industry, using the HACCP plan as a model, its prerequisites, the stages for its implementation and the verification of its efficiency.

Finally, this Postgraduate Diploma reviews the general principles of a certification process in an international context, covering aspects such as documentation management, electronic records, audits and other requirements necessary for a successful certification.

The teachers of this Postgraduate Diploma are university professors and professionals from various disciplines in primary production, the use of analytical and instrumental techniques for quality control, the prevention of accidental and intentional contamination and fraud, regulatory schemes for food safety certification (Food Safety/Food Integrity) and traceability (Food Defence and Food Fraud/Food Authenticity). They are experts in food legislation and regulations on quality and safety, validation of methodologies and processes, digitalization of quality management, research and development of new foods and finally, the coordination and execution of R&D&I projects. All this is necessary to achieve a complete and specialized training, highly demanded by professionals in the food sector.

It is an educational project committed to training high quality professionals. A program designed by professionals specialized in each specific subject who face new challenges every day.

This **Postgraduate Diploma in Integrated Food and Beverage Industry Safety Management** contains the most complete and up to date educational program on the market. The most important features of the program include:

- ♦ The development of case studies presented by experts in veterinary food safety
- ♦ The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ News on Integrated Safety Management in the Food and Beverage Industry
- ♦ Practical exercises where the self assessment process can be carried out to improve learning
- ♦ Its special emphasis on innovative methodologies in Integrated Food and Beverage Industry Safety Management
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection work
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*Do not miss the opportunity to take this Postgraduate Diploma in Integrated Management of Food and Beverage Industry Safety with us. It's the perfect opportunity to advance your career"*

“

*This Postgraduate Diploma is the best investment you can make in selecting a refresher program to update your knowledge in Integrated Food and Beverage Industry Safety Management"*

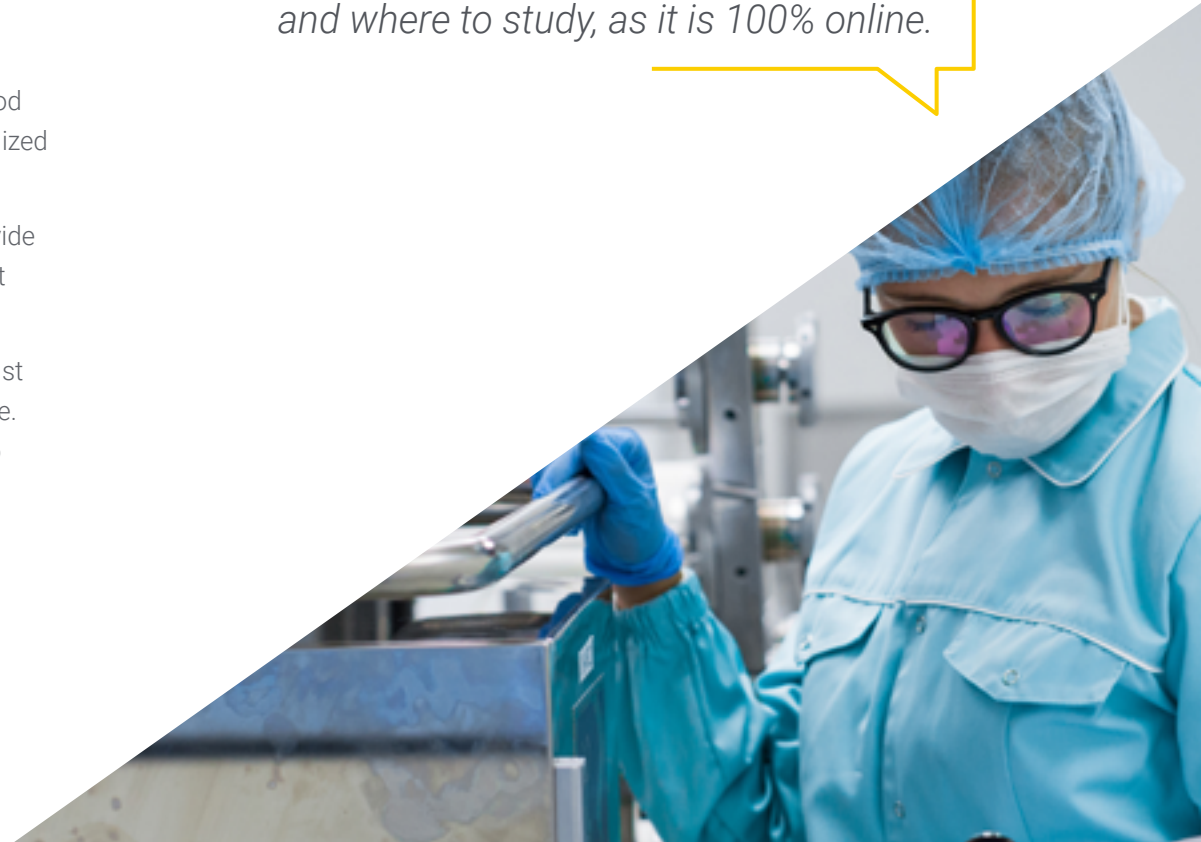
It includes, in its teaching staff, professionals belonging to the field of veterinary food safety, who pour into this training the experience of their work, in addition to recognized specialists from reference societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive training programmed to train in real situations.

This program is designed around Problem Based Learning, where the specialist must try to solve the different professional practice situations that arise during the course. For this purpose, the professional will be assisted by an innovative interactive video system developed by recognized and experienced experts in Integrated Food and Beverage Industry Safety Management.

*This training comes with the best didactic material, providing you with a contextual approach that will facilitate your learning.*

*This Postgraduate Diploma will allow you to combine your studies with your professional work. You choose when and where to study, as it is 100% online.*



# 02 Objectives

The Postgraduate Diploma in Integral Management of Food and Beverage Industry Safety is aimed at facilitating the professional's performance with the latest and most innovative advances in the sector.







# HACCP

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*This is the best option  
to learn about the latest  
advances in food safety”*



## General Objectives

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- ♦ Analyze the principles of food legislation, at national and international level, and its evolution up to the present day
- ♦ Analyze the competencies in food legislation to develop the corresponding functions in the food industry
- ♦ Evaluating food industry procedures and mechanisms of action
- ♦ Develop the basis for applying legislation to the development of food industry products
- ♦ Fundamentals of the most important food safety concepts
- ♦ Define the concept of risk and risk assessment
- ♦ Apply these principles to the development of a safety management plan
- ♦ Concretize the principles of the HACCP plan
- ♦ Define the principles of a certification process
- ♦ Develop the concept of best practice certification
- ♦ Analyze the main international certification models for food safety management in the food industry

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*A unique, key, and decisive training experience to boost your professional development”*





## Specific Objectives

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- ◆ Define the fundamentals of food law
- ◆ Describe and develop the main international, European and national organizations in the field of food safety, as well as determine their competencies
- ◆ Analyze the food safety policy in the European and Spanish frameworks
- ◆ Describe the principles, requirements and measures of food legislation
- ◆ Explain the European legislative framework regulating the food industry
- ◆ Identify and define the responsibility of the participants in the food chain
- ◆ Classify the types of liability and offenses in the field of food safety
- ◆ Develop the criteria for horizontal legislation in Spain
- ◆ Develop vertical legislation criteria in Spain
- ◆ Analyze the main types of hazards associated with food
- ◆ Evaluate and apply the principle of risk and risk analysis in food safety
- ◆ Identify the prerequisites and previous steps for the implementation of a safety management plan
- ◆ Establish the main hazards associated with food according to their physical, chemical or biological nature, and some of the methods used for their control
- ◆ Apply these principles to the development of a safety management plan
- ◆ Specify the methods to evaluate the efficiency of a critical point and of the safety management plan
- ◆ Establish the general requirements for certification
- ◆ Identify the different types of Good Practices (GxP) required in a food safety management system and their certification
- ◆ Develop the structure of the ISO and ISO 17025 international standards
- ◆ Define the characteristics, structure and scope of the main global food safety certification systems

03

# Course Management

The program includes in its teaching staff leading experts in Veterinary Food Safety who bring to this training the experience of their work. Additionally, other recognized experts participate in its design and preparation, completing the program in an interdisciplinary manner.



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*Leading professionals in the field have come together to teach you the latest advances in food safety Veterinary”*

## Management



### Dr. Limón Garduza, Rocío Ivonne

- ♦ PhD in Agricultural Chemistry and Bromatology ( Autonomous University of Madrid)
- ♦ Master's Degree in Food Biotechnology (MBTA) (University of Oviedo)
- ♦ Food Engineer, Bachelor in Food Science, and Technology (CYTA)
- ♦ Expert in Food Quality Management ISO 22000
- ♦ Specialist in Food Quality and Safety, Mercamadrid Training Center (CFM)



## Professors

### Dr. Colina Coca, Clara

- ◆ D. in Nutrition, Food Science and Technology
- ◆ Master in Food Quality and Safety: APPCC Systems
- ◆ Postgraduate in Sports Nutrition
- ◆ Collaborating professor at the UOC. Since 2018

### Dr. Martínez López, Sara

- ◆ D. in Pharmacy (Universidad Complutense de Madrid)
- ◆ Degree in Chemistry (University of Murcia)
- ◆ Assistant Professor of Nutrition and Food Technology at the European University of Madrid
- ◆ Researcher in the research group "Microbiota, Food and Health". European University of Madrid

### Ms. Andrés Castillo, Alcira Rosa

- ◆ Researcher. GenObIACM Project. Group UCM
- ◆ IRYCIS R&C Institute for Health Research U. Endothelium and MCM
- ◆ Coordinator E.C. with pharmaceuticals and foodstuffs
- ◆ Data Manager for Clinical Trials with DM2 drugs
- ◆ Degree in Marketing. UADE
- ◆ University Expert in Nutrition and Dietetics with CV Risk Factors and DM. UNED
- ◆ Food Traceability Course. USAL Foundation

04

# Structure and Content

The content structure has been designed by the best professionals in the sector, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied and diagnosed, and with extensive knowledge of new technologies applied to food safety.







“

*This Postgraduate Diploma in Integrated Food and Beverage Industry Safety Management contains the most complete and up to date Scientist program on the market”*

## Module 1. Food Legislation and Quality and Safety Standards

- 1.1 Introducción
  - 1.1.1. Legal Organization
  - 1.1.2. Basic Concepts
    - 1.1.2.1 Entitlement
    - 1.1.2.2 Legislation
    - 1.1.2.3 Food Legislation
    - 1.1.2.4 Standard
    - 1.1.2.5 Royal Decree
    - 1.1.2.6 Certifications, etc.
- 1.2. International Food Legislation. International Organizations
  - 1.2.1. United Nations Food and Agriculture Organization (FAO)
  - 1.2.2. World Health Organisation (WHO)
  - 1.2.3. Codex Alimentarius Commission
  - 1.2.4. World Trade Organization
- 1.3. European Food Legislation
  - 1.3.1. European Food Legislation
  - 1.3.2. White Paper on Food Safety
  - 1.3.3. Principles of Food Legislation
  - 1.3.4. General Requirements of Food Legislation
  - 1.3.5. Procedures
  - 1.3.6. European Food Safety Authority (EFSA)
- 1.4. Spanish Food Legislation
  - 1.4.1. Competencies
  - 1.4.2. Organizations
- 1.5. Food Safety Management in the company
  - 1.5.1. Responsibility
  - 1.5.2. Authorization
  - 1.5.3. Certifications
- 1.6. Horizontal Food Legislation. Part 1:
  - 1.6.1. General Hygiene Regulations
  - 1.6.2. Water for Public Consumption
  - 1.6.3. Official Control of Foodstuffs
- 1.7. Horizontal Food Legislation. Part 2:
  - 1.7.1. Storage, Preservation and Transportation
  - 1.7.2. Materials in Contact with Food
  - 1.7.3. Food Additives and Flavorings
  - 1.7.4. Contaminants in Food
- 1.8. Horizontal Food Legislation. Products of Plant Origin
  - 1.8.1. Vegetables and Derivatives
  - 1.8.2. Fruit and Derivatives
  - 1.8.3. Cereals
  - 1.8.4. Legumes
  - 1.8.5. Edible Vegetable Oils
  - 1.8.6. Edible fats
  - 1.8.7. Seasonings and Spices
- 1.9. Horizontal Food Legislation. Products of Animals. Origin
  - 1.9.1. Meat and Meat Derivatives
  - 1.9.2. Fishery Products
  - 1.9.3. Milk and Dairy Products
  - 1.9.4. Eggs and Derivatives
- 1.10. Horizontal Food Legislation. Other Products
  - 1.10.1. Stimulant Foods and Derivatives
  - 1.10.2. Beverages
  - 1.10.3. Ready Made Dishes



## Module 2. Food Safety Management

- 2.1. Food Safety Principles and Management
  - 2.1.1. The Concept of Danger
  - 2.1.2. The Concept of Risk
  - 2.1.3. Risk Evaluation
  - 2.1.4. Food Safety and Its Management Based on Risk Assessment
- 2.2. Physical Hazards
  - 2.2.1. Concepts and Considerations on Physical Hazards in Foods
  - 2.2.2. Physical Hazard Control Methods
- 2.3. Chemical Hazards
  - 2.3.1. Concepts and Considerations on Chemical Hazards in Foods
  - 2.3.2. Chemical Hazards Naturally Occurring in Food
  - 2.3.3. Hazards Associated with Chemicals Intentionally Added to Foods
  - 2.3.4. Incidentally or Unintentionally Added Chemical Hazards
  - 2.3.5. Chemical Hazard Control Methods
  - 2.3.6. Allergens in Food
  - 2.3.7. Allergen Control in the Food Industry
- 2.4. Biological Hazards
  - 2.4.1. Concepts and Considerations of Biological Hazards in Foods
  - 2.4.2. Microbial Hazards
  - 2.4.3. Non-Microbial Biological Hazards
  - 2.4.4. Biological Hazard Control Methods
- 2.5. Good Manufacturing Practices Program (GMP)
  - 2.5.1. Good Manufacturing Practices (GMP)
  - 2.5.2. Background on GMP
  - 2.5.3. Scope of GMPAI
  - 2.5.4. GMPs in a Safety Management System
- 2.6. Standard Operating Procedure for Sanitation (SSOP)
  - 2.6.1. Sanitary Systems in the Food Industry
  - 2.6.2. Scope of SSOPs
  - 2.6.3. Structure of a SSOP
  - 2.6.4. SSOPs in a Safety Management System

- 2.7. The Hazard Analysis and Critical Control Point (HACCP) Plan
  - 2.7.1. Hazard Analysis and Critical Control Points (HACCP)
  - 2.7.2. HACCP Background
  - 2.7.3. HACCP Prerequisites
  - 2.7.4. The 5 Preliminary Steps to HACCP Implementation
- 2.8. The 7 Steps of Hazard and Critical Control Point (HACCP) Plan Implementation
  - 2.8.1. Risk Analysis
  - 2.8.2. Identification of Critical Control Points
  - 2.8.3. Establishment of Critical Limits
  - 2.8.4. Establishment of Monitoring Procedures
  - 2.8.5. Implementation of Corrective Actions
  - 2.8.6. Establishment of Verification Procedures
  - 2.8.7. Record Keeping and Documentation System
- 2.9. Evaluation of the Efficiency of the Hazard and Critical Control Point Plan (HACCP) System
  - 2.9.1. Evaluation of the Efficiency of a CCP
  - 2.9.2. Overall Evaluation of the Efficiency of the HACCP Plan
  - 2.9.3. Use and Management of Records to Evaluate the Efficiency of the HACCP Plan
- 2.10. Hazard and Critical Control Point Plan (HACCP) System Variants Based on Risk Systems
  - 2.10.1. VACCP or Vulnerability Assessment and Critical Control Points (VACCP) Plan
  - 2.10.2. TACCP or Threat Assessment Critical Control Points (Threat Assessment Critical Control Points)
  - 2.10.3. HARPC or Hazard Analysis & Risk Based Preventive Controls (HARPC)

### Module 3. Food Safety Certifications for the Food Industry

- 3.1. Principles of Certification
  - 3.1.1. The Certification Concept
  - 3.1.2. The Certifying Agencies
  - 3.1.3. General Outline of a Certification Process
  - 3.1.4. Management of a Certification and Re-certification Program
  - 3.1.5. Management System Before and After Certification
- 3.2. Good Practice Certifications
  - 3.2.1. Good Manufacturing Practice (GMP) certification
  - 3.2.2. The case of GMP for food supplements
  - 3.2.3. Certification of Good Practices for Primary Production
  - 3.2.4. Other Good Practice Programs (GxP)
- 3.3. ISO 17025 Certification
  - 3.3.1. The ISO Standards Scheme
  - 3.3.2. ISO 17025 System Overview
  - 3.3.3. ISO 17025 Certification
  - 3.3.4. The Role of ISO 17025 Certification in Food Safety Management
- 3.4. ISO 22000 Certification
  - 3.4.1. Medical history
  - 3.4.2. Structure of the ISO 22000 Standard
  - 3.4.3. Scope of ISO 22000 Certification
- 3.5. GFSI Initiative and the Global GAP and Global Markets Program
  - 3.5.1. The GFSI (Global Food Safety Initiative) Global Food Safety System
  - 3.5.2. Global GAP Program Structure
  - 3.5.3. Scope of Global GAP Certification
  - 3.5.4. Structure of the Global Markets Program
  - 3.5.5. Scope of the Global Markets Program Certification
  - 3.5.6. Relationship of Global GAP and Global Markets with Other Certifications



- 3.6. SQF Certification (Safe Quality Food)
  - 3.6.1. SQF Program Structure
  - 3.6.2. Scope of SQF Certification
  - 3.6.3. Relationship of SQF With Other Certifications
- 3.7. BRC Certification (British Retail Consortium)
  - 3.7.1. BRC Program Structure
  - 3.7.2. Scope of BRC Certification
  - 3.7.3. Relationship of BRC With Other Certifications
- 3.8. IFS Certification
  - 3.8.1. IFS Program Structure
  - 3.8.2. Scope of IFS Certification
  - 3.8.3. Relationship of IFS With Other Certifications
- 3.9. Certificación FSSC 22000 (Food Safety System Certification22000)
  - 3.9.1. Background of the FSSC 22000 Program
  - 3.9.2. FSSC 22000 Program Structure
  - 3.9.3. Scope of FSSC 22000 Certification
- 3.10. Food Defense Programs
  - 3.10.1. The Concept of Food Defense
  - 3.10.2. Scope of a Food Defense Program
  - 3.10.3. Tools and Programs for Implementing a Food Defense Program

“ *This training will allow you to advance in your career comfortably*”

# 05 Methodology

This training program offers a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.





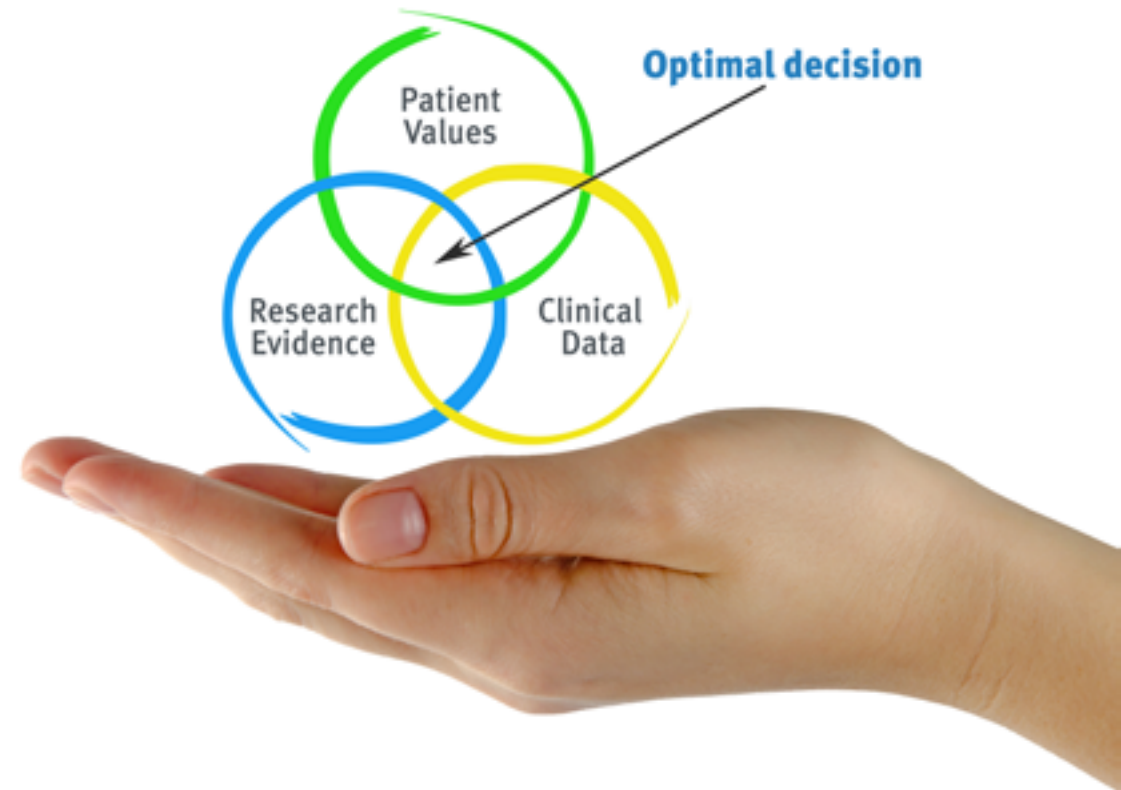
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*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

*With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.*



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the actual conditions in a veterinarian's professional practice.



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*Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method.*

The effectiveness of the method is justified by four fundamental achievements:

1. Veterinarians who follow this method not only manage to assimilate concepts, but also develop their mental capacity through exercises to evaluate real situations and knowledge application.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. The feeling that the effort invested is effective becomes a very important motivation for veterinarians, which translates into a greater interest in learning and an increase in the time dedicated to working on the course.



## Relearning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

*Veterinarians will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.*



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology more than 65,000 veterinarians have been trained with unprecedented success in all clinical specialties, regardless of the surgical load. Our teaching method is developed in a highly demanding environment, where the students have a high socio-economic profile and an average age of 43.5 years.

*Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.*

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.



This program offers the best educational material, prepared with professionals in mind:



#### Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



#### Latest Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current and procedures of veterinary techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



#### Interactive Summaries

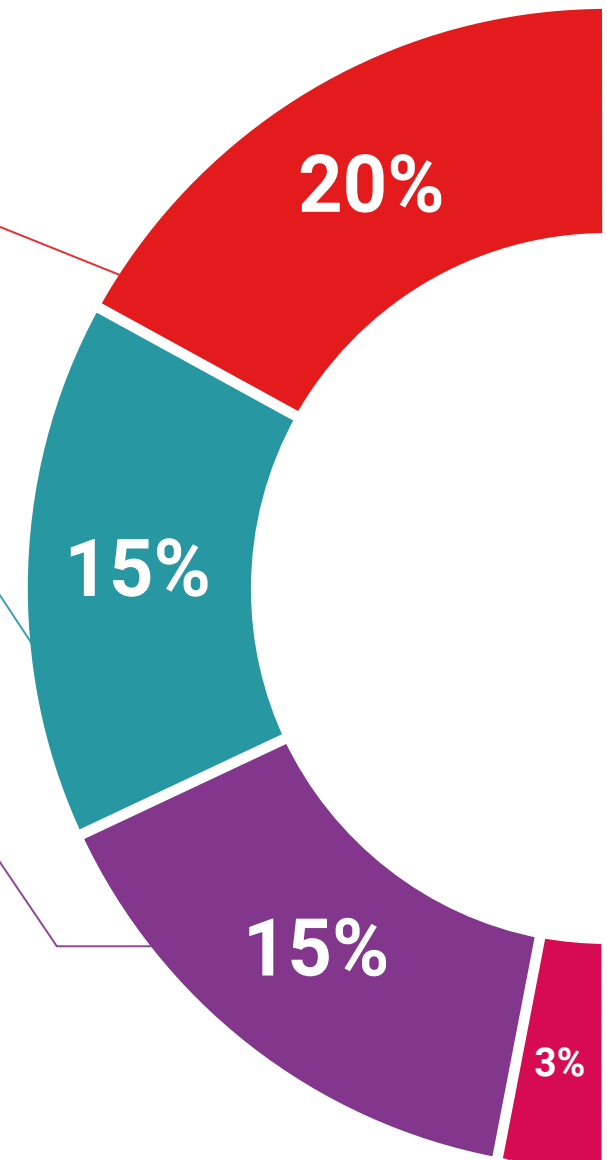
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

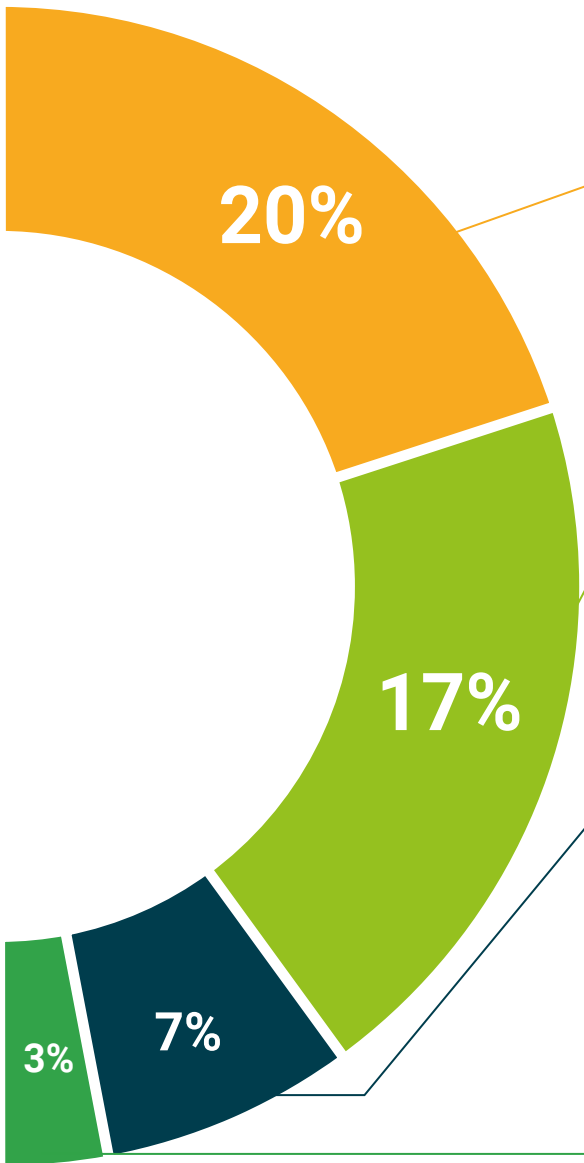
This exclusive multimedia content presentation training Exclusive system was awarded by Microsoft as a "European Success Story".



#### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





#### Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises: so that they can see how they are achieving your goals.



#### Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.



06

# Certificate

The Postgraduate Diploma in Integrated Food and Beverage Industry Safety Management guarantees, in addition to the most rigorous and up to date training, access to a Postgraduate Diploma issued by TECH Technological University.





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*Successfully complete this training and receive your university degree without travel or laborious paperwork"*

This **Postgraduate Diploma in Integrated Food and Beverage Industry Safety Management** contains the most complete and up to date Scientist program on the market.

After the student has passed the assessments, they will receive their corresponding Postgraduate Diploma issued by **TECH - Technological University** via tracked delivery\*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and it meets the requirements commonly required by labor exchanges, competitive examinations, and professional career evaluation committees.

**Title: Postgraduate Diploma in Integrated Safety Management of the Food and Beverage Industry**

**Official N° of hours: 450 h.**



\*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost..



health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present  
development language  
virtual classroom



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