



Validation of New Methodologies and Industry Digitization in Food Safety Management

» Modality: online

» Duration: 6 months

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

We bsite: www.techtitute.com/in/veterinary/postgraduate-diploma/postgraduate-diploma-validation-new-methodologies-industry-digitization-food-safety-management

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tech 06 | Introduction

The Postgraduate Diploma in Validation of New Methodologies and Industry Digitalization in Food Safety Management of TECH Technological University is the most complete among those offered in universities at this time because it is aimed at the comprehensive 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 format program offers the student a broad knowledge of the current regulations concerning food quality and safety, both nationally and internationally.

This Postgraduate Diploma also describes the importance of the application of digital media and platforms in quality management systems in the food industry, with special emphasis on migration strategies from the traditional to the digital system. In addition, basic knowledge of traditional methods for managing quality systems in the food industry and the advantages of using commercial software or different in-house computer tools to increase the efficiency of programs such as Hazard Analysis and Critical Control Point (HACCP) are reinforced.

Finally, the fundamental aspects that confirm that the critical control points are effective and are ensuring the safety of the food produced are reviewed, being clear about the need and correct formulation of the critical control points. Determines the tools necessary to validate the controls in place, verify the effectiveness of these controls and have the confidence to implement sound control processes within the food safety management system.

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 Validation of New Methodologies and Industry

Digitalization in Food Safety Management contains the most complete and up-to-date scientific 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 Validation of New Methodologies and Industry Digitization in Food Safety Management
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies in Validation of New Methodologies and Industry Digitalization in Food Safety Management
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection



Do not miss the opportunity to do with us this Postgraduate Diploma in Validation of New Methodologies and Industry Digitization in Food Safety Management. 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 Validation of New Methodologies and Industry Digitalization in Food Safety Management"

Itultimees, 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.

Theultimerdia 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.

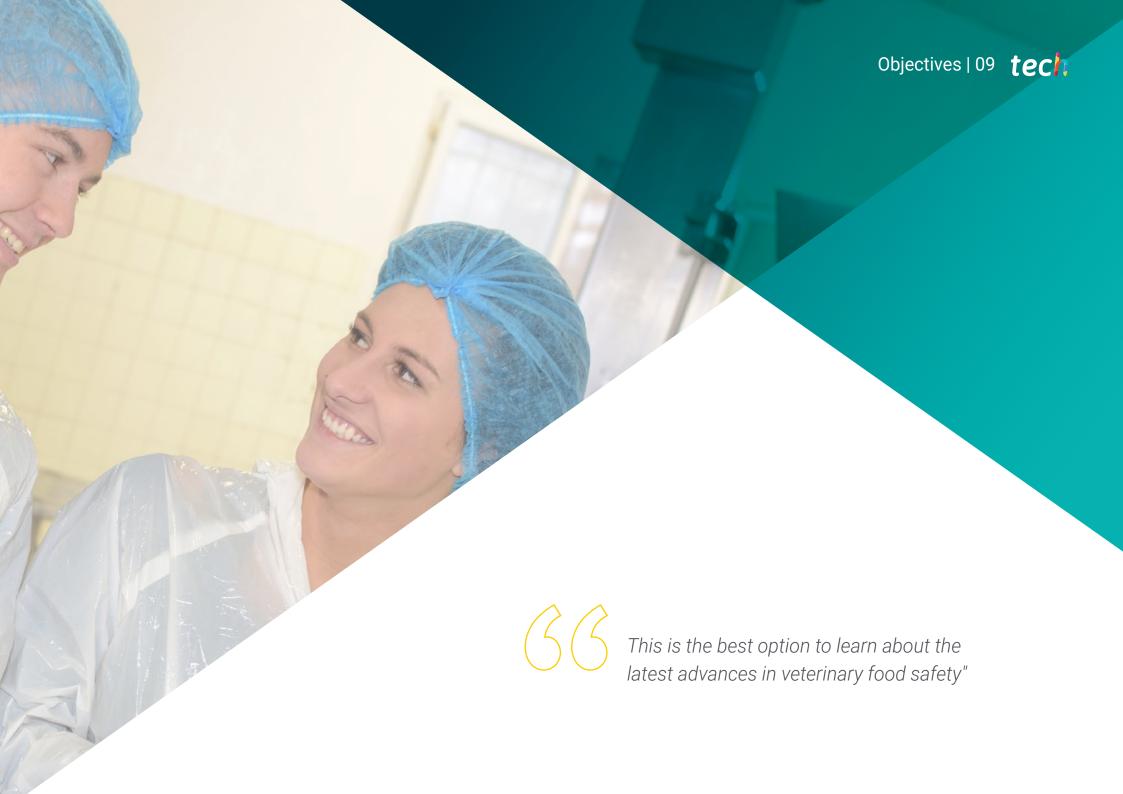
This program is designed around Problem-Based Learning, where the specialist must try to solve the different professional practice situations that arise during the course. For this, the professional will be assisted by an innovative interactive video system developed by recognized and experienced experts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

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

This will allow you to combine your studies with your professional work while increasing your knowledge in this field.







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General Objectives

- 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
- Analyze the advantages of digitalization in the currently established food safety and quality management processes
- Develop specialized knowledge of the different commercial platforms and internal IT tools for process management
- Define the importance of a migration process from a traditional to a digital system in Food Safety and Quality Management
- Establish strategies for the digitalization of protocols and documents related to the management of different Food Quality and Safety processes
- Determine critical control points
- Availability of tools for validation of CCPs
- Analyze the concepts of Process Monitoring, Verification and Validation
- Improve management of incidents, complaints and internal audits





Specific Objectives

Module 1. Food Legislation and Quality and Safety Standards

- 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

Module 2. Digitization of the Quality Management System

- Examine the quality standards and food norms in force for the digitization of the different international reference bodies
- Identify the main commercial software and internal IT strategies that enable the management of specific food safety and quality processes
- Establish appropriate strategies for the transfer of traditional quality management processes to digital platforms
- Define the key points of the digitization process of a Hazard Analysis and Critical Control Point (HACCP) program
- Analyze alternatives for the implementation of prerequisite programs (PPR), HACCP plans and monitoring of standardized operating programs (SOP)
- Analyze the most appropriate protocols and strategies for digitization in risk communication
- Develop mechanisms for digitalizing the management of internal audits, recording corrective actions and monitoring continuous improvement programs

Module 3. Validation of New Methodologies and Processes

- Know the main differences between control points and critical control points.
- Develop prerequisite programs and management charts to ensure food safety
- Apply internal audits, complaints or internal incidents as tools for the validation of control processes
- · Review process validation methods
- Differentiate and specify the differences between monitoring, verification and validation activities within the HACCP system
- Demonstrate resolution capability with root cause analysis and implementation of corrective actions for complaint or nonconformity management
- Assess the management of internal audits as a tool for improving the HACCP plan



Take the opportunity and take the step to get up to date on the latest developments in Validation of New Methodologies and Industry Digitization in Food Safety Management"





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's Degree in Food Science, and Technology (CYTA)
- Expert in Food Quality Management ISO 22000
- Specialist in Food Quality and Safety, Mercamadrid Training Center (CFM)

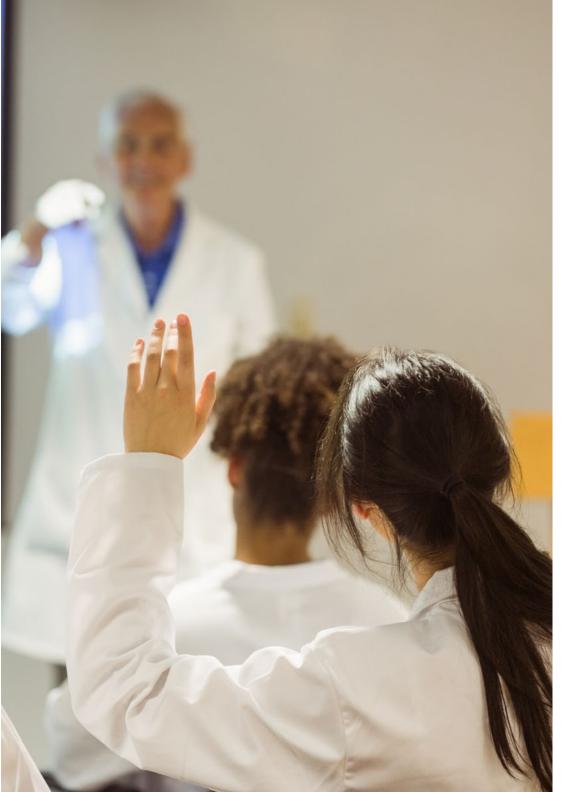
Professors

Dr. Colina Coca, Clara

- D. in Nutrition, Food Science and Technology
- Master's Degree 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



Course Management | 17 tech

Professors

Dr. Velderrain Rodríguez, Gustavo Rubén

- D. in Science. Center for Research in Food and Development, A.C. (CIAD)
- Member of the National System of Researchers of CONACyT (Mexico)

Ms. Aranda Rodrigo, Eloísa

- Degree in Food Science and Technology
- It develops its activity in the food production environment, with laboratory analysis of water and food
- Training in Quality Management Systems, BRC, IFS and ISO 22000 Food Safety
- Experience in audits under ISO 9001 and ISO 17025 protocols

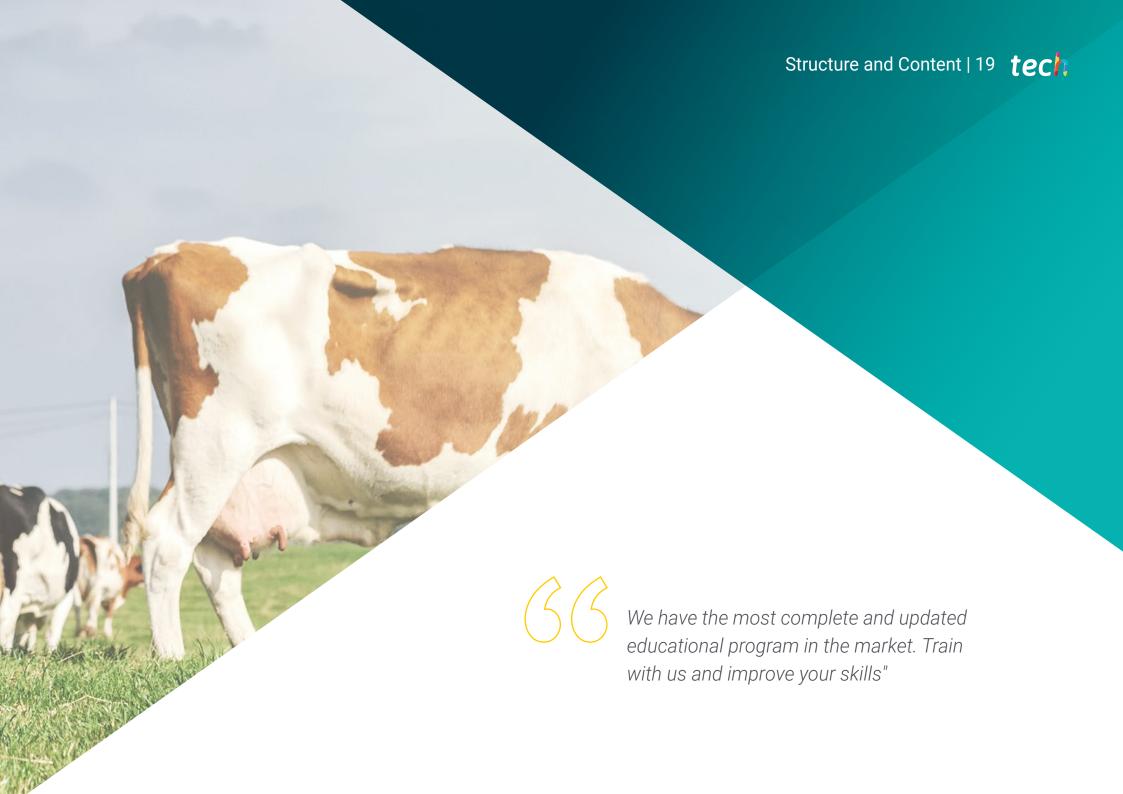
Ms. Montes Luna, Marifé

- Technical Director at Qualitatus (food safety management software)
- Degree in Agricultural Engineering from the University of Córdoba.
- Intensive Business Management Program Pide at Instituto Internacional de San Telmo
- Postgraduate Course in A.P.P.C.C. at the University of Salamanca



Learn from leading professionals the latest advances in Validation of New Methodologies and Industry Digitization in Food Safety Management"





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Module 1. Food Legislation and Quality and Safety Standards

- 1.1. Introduction
 - 1.1.1. Legal Organization
 - 1.1.2. Basic Concepts
 - 1.1.2.1. Law
 - 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. Food and Agriculture Organization of the United Nations (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. Skills
 - 1.4.2. Organizations
- 1.5. Food Safety Management in the company
 - 1.5.1. Responsibilities
 - 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. Vertical Food Legislation: Products of Plant Origin
 - 1.8.1. Vegetables and By-Products
 - 1.8.2. Fruits 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. Vertical Food Legislation: Animal Products
 - 1.9.1. Meat and Meat Derivatives
 - 1.9.2. Fish Products
 - 1.9.3. Milk and Dairy Products
 - 1.9.4. Eggs and Egg Products
- 1.10. Vertical Food Legislation: Other Products
 - 1.10.1. Stimulant Foods and Derivatives
 - 1.10.2. Beverages
 - 1.10.3. Prepared Dishes

Module 2. Digitization of the Quality Management System

- 2.1. Quality Standards and Risk Analysis in the Food Industry
 - 2.1.1. Current Food Safety and Quality Standards
 - 2.1.2. Main Risk Factors in Food Products
- 2.2. The "Age of digitization" and Its Influence on Global Food Safety Systems
 - 2.2.1. Codex Alimentarius Global Food Safety Initiative
 - 2.2.2. Hazard Analysis and Critical Control Point (HACCP)
 - 2.2.3. ISO 22000
- 2.3. Commercial Software for Food Safety Management
 - 2.3.1. Use of Smart Devices
 - 2.3.2. Business Software for Specific Management Processes
- 2.4. Establishment of Digital Platforms for the Integration of a Team Responsible for the Development of the HACCP Program
 - 2.4.1. Stage 1. Preparation and Planning
 - 2.4.2. Stage 2. Implementation of Prerequisite Programs for Hazards and Critical Control Points of the HACCP program
 - 2.4.3. Stage 3. Execution of the Plan
 - 2.4.4. Stage 4. HACCP Verification and Maintenance
- 2.5. Digitization of Pre-requisite Programs (PPR) in the Food Industry Migration from Traditional to Digital Systems
 - 2.5.1. Primary Production Processes
 - 2.5.2. Good Hygiene Practices (GHP)
 - 2.5.3. Good Manufacturing Practices (GMP)
 - 2.5.4. Strategic Processes
 - 2.5.5. Operational Processes
 - 2.5.6. Support Processes
- 2.6. Platforms for Monitoring "Standard Operating Procedures (SOPs)"
 - 2.6.1. Training of Personnel in the Documentation of Specific SOPs
 - 2.6.2. Channels of Communication and Monitoring of SOP Documentation
- 2.7. Protocols for Document Management and Communication Between Departments
 - 2.7.1. Traceability Document Management
 - 2.7.2. Procurement Protocols
 - 2.7.3. Traceability of Raw Material Receipt Protocols

- 2.7.4. Traceability of Warehouse Protocols
- 2.7.5. Process Area Protocols
- 2.7.6. Traceability of Hygiene Protocols
- 2.7.7. Product Quality Protocols
- 2.7.8. Implementation of Alternative Communication Channels
 - 2.7.8.1. Use of Storage Clouds and Restricted Access Folders
 - 2.7.8.2. Coding of Documents for Data Protection
- 2.8. Digital Documentation and Protocols for Audits and Onspections
 - 2.8.1. Management of Internal Audits
 - 2.8.2. Record of Corrective Actions
 - 2.8.3. Application of the "Deming cycle
 - 2.8.4. Management of Continuous Improvement Programs
- 2.9. Strategies for Proper Risk Communication
 - 2.9.1. Risk Management and Communication Protocols
 - 2.9.2. Effective Communication Strategies
 - 2.9.3. Public Information and Use of Social Networks
- 2.10. Case Studies of Digitization and Its Advantages in Reducing Risks in the Food Industry
 - 2.10.1. Food Safety Risks
 - 2.10.2. Food Fraud Risks
 - 2.10.3. Food Defence Risks

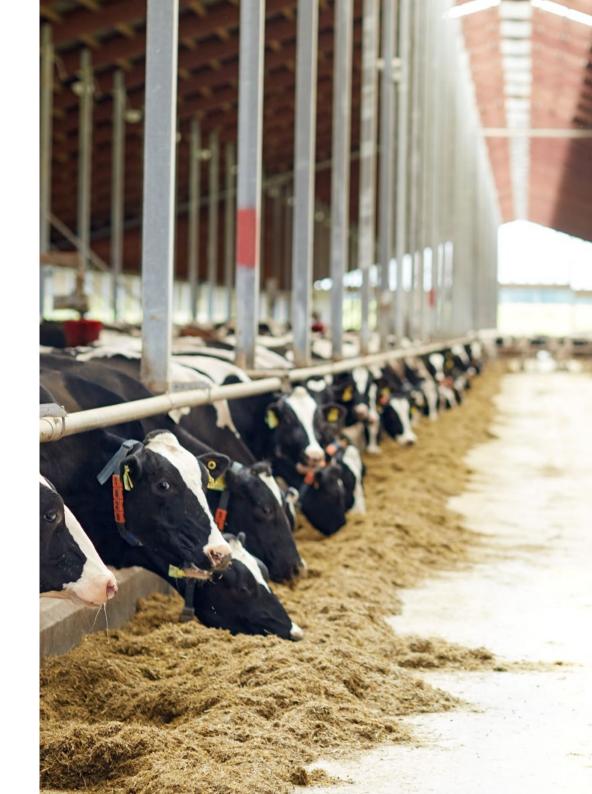
Module 3. Validation of New Methodologies and Processes

- 3.1. Critical Control Points
 - 3.1.1. Significant Hazards
 - 3.1.2. Prerequisite Programs
 - 3.1.3. Critical Control Point Management Chart
- 3.2. Verification of a Self-Control System
 - 3.2.1. Internal Audits
 - 3.2.2. Review of Historical Records and Trends
 - 3.2.3. Customer Complaints
 - 3.2.4. Detection of Internal Incidents

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- 3.3.1. Surveillance or Monitoring Techniques
- 3.3.2. Validation of Controls
- 3.3.3. Efficiency Verification
- 3.4. Validation of Processes and Methods
 - 3.4.1. Documentary Support
 - 3.4.2. Validation of Analytical Techniques
 - 3.4.3. Validation Sampling Plan
 - 3.4.4. Method Bias and Accuracy
 - 3.4.5. Determining Uncertainty
- 3.5. Validation Methods
 - 3.5.1. Method Validation Stages
 - 3.5.2. Types of Validation Processes, Approaches.
 - 3.5.3. Validation Reports, Summary of Data Obtained
- 3.6. Incident and Deviation Management
 - 3.6.1. Formation of the Work Team
 - 3.6.2. Description of the Problem
 - 3.6.3. Root Cause Determination
 - 3.6.4. Corrective and Preventive Actions
 - 3.6.5. Efficiency Verification
- 3.7. Root Cause Analysis and Its Methods
 - 3.7.1. Causal Analysis: Qualitative Methods
 - 3.7.1.1. Tree Causes Root
 - 3.7.1.2. Why
 - 3.7.1.3. Cause Effect
 - 3.7.1.4. Ishikawa Diagram
 - 3.7.2. Cause Analysis: Quantitative Methods
 - 3.7.2.1. Data Collection Data Model
 - 3.7.2.2. Pareto Chart
 - 3.7.2.3. Scatter Plots
 - 3.7.2.4. Histograms
- 3.8. Claims Management



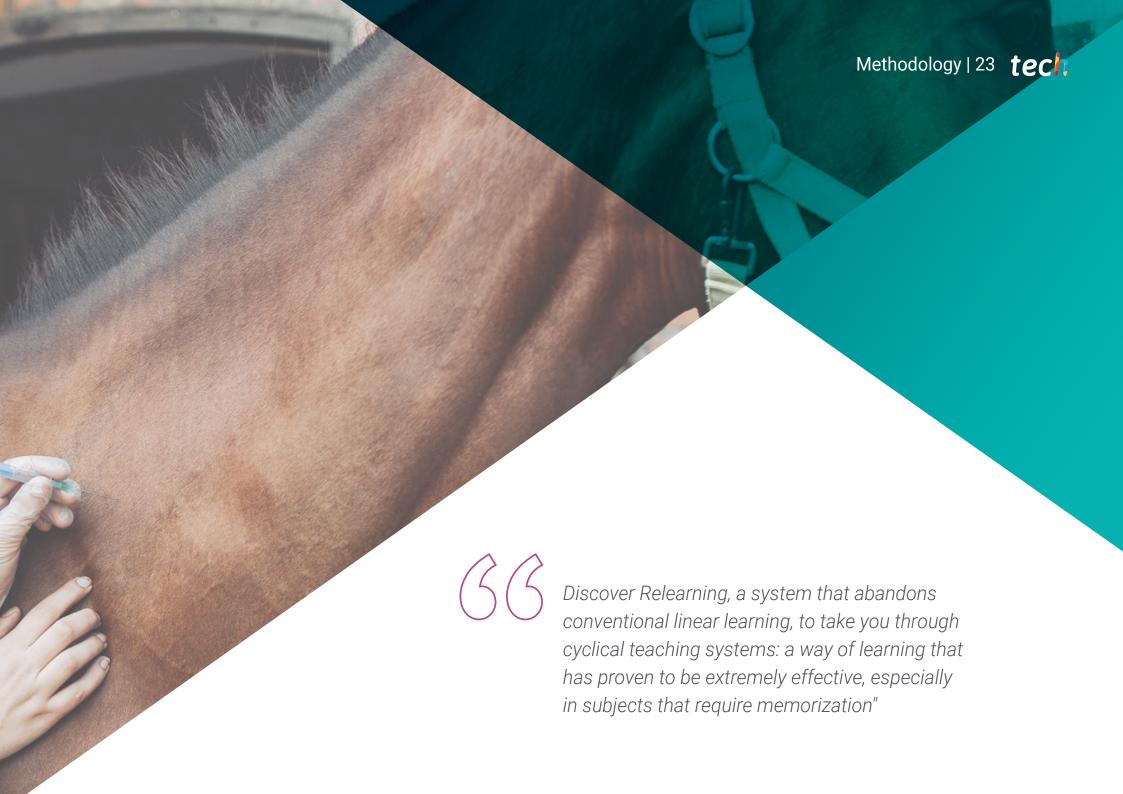


Structure and Content | 23 tech

- 3.8.1. Claim Data Collection
- 3.8.2. Investigation and Action
- 3.8.3. Preparation of Technical Report
- 3.8.4. Claims Trend Analysis
- 3.9. Internal Audits of the Self-Control System
 - 3.9.1. Competent Auditors
 - 3.9.2. Audit Program and Plan
 - 3.9.3. Scope of the Audit
 - 3.9.4. Reference Documents
- 3.10. Execution of Internal Audits
 - 3.10.1. Opening Meeting
 - 3.10.2. System Evaluation
 - 3.10.3. Deviations from Internal Audits
 - 3.10.4. Closing Meeting
 - 3.10.5. Evaluation and Monitoring of the Effectiveness of Deviation Closure





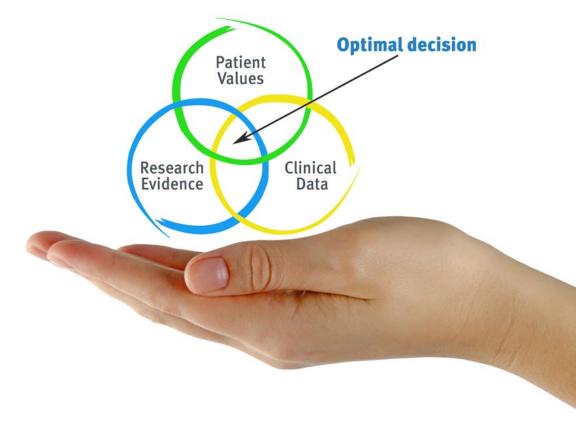


tech 24 | Methodology

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.



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.



Methodology | 27 tech

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

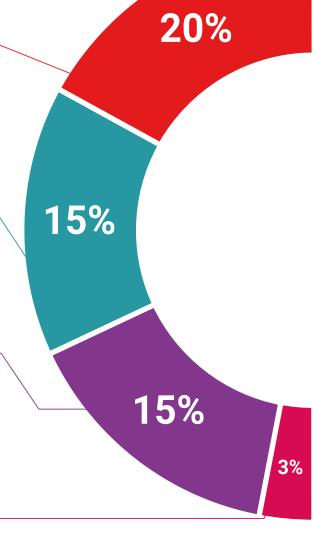
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current and procedures of veterinary techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch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

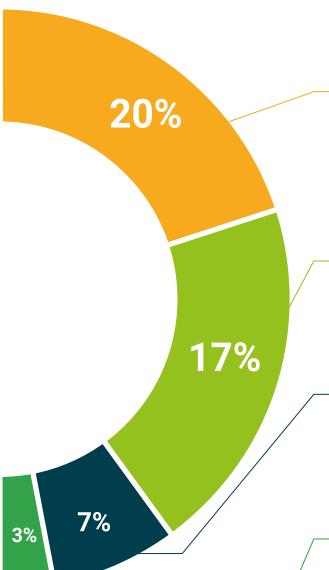
This exclusive multimedia content presentation training Exclusive system was awarded by Microsoft as a "European Success Story".





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.





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This Postgraduate Diploma in Validation of New Methodologies and Digitalization of the Food Safety Management Industry contains the most complete and updated scientific program on the market.

After the student has passed the evaluations, 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 meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees

Title: Postgraduate Diploma in Validation of New Methodologies and Industry Digitization in Food Safety Management

Official No of hours: 450 h.



June 17, 2020

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

health

guarantee

technological
university

Postgraduate Diploma

Validation of New Methodologies and Industry Digitization in Food Safety Management

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

