Postgraduate Certificate
Validation of Methodologies Applied to R&D&I Projects

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Postgraduate Certificate

Validation of Methodologies Applied to R&D&I Projects

- Modality: **online**
- Duration: **12 weeks**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/us/veterinary-medicine/postgraduate-certificate/validation-methodologies-applied-rdi-projects**

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01

Introduction

Veterinary food safety is essential to control the quality of the products we consume, so it is necessary to increase knowledge in this field. Now TECH presents a complete training in methodologies applied to R&D&I projects. 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.

This Postgraduate Certificate is the best option you can find to specialize in Validation of Methodologies Applied to R&D&I Projects".

TECH's Postgraduate Diploma in Validation of Methodologies Applied to R&D&I Projects is the most complete among those offered in universities at this time.

This course reviews the fundamental aspects that confirm that the critical control points are effective and are ensuring the safety of the food produced, being clear about the need and correct formulation of the critical control points.

It also 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.

It also addresses the "specific prerequisite" programs that support the correct management of critical control points. Analyze the root cause with effective qualitative and quantitative methods to deal with deviations from internal audits, inspections, complaints and internal deviations, in order to provide objective data for the validation of the controls carried out.

On the other hand, students will also learn about the implementation and development of R&D projects in the food field. To this end, the economic support systems for the implementation of the projects, the legal conditions and, especially, the methodology for the operation of the projects in terms of planning, availability of resources, control and follow-up are defined.

The adaptation to project work in the food environment is of great importance to carry out innovation, the development of new products or the improvement of food safety conditions and the use of food products and ingredients used.

The teachers of this Postgraduate Certificate 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 Certificate in Validation of Methodologies Applied to R&D&I Projects** 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 Validation of Methodologies Applied to R&D&I Projects
- Practical exercises where self-assessment can be used to improve learning.
- Special emphasis on innovative methodologies in Validation of Methodologies Applied to R&D&I Projects.
- 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

Don't miss the opportunity to train with us. It's the perfect opportunity to advance your career".

This course is the best investment you can make in selecting a refresher program to update your knowledge in Validation of Methodologies Applied to R&D Projects"

This training has the best didactic material and educational technology, which will allow you a contextual study that will facilitate your learning.

This course will allow you to combine your studies with your professional work as it is 100% online.

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 experts in Validation of Methodologies Applied to R&D&I Projects and with great experience.

02

Objectives

The Postgraduate Certificate in Validation of Methodologies Applied to R&D&I Projects is aimed at facilitating the professional's performance with the latest and most innovative advances in the sector.

Thanks to this course you will notice how you advance every day in your profession"

General Objectives

- 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
- Determine the functioning of R&D&I systems in the field of new product and process development in the food environment
- Analyze the R&D&I system and the use of tools for planning, management, evaluation, protection of results and dissemination of food R&D&I
- Acquire knowledge that provides a basis or opportunity for the development and/or application of ideas, in a research context, including reflections on the responsibilities associated with the application of their developments

A path to achieve training and professional growth that will propel you towards a greater level of competitiveness in the employment market".

Specific Objectives

- 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
- Establish R&D&I systems that enable the development of novel foods and ingredients especially in food safety issues, so that they can address research, development and innovation in the field of novel foods and ingredients
- Compile the sources of financing for R&D&I activities in the development of new food products that allow different innovation strategies in the food industry to be addressed
- Analyze the forms of access to public and private sources of information in the scientific-technical, economic and legal fields for the planning of an R&D&I project
- Develop methodologies for project planning and management, control reporting and monitoring of results
- Evaluate the technology transfer systems that allow the transfer of R&D&I results to the productive environment
- Analyze the implementation of projects once their documentation stage has been completed

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 specialists participate in its design and preparation which means that the program is developed in an interdisciplinary manner.

Our teaching team, specialists in Food Safety, will help you train for success in your profession"

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. Rendueles de la Vega, Manuel

- D. in Chemical Engineering, Professor of Chemical Engineering (University of Oviedo)
- Coordinator of the Master in Food Biotechnology at the University of Oviedo since 2013.
- Principal investigator in three projects of the National R&D Plan. Since 2004.

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.

We have the most complete and updated educational program in the market. Train with us and improve your skills"

Module 1. Validation of New Methodologies and Processes

1.1. Critical Control Points
- 1.1.1. Significant Hazards
- 1.1.2. Prerequisite Programs
- 1.1.3. Critical Control Point Management Chart

1.2. Verification of a Self-Control System
- 1.2.1. Internal Audits
- 1.2.2. Review of Historical Records and Trends
- 1.2.3. Customer Complaints
- 1.2.4. Detection of Internal Incidents

1.3. Monitoring, Validation and Verification of Control Points
- 1.3.1. Surveillance or Monitoring Techniques
- 1.3.2. Validation of Controls
- 1.3.3. Efficiency Verification

1.4. Validation of Processes and Methods
- 1.4.1. Documentary Support
- 1.4.2. Validation of Analytical Techniques
- 1.4.3. Validation Sampling Plan
- 1.4.4. Method Bias and Accuracy
- 1.4.5. Determining Uncertainty

1.5. Validation Methods
- 1.5.1. Method Validation Stages
- 1.5.2. Types of Validation Processes, Approaches
- 1.5.3. Validation Reports, Summary of Data Obtained

1.6. Incident and Deviation Management
- 1.6.1. Formation of the Work Team
- 1.6.2. Description of the Problem
- 1.6.3. Root Cause Determination
- 1.6.4. Corrective and Preventive Actions
- 1.6.5. Efficiency Verification

1.7. Root Cause Analysis and Its Methods
- 1.7.1. Causal Analysis: Qualitative Methods
  - 1.7.1.1. Tree Causes Root
  - 1.7.1.2. Why
  - 1.7.1.3. Cause Effect
  - 1.7.1.4. Ishikawa Diagram
- 1.7.2. Cause Analysis: Quantitative Methods
  - 1.7.2.1. Data Collection Data Model
  - 1.7.2.2. Pareto Chart
  - 1.7.2.3. Scatter Plots
  - 1.7.2.4. Histograms

1.8. Claims Management
- 1.8.1. Claim Data Collection
- 1.8.2. Investigation and Action
- 1.8.3. Preparation of Technical Report
- 1.8.4. Claims Trend Analysis

1.9. Internal Audits of the Self-Control System
- 1.9.1. Competent Auditors
- 1.9.2. Audit Program and Plan
- 1.9.3. Scope of the Audit
- 1.9.4. Reference Documents

1.10. Execution of Internal Audits
- 1.10.1. Opening Meeting
- 1.10.2. System Evaluation
- 1.10.3. Deviations from Internal Audits
- 1.10.4. Closing Meeting
- 1.10.5. Evaluation and Monitoring of the Effectiveness of Deviation Closure

Module 2. Development, Coordination and Execution of R&D&I Projects.

2.1. Innovation and Competitiveness in the Food Industry
- 2.1.1. Analysis of the Food Sector
- 2.1.2. Innovation in Processes, Products and Management
- 2.1.3. Regulatory Conditions for the Marketing of Novel Foods

2.2. The R&D System
- 2.2.1. Public Investigation and Private Investigation
- 2.2.2. Regional and Local Business Support Plans
- 2.2.3. National R&D&I Plans
- 2.2.4. International Programs
- 2.2.5. Research Promotion Organizations

2.3. R+D+I Projects
- 2.3.1. R&D&I Aid Programs
- 2.3.2. Types of Projects
- 2.3.3. Types of Financing
- 2.3.4. Project Evaluation, Monitoring and Control

2.4. Scientific and Technological Production
- 2.4.1. Publication, Dissemination and Diffusion of Research Results
- 2.4.2. Basic Research/Applied Research
- 2.4.3. Private Sources of Information

2.5. Technology Transfer
- 2.5.1. Protection of Industrial Property. Patents
- 2.5.2. Regulatory Constraints on Transfers in the Food Sector
- 2.5.3. *European Food Safety Authority* (EFSA)
- 2.5.4. *Food and Drug Administration* (FDA)
- 2.5.5. National Organizations. Example: Spanish Agency for Food Safety and Nutrition (AESAN)

2.6. Planning of R&D&I Projects
- 2.6.1. Work Decomposition Scheme
- 2.6.2. Resource Allocation
- 2.6.3. Priority of Tasks
- 2.6.4. Gantt Chart Method
- 2.6.5. Digitally Supported Planning Methods and Systems

2.7. Documentary Development of R&D&I Projects
- 2.7.1. Prior Studies
- 2.7.2. Delivery of Progress Reports
- 2.7.3. Development of the Project Report

2.8. Project Execution
- 2.8.1. Checklist
- 2.8.2. Deliverables
- 2.8.3. Project Progress Control

2.9. Project Delivery and Validation
- 2.9.1. ISO Standards for the Management of R&D&I Projects
- 2.9.2. Completion of the Project Phase
- 2.9.3. Analysis of Results and Feasibility

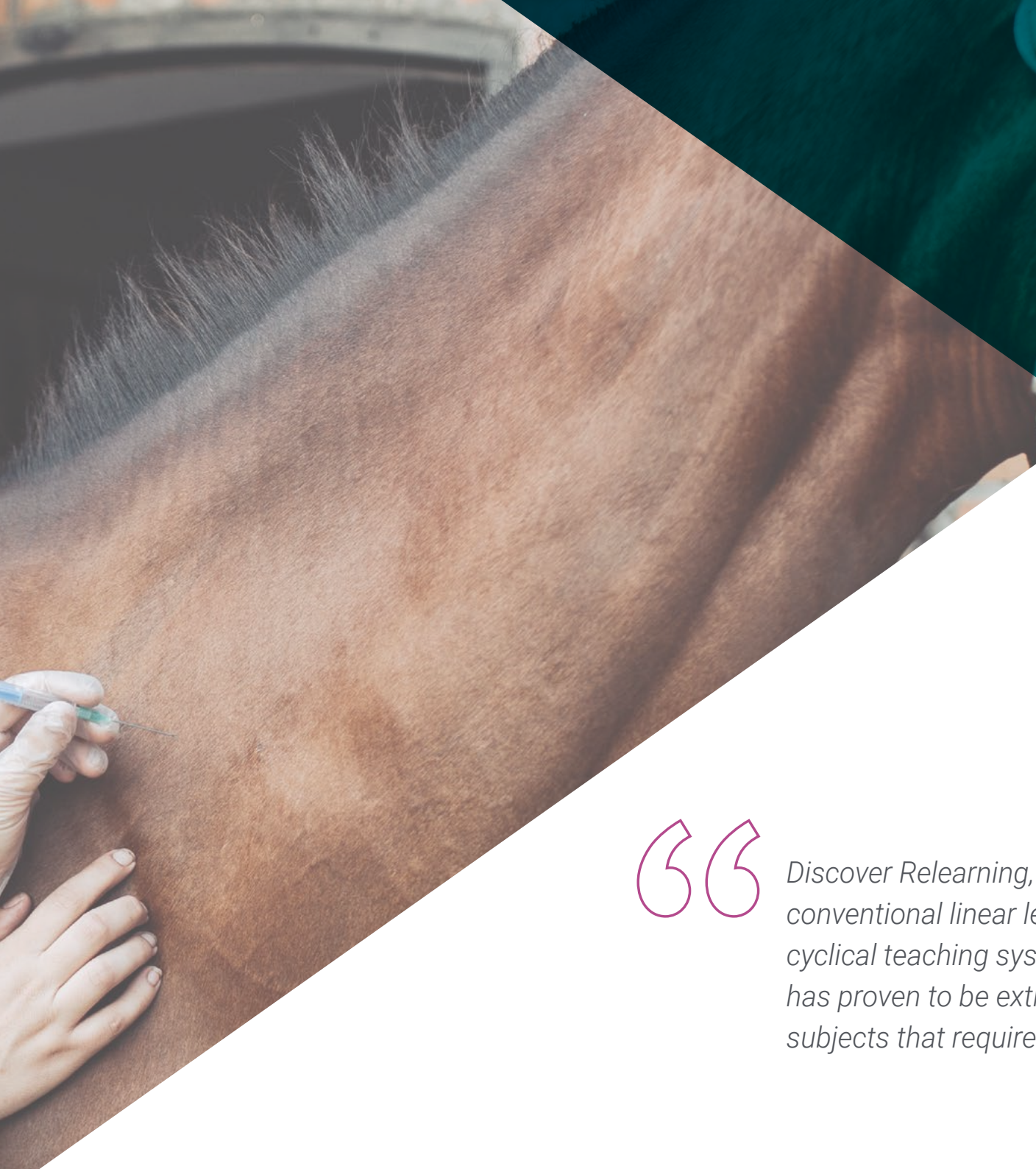
2.10. Implementation of R&D&I Projects Developed by the Company
- 2.10.1. Purchase Management
- 2.10.2. Supplier Validation
- 2.10.3. Project Validation and Verification

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

05

Methodology

This academic program offers students 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.

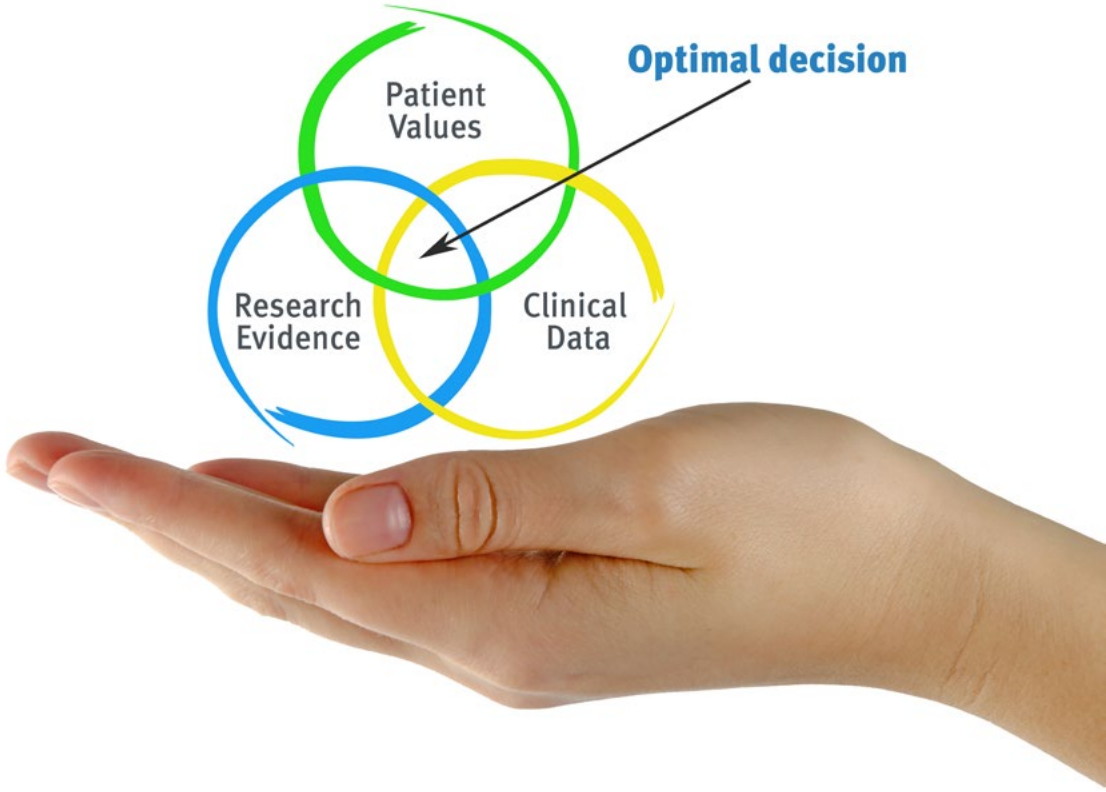


Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

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.

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:

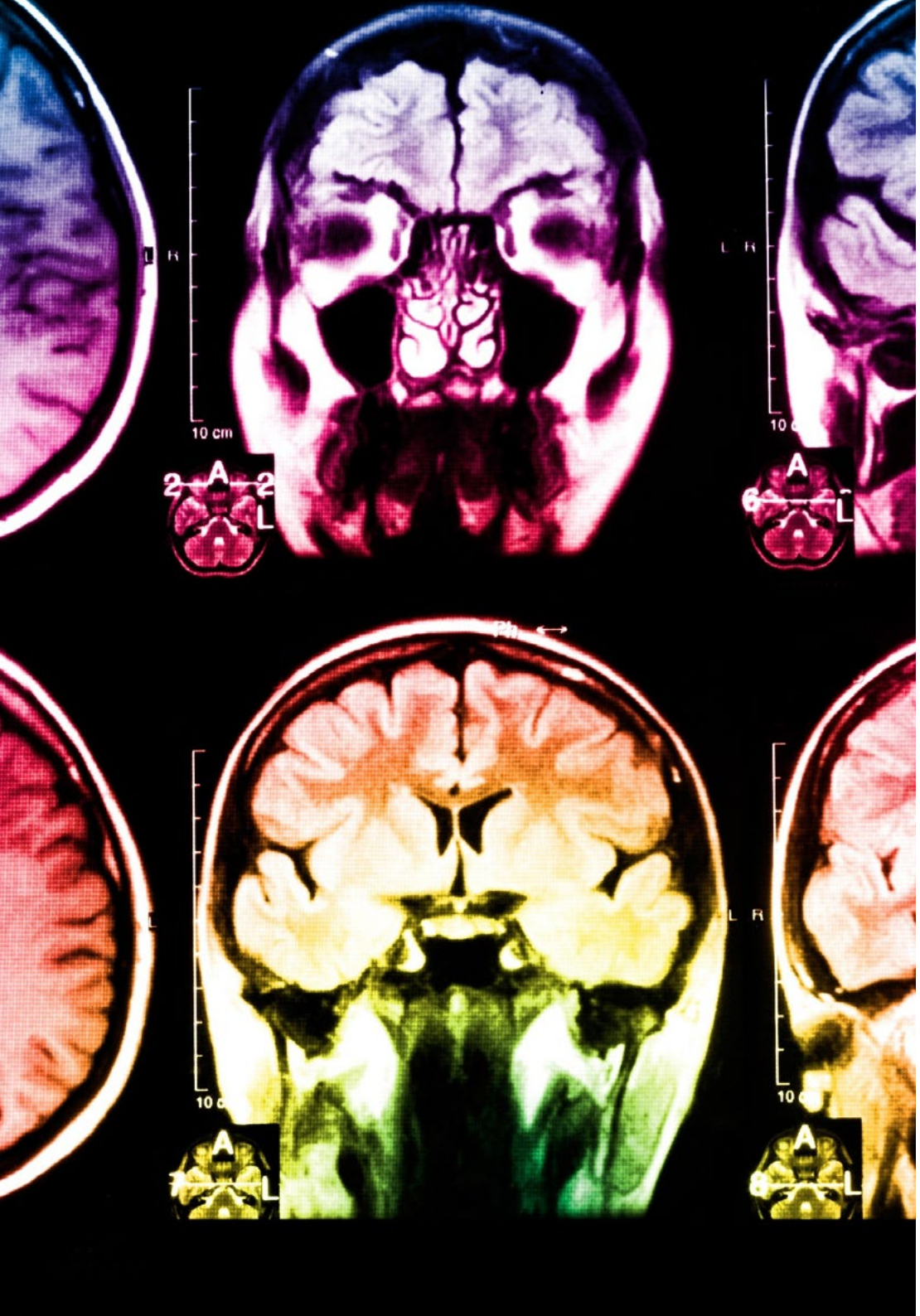
1. Veterinarians who follow this method not only manage to assimilate concepts, but also develop their mental capacity through exercises to evaluate real situations and knowledge application
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real 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 Spanish-speaking 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.

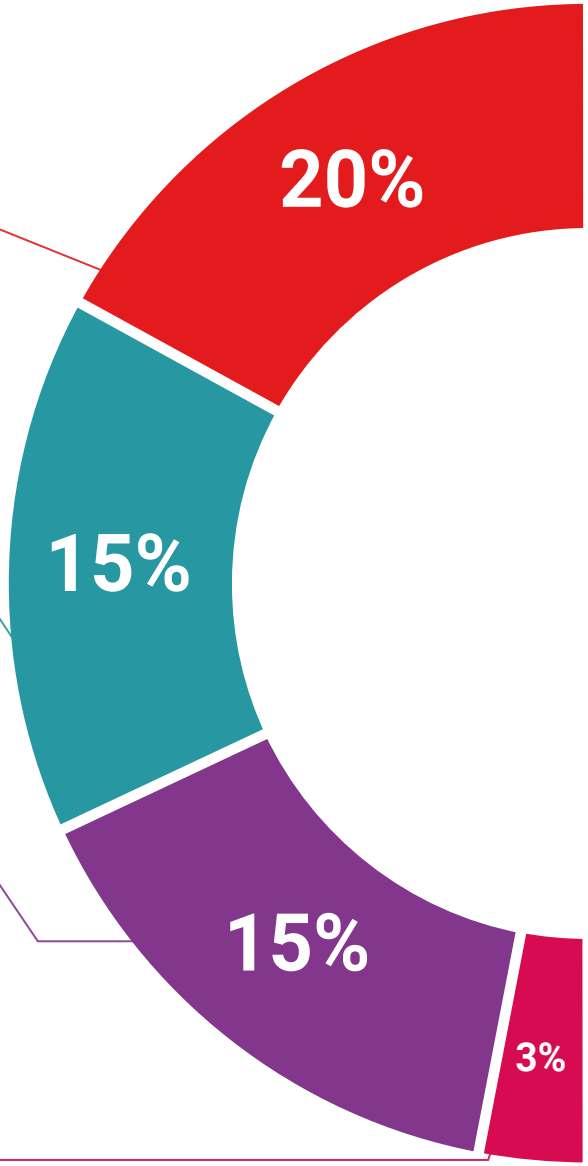
Interactive Summaries

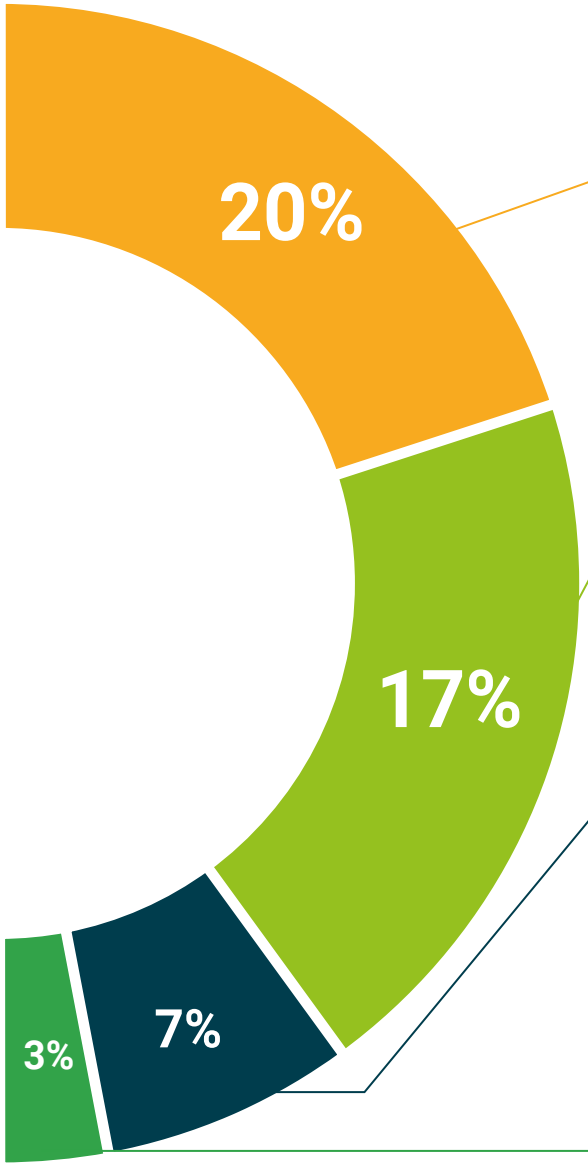
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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 Certificate in Validation of Methodologies Applied to R&D&I Projects guarantees, in addition to the most rigorous and up-to-date training, access to a diploma issued by TECH Technological University.

Successfully complete this training program and receive your university certificate without travel or laborious paperwork"

This **Postgraduate Certificate in Validation of Methodologies Applied to R&D&I Projects** 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 **certificate** issued by **TECH Technological University** via tracked delivery*.

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

Title: **Postgraduate Certificate in Validation of Methodologies Applied to R&D&I Projects**

Official Nº of Hours: **300 h.**


tech technological university

Awards the following

DIPLOMA

to

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

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Validation of Methodologies Applied to R&D&I Projects

This is a qualification awarded by this University, equivalent to 300 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 diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost..

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