Postgraduate Diploma

Process Management and Validation in the Food Industry

tech technological university

tech technological university

Postgraduate Diploma

Process Management and Validation in the Food Industry

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

Website: www.techtitute.com/pk/veterinary-medicine/postgraduate-diploma/postgraduate-diploma-process-management-validation-food-industry

Index

01

Introduction

Project Management and Validation in the Food Industry is essential to control the quality of the animal products we consume. Therefore, it is necessary to obtain specialized training in this area. The student can take advantage of the opportunity and acquire a solid knowledge in this field that will allow him/her to become a successful professional.

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

The Postgraduate Diploma in Management and Assessment of Processes in the Food Sector 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 animal food safety.

Specifically, this training program 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.

It also 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.

Another of the strong points of this training is that 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. In addition, it shows the tools needed 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, 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 Process Management and Validation in the Food Sector** 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 Process Management and Validation in the Food Industry
- Practical exercises where self-assessment can be used to improve learning.
- Its special emphasis on innovative methodologies in Process Management and Validation in the food sector.
- 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 Management and Validation of Processes in the Food Sector. It's the perfect opportunity to advance your career".

This Postgraduate Diploma is the best investment you can make in the selection of a refresher program to update your knowledge in Process Management and Validation in the Food Sector".

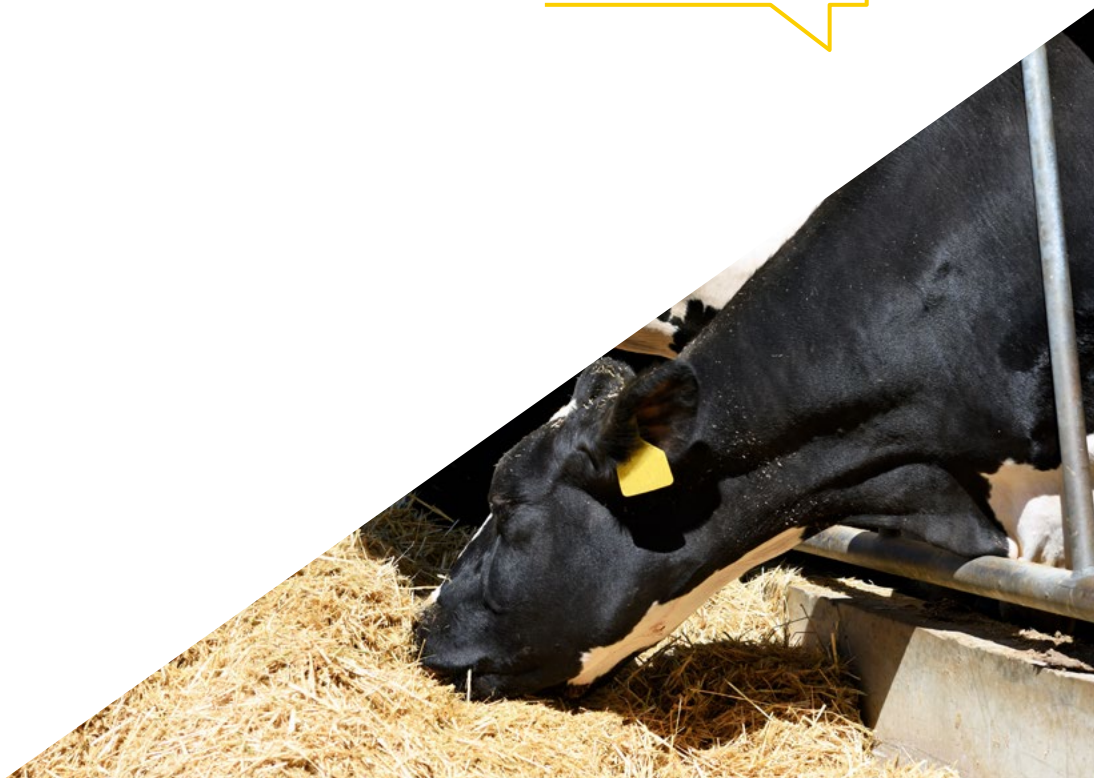
This Postgraduate Diploma will allow you to combine your studies with your professional work 100% online.

We have the best didactic material and we offer you the latest educational technology, which will allow you a contextual study that will facilitate your learning.

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, the professional will be assisted by an innovative interactive video system developed by recognized experts in Process Management and Validation in the Food Sector and with great experience.



02

Objectives

The Postgraduate Diploma in Management and Validation of Processes in the Food Sector is aimed at facilitating the professional's performance with the latest and most innovative advances in the sector.

This is the best option to learn about the latest advances in Process Management and Validation in the Food Industry"

General Objective

- 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.
- 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

- 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.
- 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.

03

Course Management

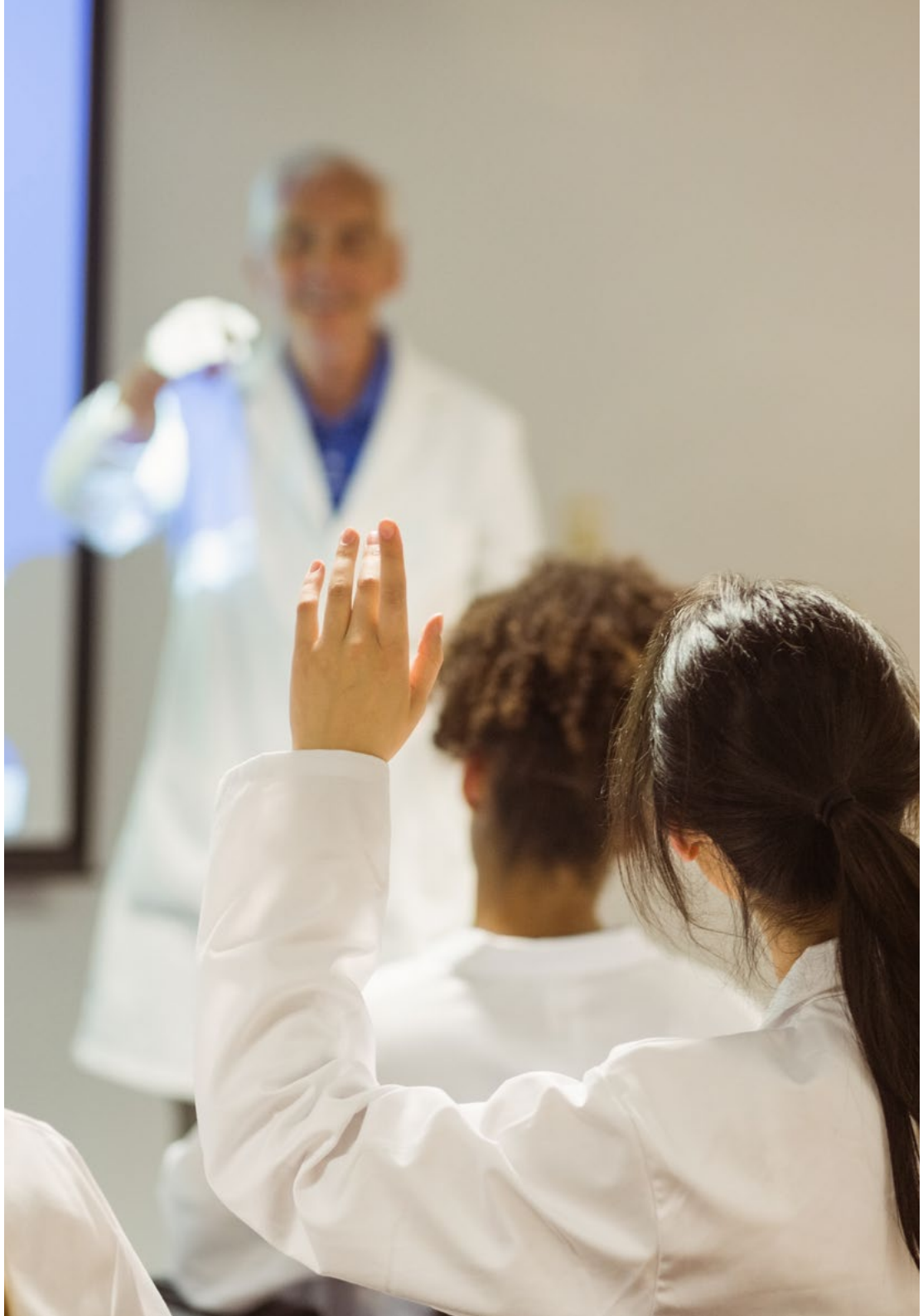
The program includes in its teaching staff leading experts in Veterinary Food Safety who bring to this training the experience of their work. Additionally, other recognized experts participate in its design and preparation, completing the program in an interdisciplinary manner.

Leading professionals in the field have come together to show you what's new in food safety"

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

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

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

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 Process Management and Validation in the Food Sector contains the most complete and up-to-date scientific program on the market"

Module 1. Food Safety Management

1.1. Food Safety Principles and Management
- 1.1.1. The Concept of Danger
- 1.1.2. The Concept of Risk
- 1.1.3. Risk Evaluation
- 1.1.4. Food Safety and Its Management Based on Risk Assessment

1.2. Physical Hazards
- 1.2.1. Concepts and Considerations on Physical Hazards in Foods
- 1.2.2. Physical Hazard Control Methods

1.3. Chemical Hazards
- 1.3.1. Concepts and Considerations on Chemical Hazards in Foods
- 1.3.2. Chemical Hazards Naturally Occurring in Food
- 1.3.3. Hazards Associated with Chemicals Intentionally Added to Foods
- 1.3.4. Incidentally or Unintentionally Added Chemical Hazards
- 1.3.5. Chemical Hazard Control Methods
- 1.3.6. Allergens in Food
- 1.3.7. Allergen Control in the Food Industry

1.4. Biological Hazards
- 1.4.1. Concepts and Considerations of Biological Hazards in Foods
- 1.4.2. Microbial Hazards
- 1.4.3. Non-Microbial Biological Hazards
- 1.4.4. Biological Hazard Control Methods

1.5. Good Manufacturing Practices Program (GMP)
- 1.5.1. Buenas Prácticas de Fabricación (GMP)
- 1.5.2. Background on GMP
- 1.5.3. Scope of GMPAI
- 1.5.4. GMPs in a Safety Management System

1.6. Standard Operating Procedure for Sanitation (SSOP)
- 1.6.1. Sanitary Systems in the Food Industry
- 1.6.2. Scope of SSOPs
- 1.6.3. Structure of a SSOP
- 1.6.4. SSOPs in a Safety Management System

1.7. The Hazard Analysis and Critical Control Point (HACCP) Plan
- 1.7.1. *Hazard Analysis and Critical Control Points* (HACCP)
- 1.7.2. Background of HACCP
- 1.7.3. HACCP Prerequisites
- 1.7.4. The 5 Preliminary Steps to HACCP Implementation

1.8. The 7 Steps of Hazard and Critical Control Point (HACCP) Plan Implementation
- 1.8.1. Risk Analysis
- 1.8.2. Identification of Critical Control Points
- 1.8.3. Establishment of Critical Limits
- 1.8.4. Establishment of Monitoring Procedures
- 1.8.5. Implementation of Corrective Actions
- 1.8.6. Establishment of Verification Procedures
- 1.8.7. Record Keeping and Documentation System

1.9. Evaluation of the Efficiency of the Hazard and Critical Control Point Plan (HACCP) System.
- 1.9.1. . Evaluation of the Efficiency of a CCP
- 1.9.2. Overall Evaluation of the Efficiency of the HACCP Plan
- 1.9.3. Use and Management of Records to Evaluate the Efficiency of the HACCP Plan

1.10. Hazard and Critical Control Point Plan (HACCP) System Variants Based on Risk Systems
- 1.10.1. VACCP or Vulnerability Assessment and Critical Control Points (VACCP) Plan
- 1.10.2. TACCP or Threat Assessment Critical Control Points (Threat Assessment Critical Control Points)
- 1.10.3. HARPC or Hazard Analysis & Risk-Based Preventive Controls (HARPC)

Module 2. Food Safety Certifications for the Food Industry

2.1. Principles of Certification
- 2.1.1. The Certification Concept
- 2.1.2. The Certifying Agencies
- 2.1.3. General Outline of a Certification Process
- 2.1.4. Management of a Certification and Re-certification Program
- 2.1.5. Management System Before and After Certification

2.2. Good Practice Certifications
- 2.2.1. Good Manufacturing Practice (GMP) certification
- 2.2.2. The case of GMP for food supplements
- 2.2.3. Certification of Good Practices for Primary Production
- 2.2.4. Other Good Practice Programs (GxP)

2.3. ISO 17025 Certification
- 2.3.1. The ISO Standards Scheme
- 2.3.2. ISO 17025 System Overview
- 2.3.3. ISO 17025 Certification
- 2.3.4. CThe Role of ISO 17025 Certification in Food Safety Management

2.4. ISO 22000 Certification
- 2.4.1. Medical History
- 2.4.2. Structure of the ISO 22000 Standard
- 2.4.3. Scope of ISO 22000 Certification

2.5. GFSI Initiative and the Global GAP and Global Markets Program
- 2.5.1. The GFSI Global Food Safety System (*Global Food Safety Initiative*)
- 2.5.2. Global GAP Program Structure
- 2.5.3. Scope of Global GAP Certification
- 2.5.4. Structure of the Global Markets Program
- 2.5.5. Scope of the Global Markets Program Certification
- 2.5.6. Relationship of Global GAP and *Global Markets* with Other Certifications

2.6. SQF Certification (*Safe Quality Food*)
- 2.6.1. SQF Program Structure
- 2.6.2. Scope of SQF Certification
- 2.6.3. Relationship of SQF With Other Certifications

2.7. BRC Certification (*British Retail Consortium*)
- 2.7.1. BRC Program Structure
- 2.7.2. Scope of BRC Certification
- 2.7.3. Relationship of BRC With Other Certifications

2.8. IFS Certification
- 2.8.1. IFS Program Structure
- 2.8.2. Scope of IFS Certification
- 2.8.3. Relationship of IFS With Other Certifications

2.9. Certification FSSC 22000 (Food Safety System Certification22000)
- 2.9.1. Background of the FSSC 22000 Program
- 2.9.2. FSSC 22000 Program Structure
- 2.9.3. Scope of FSSC 22000 Certification

2.10. Food Defence Programs
- 2.10.1. The Concept of Food Defence
- 2.10.2. Scope of a Food Defence Program
- 2.10.3. Tools and Programs for Implementing a Food Defence Program

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

3.3. Monitoring, Validation and Verification of Control Points
- 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
- 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.

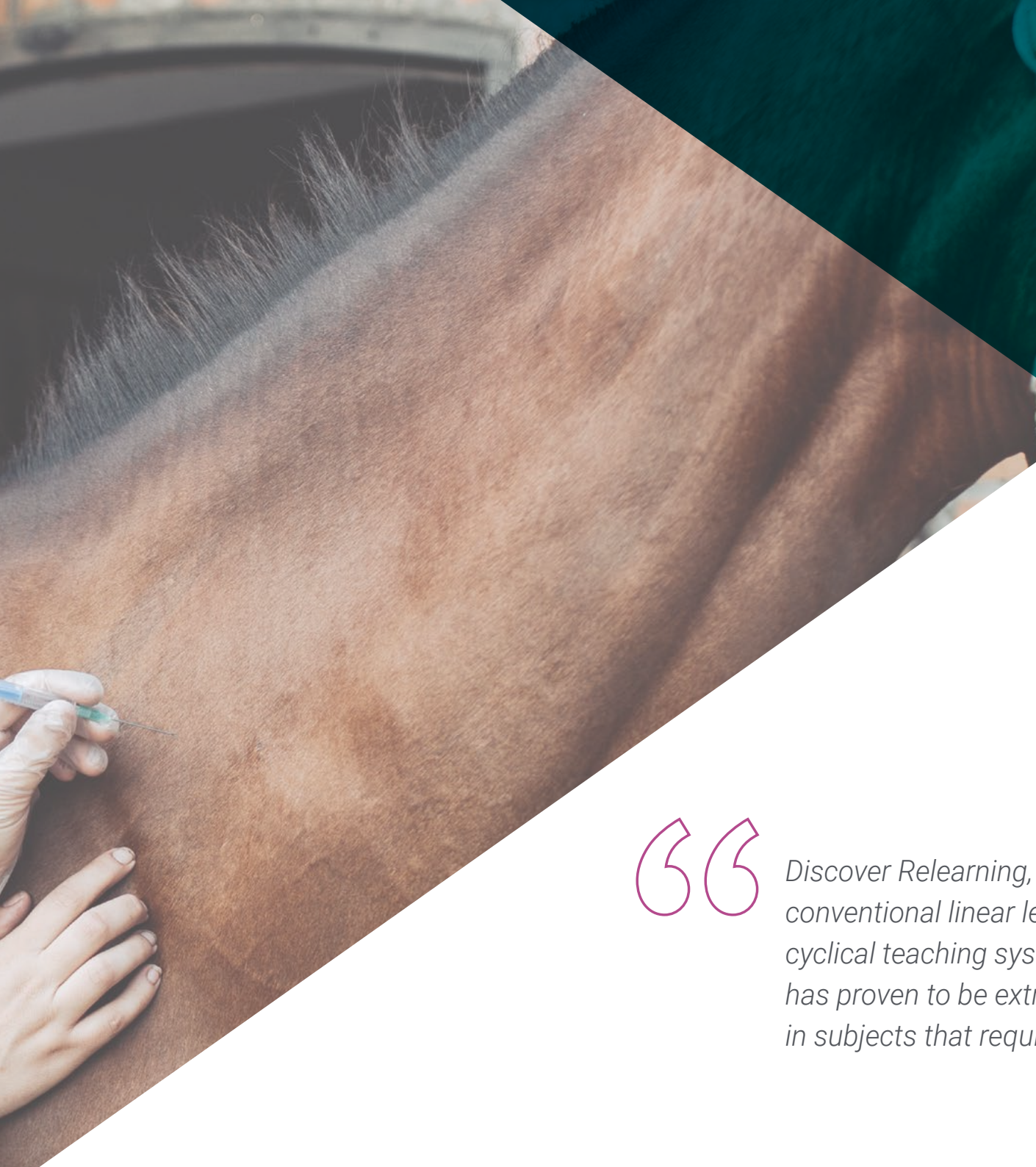
This training will allow you to advance in your career comfortably"

05

Methodology

This training provides you with a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

This teaching system is used 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.

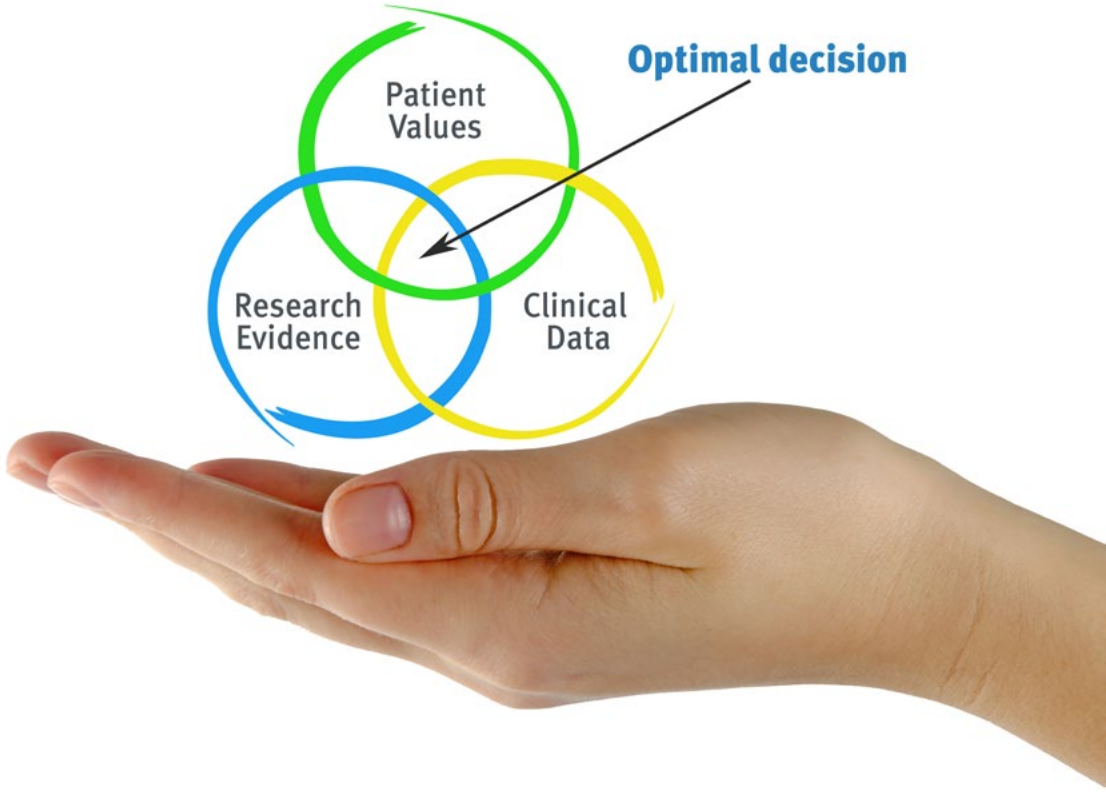


Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization".

At TECH we use the Case Method

In a given clinical situation, what would you do? 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 can 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 potential or because of its uniqueness or rarity. It is essential that the case be based on current professional life, trying to recreate the real conditions in the 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:

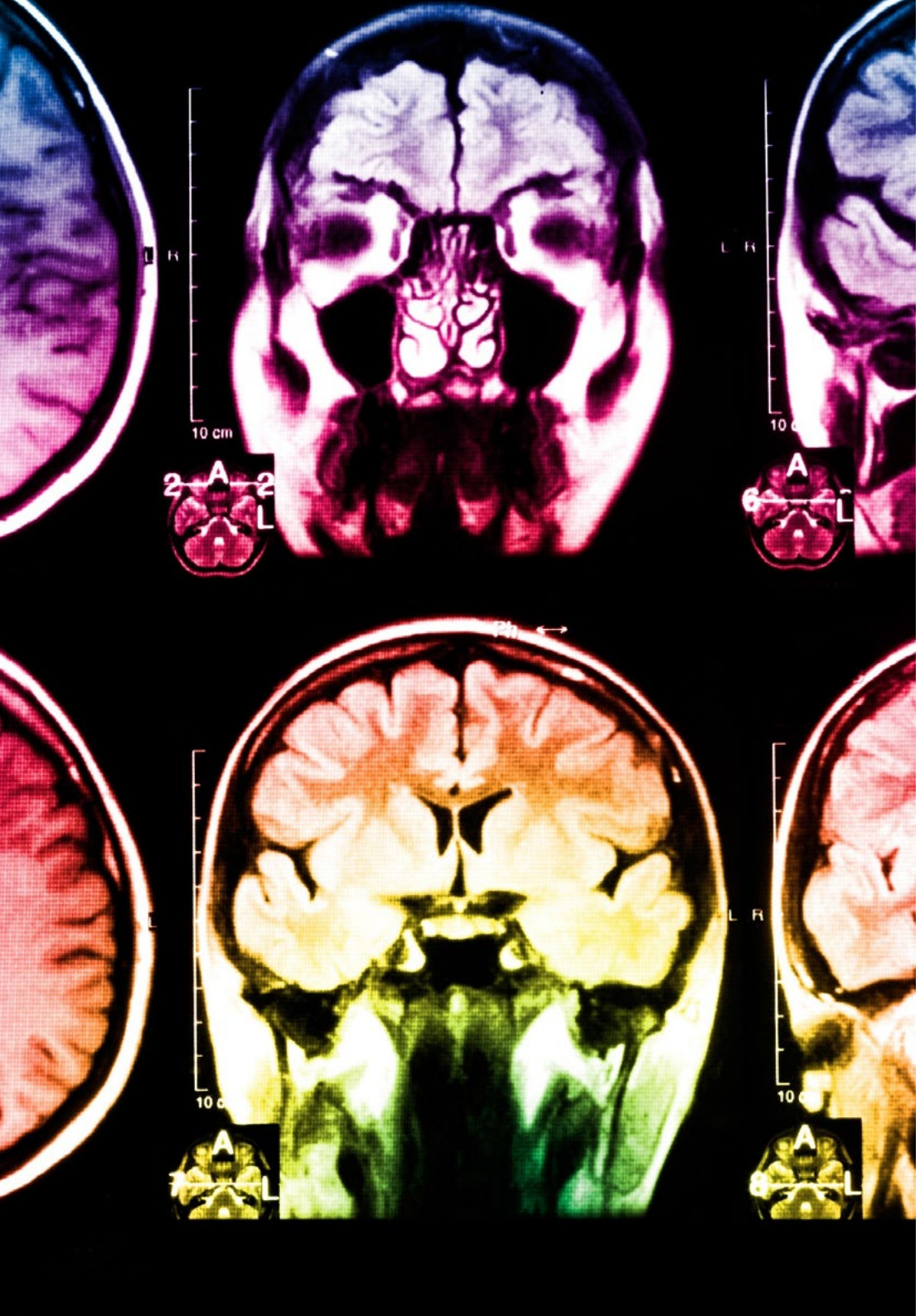
1. Veterinarians who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity through exercises to evaluate real situations and the application of knowledge.
2. The learning process has a clear focus on practical skills that allow the student to 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.

Our 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, which represent a real revolution with respect to simply studying and analyzing 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 Spanish-speaking online university (Columbia University).

With this methodology we have trained more than 65,000 veterinarians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong 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 to success.

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

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

In this program you will have access to the best educational material, prepared with you 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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.

Latest Techniques and Procedures on Video

We bring you closer to the latest Techniques, to the latest Educational Advances, to the forefront of current Veterinary Techniques and Procedures. All this, first hand, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.

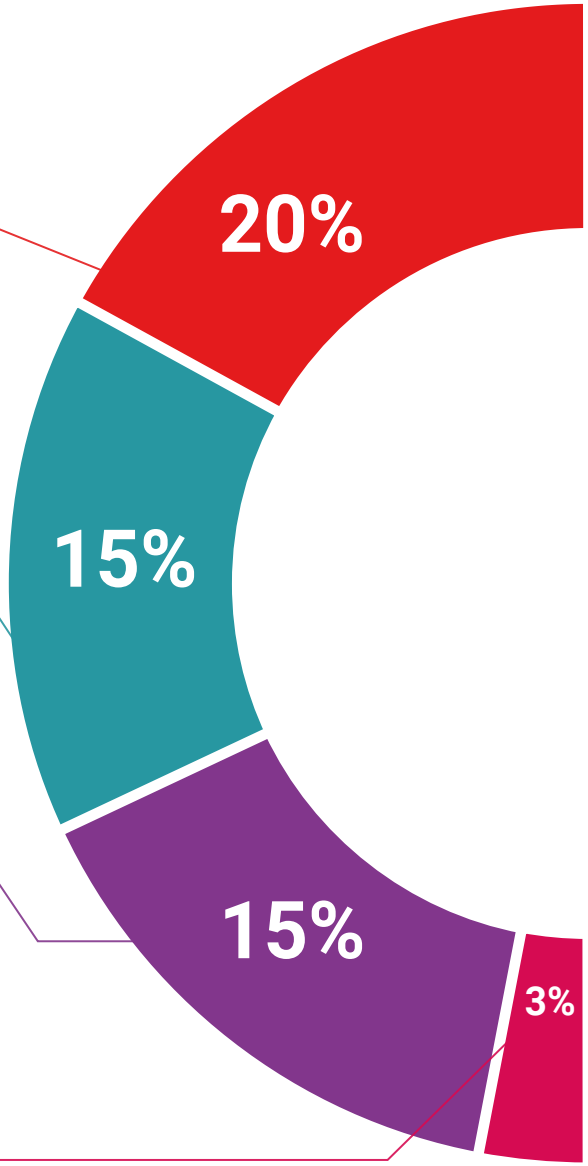
Interactive Summaries

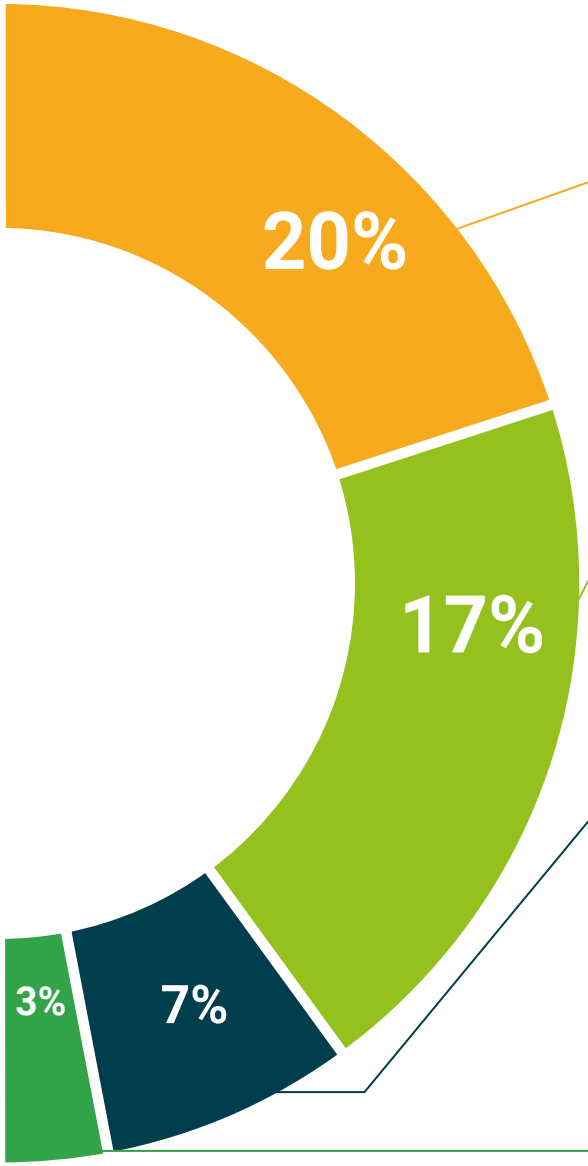
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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

Additional Reading

Recent articles, consensus documents, international guides... in our virtual library you will have access to everything you need to complete your training.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through 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 your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you 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 our future difficult decisions.

Quick Action Guides

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.

06

Certificate

The Postgraduate Diploma in Quality Control in Food Industries guarantees, in addition to the most rigorous and up-to-date training, access to a Postgraduate Diploma issued by TECH Technological University.

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

This **Postgraduate Diploma in Process Management and Validation in the Food Sector** contains the most complete and up-to-date scientific 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 meets the requirements commonly required by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Diploma in Management and Validation of Processes in the Food Sector**

Official Nº of Hours: **450 h.**


tech technological university

Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE DIPLOMA

in

Process Management and Validation in the Food Sector

This is a qualification awarded by this University, equivalent to 450 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro

Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*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.

tech technological university

Postgraduate Diploma
Process Management and Validation in the Food Industry

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

Postgraduate Diploma

Process Management and Validation in the Food Industry

tech technological university