

Postgraduate Certificate Environmental Public Health



Postgraduate Certificate Environmental Public Health

- » 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/environmental-public-health

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01

Introduction

Environmental Health is fundamental to ensuring the well-being of communities, as it addresses environmental factors that can affect the community, such as air quality or pollution. In this context, pharmacists play an essential role in the proper management of drug waste, thereby reducing pollution. In addition, they participate in research and policy development aimed at mitigating the impact of the industry by promoting environmentally friendly practices. For this reason, TECH has designed a program that aims to provide students with a comprehensive and collaborative vision, through the innovative Relearning methodology and through a 100% online curriculum.



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Thanks to this Postgraduate Certificate you will delve into the most relevant aspects of Environmental Public Health, such as exposure to radioactivity or environmental management of Legionellosis”

Environmental Public Health is vital for global well-being. The World Health Organization (WHO) estimates that around 24% of all deaths worldwide are due to unhealthy environmental conditions, underlining the magnitude of the problem. The challenges facing the community and healthcare professionals are complex and range from air and water pollution, to toxic chemical exposure and the effects of climate change. In this sense, TECH has developed a Postgraduate Certificate of excellence. This has an agenda that covers the most significant problems, to enable pharmacists to develop plans, in cooperation with experts from other areas, to provide effective solutions.

Therefore, students will delve into pollutant sources and risks associated with air quality, as well as control systems and strategies. Water quality is another critical challenge. UNICEF reports that nearly 2.2 billion people lack access to safe drinking water, which contributes to the spread of infectious diseases. Therefore, this program will focus on drinking water treatment and water supply infrastructure.

On the other hand, graduates will address the environmental management of vector-borne diseases, focusing on identification and prevention processes. They will also be prepared for the implementation of comprehensive strategies to reduce the impact and protect communities from diseases such as dengue or malaria.

At the same time, they will be able to specialize through a completely online curriculum, from anywhere, using multimedia and interactive material. In addition, they will benefit from the innovative and revolutionary Relearning methodology, which combines maximum pedagogical rigor, the highest academic standards and the latest educational technology.

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

- ♦ The development of case studies presented by experts in Public Health and Health Management
- ♦ 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 self-assessment can be used 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



Master comprehensively the complex concepts addressed in this program through the revolutionary Relearning methodology, based on the reiteration of concepts for their internalization"

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Update your knowledge at your own pace, without schedules and in a comfortable way through this comprehensive TECH university program"

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.

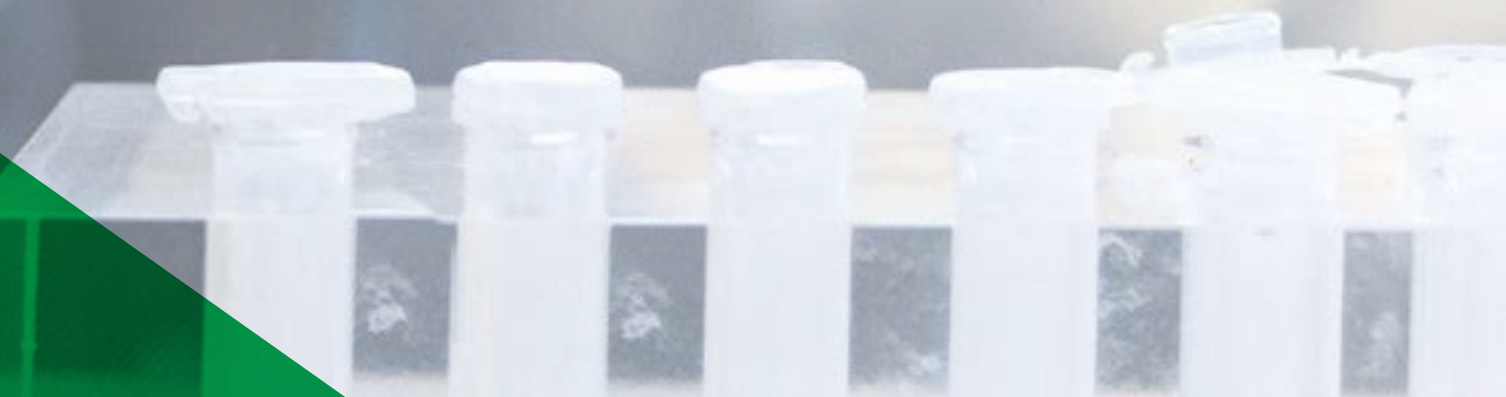
Thanks to a high quality pedagogical content, you will delve into methods of environmental management of legionellosis, as well as chemical risk at international level.

You will analyze the influence of climate change on health and delve into methods of action to address this problem, from the pharmaceutical field.



02 Objectives

This TECH Postgraduate Certificate is based on the most important aspects of the field of Environmental Public Health. Through a rigorous, cutting-edge syllabus, pharmacists acquire the necessary skills to become professionals of reference and achieve all their objectives. They can also update their knowledge, analyzing the latest advances in combating environmental problems and explore the dangers derived from the use of recreational water, as well as the conditions that favor the spread of bacteria such as Legionella.



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Address the health implications of climate change and delve into the pollutant sources associated with air and water quality with this comprehensive TECH program”



General Objectives

- ♦ 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

- ◆ Substantiate the interrelationship of health with its environmental determinants, to apply cross-cutting approaches, such as One Health
- ◆ Analyze the most significant risks of contaminants in drinking water and establish the key measures to ensure their contribution to the population
- ◆ Identify the hazards arising from the use of recreational waters and analyze the preventive measures necessary for the safe use of recreational waters
- ◆ Examine the main preventive measures to avoid the conditions that favor colonization, multiplication and dispersion of Legionella
- ◆ Substantiate the risk and impact of vectors and the diseases they transmit to develop and establish strategies and means of control
- ◆ Analyze the exposure to natural radioactivity, specifying actions to reduce exposure to radon



Delve into Legionellosis control strategies, as well as environmental determinants of health and position yourself as a reference professional"

03

Course Management

This academic program has a first-rate faculty of renowned specialists in the field of Environmental Public Health. These experts have solid academic background and extensive practical experience in the detection of health risk factors for the community, as well as in the implementation of prevention programs. In addition, they facilitate a collaborative and critical learning environment where pharmacists can enhance their professional development and ability to make a positive impact.





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Update your knowledge thanks to a curriculum developed by prestigious, active experts with extensive professional experience”

Management



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 SESCAM
- ♦ 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. Montero Rubio, Juan Carlos

- ♦ Head of Section of Clinical and Environmental Microbiology at the Institute of Health Sciences, Castilla-La Mancha
- ♦ Doctor in the Department of Preventive Medicine and Public Health, Medical Immunology and Microbiology, Rey Juan Carlos University
- ♦ Master's Degree in Public Health, University Center of Public Health, Autonomous University of Madrid
- ♦ Master's Degree in Environmental Management, Institute of Ecological Research of Malaga, Open International University
- ♦ Doctorate in Biological Sciences from the Complutense University of Madrid

Dr. Columé Díaz, Almudena

- ♦ Official Public Health Pharmacist in the Community Regional Government of Castilla-La Mancha
- ♦ Member of the Research Group Specialized in the Automation and Miniaturization of Analytical Techniques, at the University of Cordoba
- ♦ Doctorate in Chemistry from the University of Cordoba
- ♦ Degree in Pharmacy from the University of Seville
- ♦ Degree in Food Science and Technology, University of Córdoba

Mr. Gago Gutiérrez, Roberto

- ♦ Environmental Health Inspector in the Official Pharmaceutical Services, Ávila
- ♦ Head of the Physical and Chemical Risk Assessment Section of the Environmental Health Service of the Castilla and León Regional Government
- ♦ Food Safety Inspector in the Official Pharmaceutical Services, Ávila
- ♦ Assistant Pharmacist in Pharmacy Office
- ♦ University Expert in Pharmaceutical Marketing from the UNED
- ♦ Degree in Pharmacy from the University of Salamanca

Ms. González Gascón y Marín, María Almudena

- ♦ Official Pharmacist of the Community Regional Government of Castilla-La Mancha
- ♦ First Prize for "Best Communication" of the Spanish Society of Environmental Health for the article "Ochratoxin A and residues of phytosanitary products in wines produced in the health districts of La Roda and Villarrobledo (Albacete)"
- ♦ Degree in Pharmacy from the Complutense University of Madrid
- ♦ Diploma in Advanced Studies in Preventive Medicine and Public Health, Complutense University of Madrid
- ♦ Collaboration grant at the European Food Safety Authority

Ms. Martínez Domínguez, María Inmaculada

- ♦ Civil servant of the Superior Corps of Chemistry in the Community Regional Government of Castilla-La Mancha
- ♦ Consultant in the private sector, especially in activities related to food safety and development and implementation of HACCP system
- ♦ Master's Degree in Environmental Management from the Institute of Training and Employment
- ♦ Degree in Chemistry from the University of Castilla-La Mancha
- ♦ Degree in Food Science and Technology from the University of Castilla-La Mancha
- ♦ Diploma in Public Health from the National School of Health

04

Structure and Content

The syllabus of this Postgraduate Certificate has been carefully prepared, taking into account the specific requirements of the field being addressed, as well as the proposals and demands of the prestigious teaching staff. In this sense, through this rigorous program, students will delve into the different environmental risks. They will also analyze problems such as water quality, Legionellosis or vector-borne diseases.



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Specialize in Environmental Public Health and acquire competencies to face important problems, such as the influence of climate change or air quality in society"

Module 1. Environmental Health

- 1.1. Environmental Health: Health Impact Assessment. One Health Approach
 - 1.1.1. Environmental Health through Environmental Determinants of Health
 - 1.1.2. Interaction of Health and Environment with One Health Approach
 - 1.1.3. Health in All Policies. Health Impact Assessment Tools
- 1.2. Water Quality: Supply
 - 1.2.1. Sanitary Quality of Water: Sources of Contamination and Health Risks Emerging Contaminants
 - 1.2.2. Infrastructures of Water Supplies for Human Consumption
 - 1.2.3. Drinking Water Treatment. Products for the Treatment of Drinking Water
 - 1.2.4. Quality Control of Water for Human Consumption
 - 1.2.5. Disinfection By-products
 - 1.2.6. Communication of Water Quality to the Population
- 1.3. Water Quality. Recreational Waters: Swimming Pools and Bathing Waters
 - 1.3.1. Risks Associated with the Use of Recreational Waters
 - 1.3.2. Requirements for Swimming Pool and Aquatic Park Facilities
 - 1.3.3. Treatments to Ensure Water and Air Quality Products
 - 1.3.4. Control of the Sanitary Quality of Water and Air
 - 1.3.5. Bathing Water Quality Requirements
 - 1.3.6. Measures to Prevent Bathing Water Contamination
 - 1.3.7. Surveillance and Sanitary and Environmental Control of Bathing Water
 - 1.3.8. Communication of Risks to the Population
- 1.4. Environmental Management of Legionellosis
 - 1.4.1. Bacteria from an Environmental Health Perspective
 - 1.4.2. Installations and Equipment Involved and Preventive Measures
 - 1.4.3. Control Strategies and Responsibilities
 - 1.4.4. Examples of Cases and Outbreaks. Lessons Learned





- 1.5. Public Health and Chemical Safety
 - 1.5.1. International Chemical Risk Management
 - 1.5.2. Hazard Classification and Hazard Communication: Labeling and Safety Data Sheets
 - 1.5.3. Registers for the Protection of Human Health and the Environment against Chemical Hazards. Evaluation, Authorization and Restrictions of Chemical Substances and Mixtures
 - 1.5.4. Biocides. Administrative Control over Activities and User
- 1.6. Environmental Management of Vector-borne Diseases
 - 1.6.1. Main Vectors
 - 1.6.2. Impact on Health
 - 1.6.3. Vector Control Strategies
- 1.7. Public Health Impact of Contaminated Soil, Solid Waste and Contaminated Wastewater
 - 1.7.1. Contaminating and Emerging Sources
 - 1.7.2. Pollution Prevention Measures
 - 1.7.3. Monitoring Systems and Control Strategies
- 1.8. Monitoring and Control of Physical Contamination and Natural Radioactivity to Protect Public Health
 - 1.8.1. Natural Radioactivity
 - 1.8.2. Routes of Exposure
 - 1.8.3. Radioactivity in Drinking Water and its Regulation
 - 1.8.4. Radon as a Parameter in Indoor Air Quality and its Management
- 1.9. Public Health Protection. Air Quality: Atmospheric Pollution
 - 1.9.1. Air Quality Analysis
 - 1.9.2. Pollutant Sources and Health Risks Associated with Air Quality
 - 1.9.3. Monitoring Systems and Control Strategies
 - 1.9.4. Communication of Risks to the Population
- 1.10. Climate Change and Health
 - 1.10.1. Climate Change
 - 1.10.2. Actions to Address Climate Change
 - 1.10.3. Influence of Climate Change and Health
 - 1.10.4. Climate Change and Social Determinants of Health

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

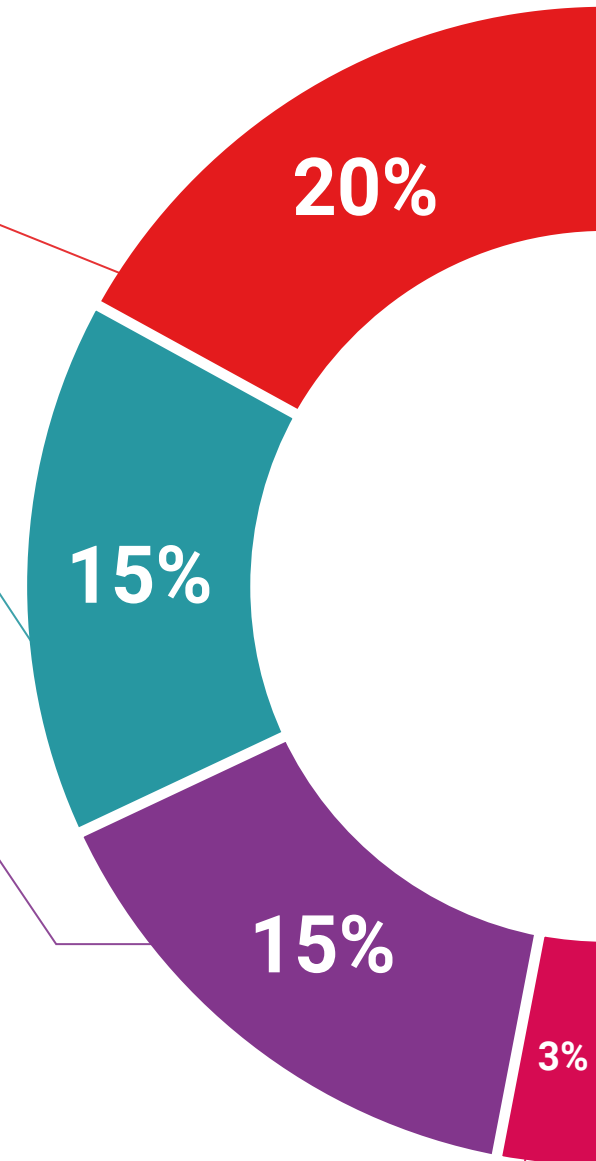
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

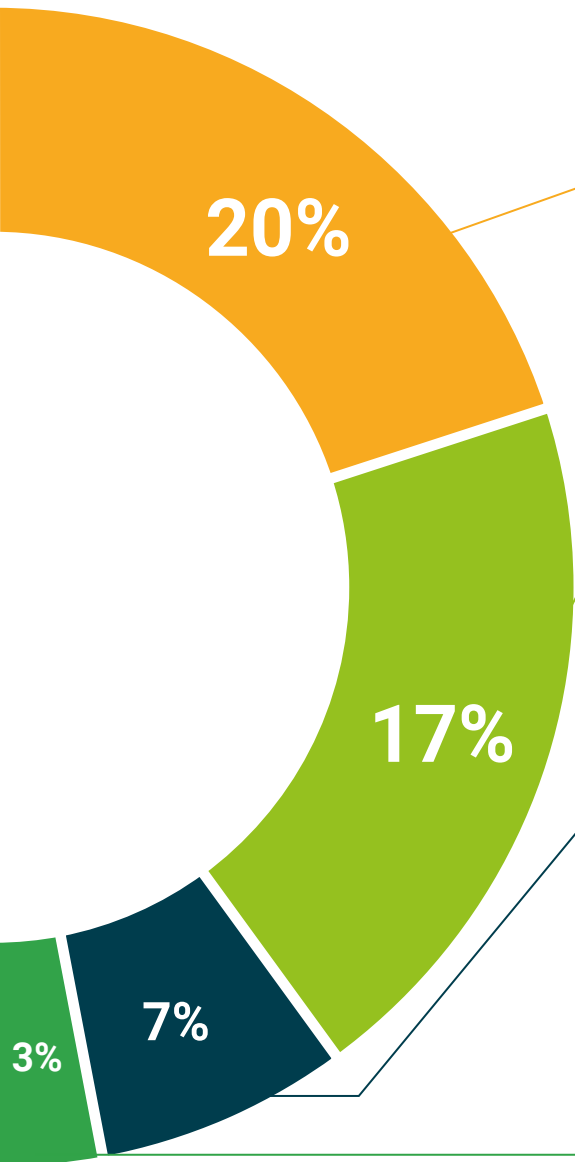
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



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 Environmental Public Health 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 Environmental Public Health** 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 Environmental Public Health**

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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