

# Postgraduate Certificate Public Health Surveillance





## Postgraduate Certificate Public Health Surveillance

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/pharmacy/postgraduate-certificate/public-health-surveillance](http://www.techtute.com/us/pharmacy/postgraduate-certificate/public-health-surveillance)

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# 01

# Introduction

Public Health Surveillance has become an essential component of Public Health, consisting of both the systematic collection and interpretation of health data with the aim of optimizing the quality of life of the population. In this context, pharmacy professionals play an essential role in the early detection of health problems, the evaluation of the effectiveness of pharmaceutical interventions and the promotion of health in the community. Therefore, pharmacists need to keep abreast of the latest trends in the incidence and prevalence of diseases in the community. With this in mind, TECH presents a pioneering 100% online university program that will address recent innovations in Epidemiological Surveillance.





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*Through this 100% online Postgraduate Certificate, you will acquire the skills to identify disease outbreaks, assess health trends and recognize changes in the incidence of disease in the population”*

A recent report by the World Health Organization shows that the incidence of communicable diseases continues to be a global challenge for the health system. In this regard, epidemiological surveillance is an indispensable tool for the early detection and control of disease outbreaks. Faced with this situation, pharmacists play an active role in data collection or data reporting. In this way, these professionals contribute to the prevention and active surveillance of infectious diseases.

Within this framework, TECH launches a revolutionary and very complete Postgraduate Certificate in Public Health Surveillance. The academic itinerary will analyze the mechanisms to design effective health protection programs, taking into account aspects such as the analysis of the burden of pathologies or the evaluation of the impact and communication of results. In this regard, the syllabus will delve into the latest innovations in both Pharmacology prevention and control systems. Thanks to this, graduates will develop advanced skills to ensure efficacy and safety during drug administration.

In order to strengthen these contents, TECH offers a 100% online educational environment, adapted to the needs of busy pharmacists who want to advance their careers. It also relies on the Relearning methodology, based on the repetition of key concepts to fix knowledge and facilitate learning. In this way, the combination of flexibility and a robust pedagogical approach makes it highly accessible. In addition, professionals will have access to an extensive library of innovative multimedia resources in different audiovisual formats, such as interactive summaries, explanatory videos, case studies and infographics. In this way, pharmacy personnel will have access to an immersive learning experience that will optimize their daily practice and significantly raise their professional horizons.

This **Postgraduate Certificate in Public Health Surveillance** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Development of practical case studies presented by experts in health sciences
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where the self-assessment process can be carried out to improve learning
- ♦ Its special emphasis on innovative methodologies
- ♦ 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



*This academic itinerary gives you the opportunity to update your knowledge in a real scenario, with the maximum scientific rigor of an institution at the forefront of technology”*

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*You will deepen your knowledge in Research and Analysis of Indicators to evaluate the effectiveness of Public Health interventions, such as prevention programs or vaccination campaigns”*

The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading 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 education programmed to prepare for real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Do you want to incorporate into your practice the most innovative strategies to respond to health emergencies such as epidemic outbreaks? Get it with this program.*

*With TECH's disruptive Relearning methodology, you will assimilate all the knowledge in an optimal way and successfully achieve the results you are looking for.*



02

# Objectives

Through this Postgraduate Certificate, pharmacists will master the principles of Public Health Surveillance. In this same line, professionals will develop advanced competencies to identify disease outbreaks, evaluate health trends and recognize changes in the prevalence of pathologies in the population. In this way, graduates will be prepared to participate in disease outbreak prevention and control activities, such as vaccination or community education.





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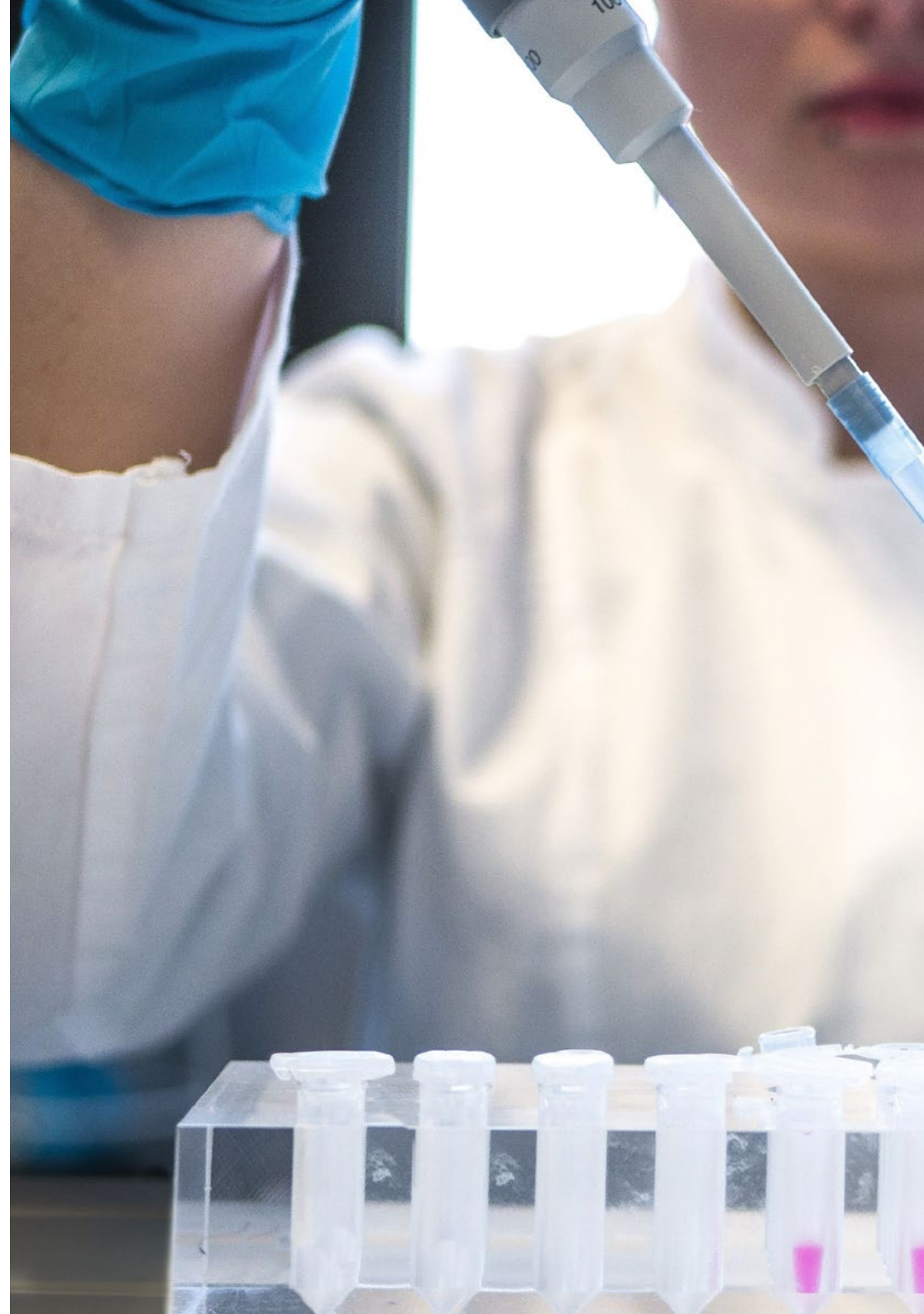
*You will manage health information systems to access epidemiological data and use them to monitor the state of the population”*



## General Objectives

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- ♦ Develop a broad and comprehensive conceptual framework of the situation, challenges and needs of public health in the 21st century
- ♦ Examine the international and global framework of public health policies
- ♦ Determine the key factors for proper health crisis communication: crisis communication and crisis of communication
- ♦ Identify the theoretical and methodological framework for Public Health evaluation
- ♦ Identify the steps to be followed for disease assessment using epidemiological data
- ♦ Compile the research methodology related to disease surveillance
- ♦ Identify the main risk and protective factors in communicable and noncommunicable diseases
- ♦ Analyze the importance of assessing the quality of intervention studies
- ♦ Develop the fundamentals of clinical epidemiology, measurement of frequency and distribution of diseases
- ♦ Critically evaluate the efficacy and effectiveness of clinical interventions, pharmacological treatments, surgical interventions and prevention strategies
- ♦ Substantiate the principles of the epidemiological method
- ♦ Substantiate the health promotion principles, social determinants of health, health-related behavioral theories, and strategies to promote healthy lifestyles and health-promoting environments
- ♦ Analyze the main health risks for different vulnerable groups
- ♦ Implement a holistic and integrative vision in the assessment of the impact of environmental risks on health protection





## Specific Objectives

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- ◆ Determine the fundamental principles of health protection and prevention, including epidemiological monitoring, and the assessment, management, control and communication of risk
- ◆ Examine self-monitoring and monitoring systems through hazard analysis and identification of critical control points
- ◆ Delve into research systems and carry out a critical analysis of indicators, as well as records and evaluation systems
- ◆ Determine the requirements in primary prevention research for chronic diseases, as well as evaluate effective strategies
- ◆ Specify the terms needed to conduct research to improve the design, implementation and evaluation of comprehensive health protection and prevention programs
- ◆ Analyze, in detail, the interpretation of epidemiological data related to environmental health, including disease monitoring and environmental risk factors
- ◆ Describe innovative pharmacovigilance monitoring and prevention systems that allow early detection of drug-related adverse events
- ◆ Describe international disease monitoring systems and the systems of cooperation between them

03

# Course Management

In line with its priority to offer the most complete and renewed university programs in the academic panorama, TECH carries out a meticulous process to form its teaching staff. For the delivery of this Postgraduate Certificate, TECH has enlisted the services of recognized experts in Public Health Surveillance. These professionals have an extensive professional background, where they have contributed to optimize the health of the population through the identification, prevention and control of diseases. This is an endorsement for pharmacists, as they will have access to an immersive experience that will optimize their daily practice and enhance their professional prospects.



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*You will have the support of a teaching team formed by distinguished professionals in Public Health”*

## Management



### Dr. Camacho Parejo, Juan José

- General Director of Public Health at the Ministry of Health of Castilla-La Mancha
- Director of the Center for Analysis, Documentation and Evaluation of Health Policies of the SESCAM
- Director of Hospitals in DG Health Care of SESCAM
- Medical Director at the Integrated Care Management of Talavera de la Reina
- Deputy Medical Director at Nuestra Señora del Prado Hospital (Talavera de la Reina)
- Urologist at the Río Hortega Hospital, Jove Hospital (Gijón) and Nuestra Señora del Prado Hospital (Talavera de la Reina)
- Specialist in Urology
- Senior Management Program in the Health Sector, Administration/Management of Health Services, San Telmo Business School
- Degree in Medicine and Surgery from the Complutense University of Madrid



### **Ms. Ruiz Redondo, Julia María**

- ◆ Coordinator of the National Working Group on Public Health 2.0 in the SEMG
- ◆ Coordinator of the General Directorate of Public Health in the Ministry of Health of Castilla-La Mancha
- ◆ Coordinator of the Regional Advisory Group on Immunization at the Regional Ministry of Health of Castilla-La Mancha
- ◆ Nurse Inspector in the Management of Coordination and Inspection of Castilla-La Mancha in the SESCOAM
- ◆ Specialized Care Nurse in the Hospital Emergency Area at the General Hospital of Tomelloso
- ◆ Master's Degree in Medical Management and Clinical Management by UNED, ISCIII, National School of Health
- ◆ Master's Degree in Vaccines from the Catholic University of Murcia
- ◆ Master's Degree in Specialized Emergency Nursing Care, Critical Care and Post-Anesthesia from the University of Valencia
- ◆ Master's Degree in Nursing Services Management from the UNED
- ◆ Senior Healthcare Management Program, San Telmo Business School
- ◆ Graduate in Nursing from the Catholic University of Ávila
- ◆ Diploma in Nursing from the University of Jaén

## Professors

### Dr. Sanz Muñoz, Iván

- ♦ Scientific and Virological Surveillance Manager at the National Influenza Center in Valladolid
- ♦ Director and Coordinator of the Influenza Update Conference at the National Influenza Center
- ♦ Doctorate in Health Sciences Research, University of Valladolid
- ♦ Master's Degree in Vaccines from the Catholic University of Murcia
- ♦ Master's Degree in Genomics and Medical Genetics from the University of Granada
- ♦ Master's Degree in Health Sciences Research: Pharmacology, Neurobiology and Nutrition from the University of Valladolid
- ♦ Master's Degree in Anthropology and Forensic Genetics from the University of Granada
- ♦ Degree in Biology from the University of Salamanca
- ♦ Member of: WHO Global Influenza Surveillance and Response System (GISRS), Institute of Health Sciences of Castilla and León (ICSCYL) and Center for Biomedical Research in Infectious Diseases (CIBERINFEC)







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

# 04

# Structure and Content

Thanks to this university program, pharmacists will have a solid knowledge of the fundamentals of Public Health Surveillance. The syllabus will delve deeper into self-monitoring systems; addressing factors such as risk identification, the establishment of preventive protocols or the monitoring of control points. At the same time, the syllabus will analyze the interpretation of epidemiological data on chronic diseases. In this way, graduates will be able to take preventive measures to control the spread of these pathologies. The didactic materials will also analyze the response models to alerts, epidemic outbreaks and emergencies. Thanks to this, professionals will develop protocols to optimally manage crises.



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*You will be able to identify diseases of interest for epidemiological surveillance, including chronic pathologies”*

## Module 1. Public Health Monitoring

- 1.1. Public Health Protection, Prevention and Surveillance: Classification, Evaluation, Management, Control and Risk Communication
  - 1.1.1. Health Protection and Prevention
  - 1.1.2. Health Surveillance and Risk Management
  - 1.1.3. Risk Communication. Mechanisms and Limitations
- 1.2. Self-control and Surveillance Systems: Hazard Analysis and Critical Control Points
  - 1.2.1. Establishment of Preventive Protocols
  - 1.2.2. Risk Identification and Assessment
  - 1.2.3. Implementation and Follow-up. Control Points
- 1.3. Research and Critical Analysis of Process and Result Indicators, Records, and Evaluation Systems Development and Innovation
  - 1.3.1. Research and Analysis of Indicators
  - 1.3.2. Recording and Evaluation for Efficient Data Management
  - 1.3.3. Innovation in Evaluation Systems
- 1.4. Research in the Design, Implementation, and Impact Evaluation of Health Protection and Prevention Programs
  - 1.4.1. Mechanisms for the Design of Health Protection and Prevention Programs
  - 1.4.2. Implementation of Health Protection and Prevention Programs
  - 1.4.3. Analysis of the Impact of Health Protection and Prevention Programs
- 1.5. Analysis and Interpretation of Epidemiological Data on Environmental Health: Surveillance, Estimation, Plans and Programs
  - 1.5.1. Importance of Environmental Health in Human Health
  - 1.5.2. Exploration of Environmental Epidemiological Data
  - 1.5.3. Practical Application of Environmental Data Analysis
- 1.6. Interpretation of Epidemiological Data on Chronic Diseases and Planning: Surveillance, Estimation, Plan Design, Programs and Screening
  - 1.6.1. Epidemiological Analysis of Chronic Diseases. Importance of Follow-up
  - 1.6.2. Design and Development of Interventions for Chronic Diseases
  - 1.6.3. Epidemiological Surveillance and Disease Load Analysis



- 1.7. Research in Primary Prevention of Chronic Diseases: Health Protection
  - 1.7.1. Research in Primary Prevention of Chronic Diseases
  - 1.7.2. Applied Research in Prevention and Health Protection
  - 1.7.3. Impact Evaluation and Communication of Results
- 1.8. Innovation in Pharmacovigilance Monitoring and Prevention Systems: Alerts and Preventive Interventions
  - 1.8.1. Importance of Pharmacovigilance. Safety in the Use of Medications
  - 1.8.2. Advances in Pharmacovigilance Monitoring Systems
  - 1.8.3. Risk Prevention through Preventive Interventions
- 1.9. Models of Response to Alerts, Epidemic Outbreaks and Emergencies Development of Protocols and Procedures
  - 1.9.1. Response Strategies for Health Emergencies
  - 1.9.2. Development of Crisis Management Protocols
  - 1.9.3. Implementation and Evaluation of Emergency Response
- 1.10. International Health and Innovation in International Cooperation for Epidemiological Surveillance
  - 1.10.1. International Health Global Perspective on Epidemiological Surveillance
  - 1.10.2. Innovation in International Cooperation for Epidemiological Surveillance
  - 1.10.3. Challenges and Future of International Health Cooperation



*This is a flexible university qualification that is compatible with the most demanding Daily responsibilities. What are you waiting for to enroll?"*

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.



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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, students will be confronted with multiple simulated clinical cases based on real patients, in which they will have to investigate, establish hypotheses and ultimately, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Pharmacists learn better, more quickly 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. Gervas, 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, attempting to recreate the actual conditions in a pharmacist'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. Pharmacists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
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. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



## Relearning Methodology

At TECH we enhance the 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.



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

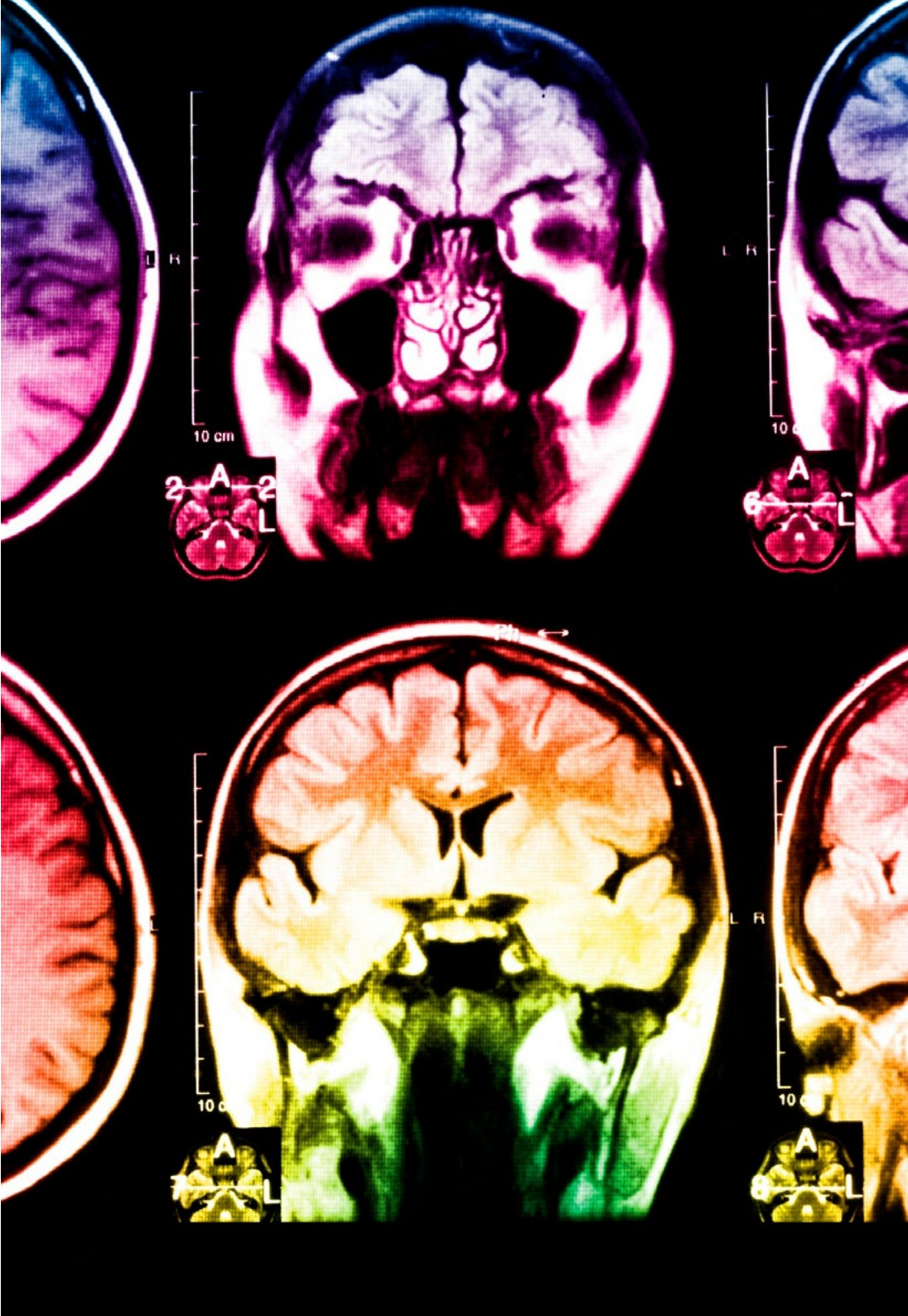
At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 115,000 pharmacists have been trained with unprecedented success in all clinical specialties, regardless of the surgical load. This pedagogical methodology is developed in a highly demanding environment, with a university student body with a high socioeconomic profile and an average age of 43.5 years.

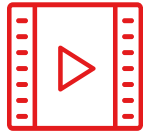
*Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.*

In our program, learning is not a linear process, but rather a spiral (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 created specifically for the course by specialist pharmacists who will be teaching the course, so that the didactic development is highly specific and accurate.

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.



### Video Techniques and Procedures

TECH introduces students to the latest techniques, to the latest educational advances, to the forefront of current pharmaceutical care procedures. All of this, first hand, and explained and detailed with precision to contribute to assimilation and a better understanding. And best of all, you can watch them as many times as you want.



### Interactive Summaries

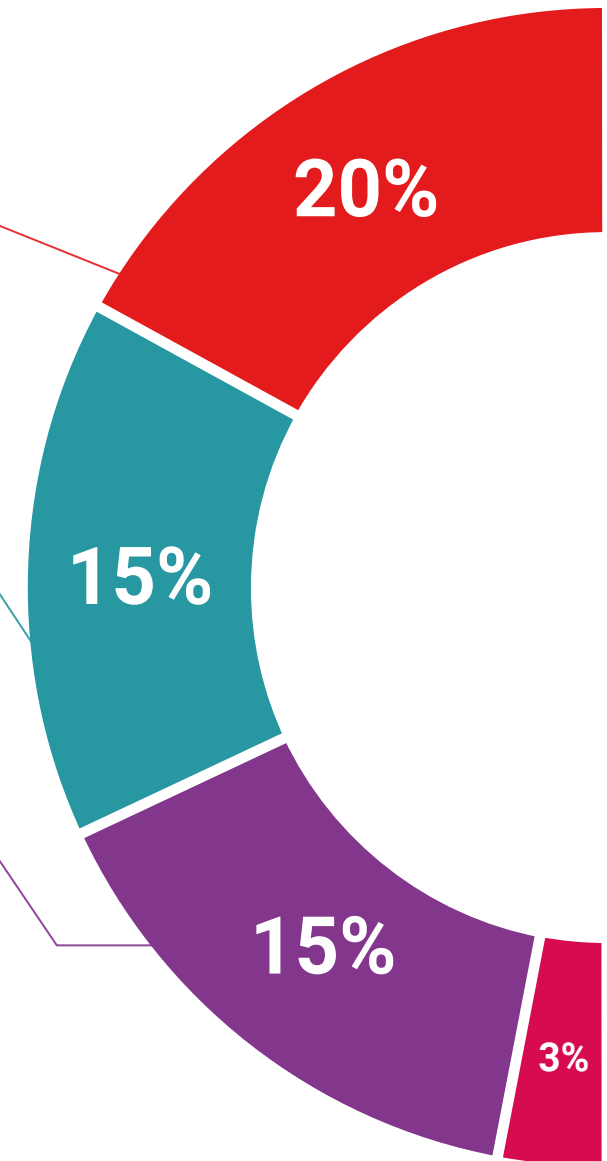
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

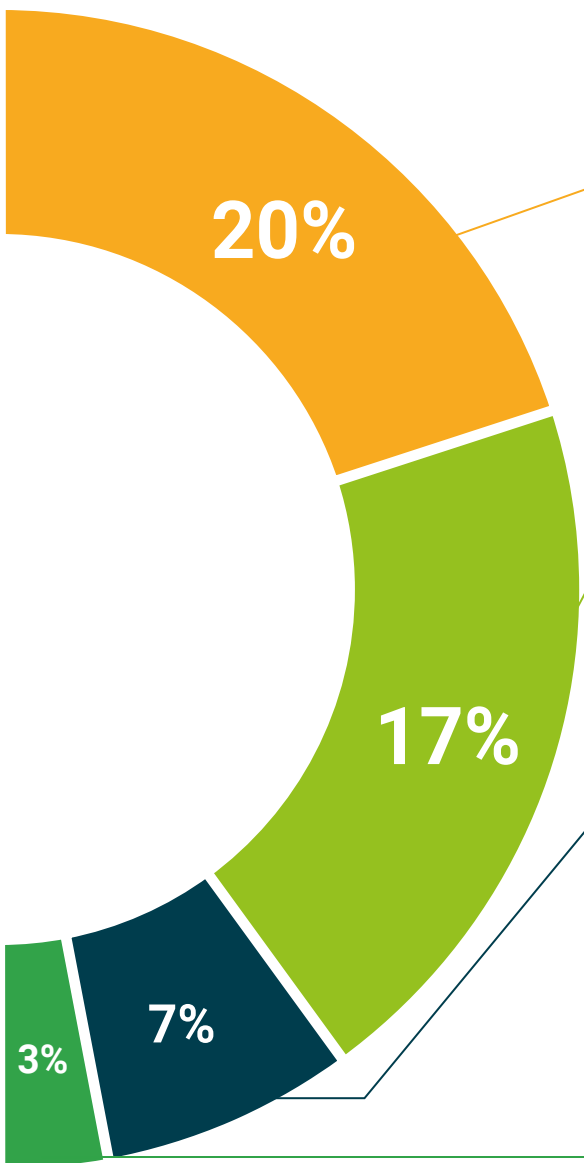
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



### 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, 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 students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



**Classes**

There is scientific evidence on the usefulness of learning by observing experts. The system known as 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 Public Health Surveillance guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.





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*Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”*

This private qualification will allow you to obtain a **Postgraduate Certificate in Public Health Surveillance** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University**, is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** private qualification, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Public Health Surveillance**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



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





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