



## Postgraduate Certificate

## **Environmental Public** Health for Nursing

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Accreditation: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/nursing/postgraduate-certificate/environmental-public-health-nursing

## Index

 $\begin{array}{c|c} 01 & 02 \\ \hline & \\ \hline \\ 03 & 04 \\ \hline \\ \hline \\ Course Management & \\ \hline \\ \hline \\ p. 12 & \\ \hline \end{array}$ 

06 Certificate

p. 30



According to the World Health Organization, outbreaks of Legionellosis are a global concern, with a steady increase in the incidence of reported cases in recent years. This increase raises a number of questions about strategies for prevention, diagnosis and management of this disease. In this regard, nursing professionals play a crucial role in the care of affected patients. These professionals are responsible for continuous monitoring of individuals, including monitoring vital signs, administering prescribed medications and providing supportive care. In light of this, TECH presents a revolutionary online program focused on best practices for the management of environmentally related pathologies.



## tech 06 | Introduction

The interaction between the environment and human health is an area of growing concern in the field of Nursing. Exposure to environmental factors (such as air, water and soil pollution) or toxic chemicals can have a significant impact on the health of populations, increasing the risk of cardiovascular diseases, respiratory diseases and cancer. In this context, nurses play a crucial role in the promotion of Environmental Health and the prevention of pathologies associated with the environment. Therefore, it is essential that they remain at the forefront of the most innovative strategies to advocate for policies that protect the environment and promote Public Health.

In this scenario, TECH implements a pioneering and comprehensive Postgraduate Certificate in Environmental Public Health for Nursing. Designed by experts in this field, the academic itinerary will focus on the One Health approach, which will allow graduates to holistically address health problems arising from the interconnection between environmental, human and animal health. In addition, the teaching materials will delve into issues such as air pollution, vector-borne diseases and the effects of climate change. In this way, nurses will obtain competencies to design preventive measures to reduce the risk of environment-related diseases.

On the other hand, the methodology implemented in this program reinforces its innovative character. TECH offers a 100% online educational environment, adapted to the needs of active nurses seeking to advance their careers. Similarly, it employs the Relearning teaching system, based on the reiteration of key concepts to fix knowledge and facilitate learning. Therefore, the combination of flexibility and a robust pedagogical approach makes it highly accessible. In addition, nursing professionals will have access to a rich library of multimedia resources in different audiovisual formats, such as interactive summaries, explanatory videos and infographics.

This **Postgraduate Certificate in Environmental Public Health for Nursing** 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 eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable 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



A syllabus that will prepare you to overcome all challenges in the field of Environmental Public Health"



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 learn in 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, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Looking to develop skills to identify which population groups are most susceptible to environmental hazards? Achieve it with this program.

You will reinforce your key knowledge through the innovative Relearning methodology, achieving an effective assimilation of the subject matter.







## tech 10 | Objectives



## **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 a correct communication in health crisis: crisis communication and communication crisis
- Identify the theoretical and methodological framework for evaluation in Public Health
- 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 quality assessment 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
- Fundamentals of the principles of the epidemiological method
- Fundamentals of the principles of health promotion, social determinants of health, health-related behavioral theories, and strategies to promote healthy lifestyles and environments
- Analyze the main health risks for different vulnerable groups
- Implement a holistic and integrative vision in the impact assessment 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 to establish the fundamental 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 the colonization, multiplication and dispersion of Legionella
- Substantiate the risk and impact of vectors and the diseases they transmit, in order to develop and establish control strategies and means of control
- Analyze the exposure to natural radioactivity, specifying actions to reduce exposure to radon



You will expand your knowledge through real cases and the resolution of complex situations in simulated learning environments"

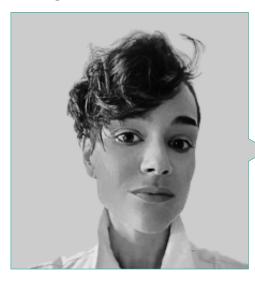






## tech 14 | Course Management

## 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
- Nurse of Specialized Care in the Hospital Emergency Area at the General Hospital of Tomelloso
- Master's Degree in Medical Management and Clinical Management by the UNED, ISCIII, National School of Health
- Master's Degree in Vaccines from the Catholic University of San Antonio de Murcia
- Master's Degree in Specialized Emergency Nursing Care, Critical Patient Area and Post-Anesthesia Care by the University of Valencia
- Master's Degree in Nursing Services Management from the UNED
- Senior Healthcare Management Program from San Telmo Business School
- Graduate in Nursing from the Catholic University of Avila
- Diploma in Nursing from the University of Jaér

## **Professors**

### Ms. Martínez Domínguez, María Inmaculada

- Civil Servant of the Superior Body of Chemistry in the Board of Communities of Castilla- La Mancha
- Consultant in the private sector, especially in activities related to food safety and HACCP system development and implementation
- Master's Degree in Environmental Management from Training and Employment Institute
- 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

#### Dr. Columé Díaz, Almudena

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

#### Mr. Gago Gutiérrez, Roberto

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

### Ms. González Gascón y Marín, María Almudena

- Official Pharmacist of the Regional Government of Castilla-La Mancha
- First Prize for the "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)"
- Graduate in Pharmacy from the Complutense University of Madrid
- Diploma in Advanced Studies in Preventive Medicine and Public Health by
- Complutense University of Madrid
- Collaboration grant at the European Food Safety Authority

### 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, Immunology and Medical Microbiology, Rey Juan Carlos University
- Master's Degree in Public Health from the University Center of Public Health of the Autonomous University of Madrid
- Master's Degree in Environmental Management from the Institute of Ecological Research of Malaga, Open International University
- Graduate in Biological Sciences from the Complutense University of Madrid





## tech 18 | Structure and Content

## 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: Water 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 Pool and Bathing Waters
  - 1.3.1. Risks Associated with the Use of Recreational Waters
  - 1.3.2. Requirements for Swimming Pool and Water 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. Water Pollution Prevention Measures
  - 1.3.7. Sanitary and Environmental Monitoring and Control of Bathing Waters
  - 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. Facilities and Equipment Involved and Preventive Measures
  - 1.4.3. Control Strategies and Responsibilities
  - 1.4.4. Examples of Cases and Outbreaks Apprenticeships





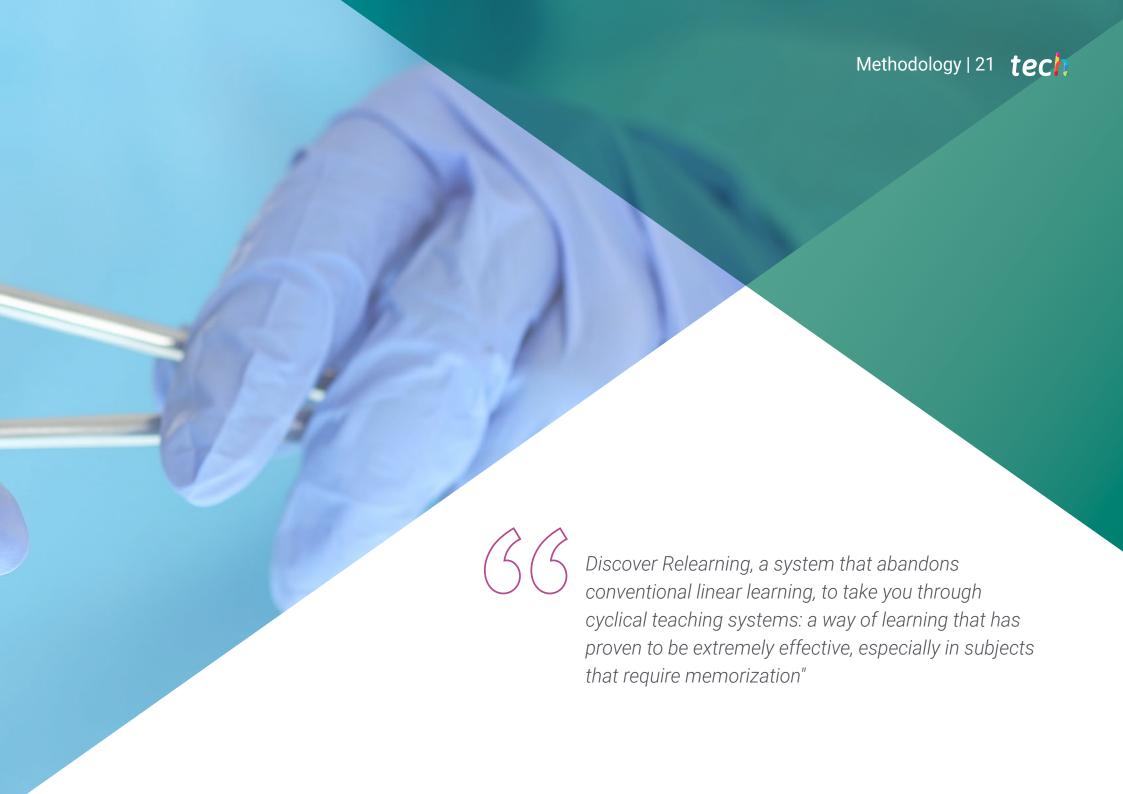
## Structure and Content | 19 tech

- 1.5. Public Health and Chemical Safety
  - 1.5.1. International Chemical Risk Management
  - 1.5.2. Hazard Classification and 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
  - 1.5.4. Biocides Administrative Control Over Activities and Users
- 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 Regulations
  - 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



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.

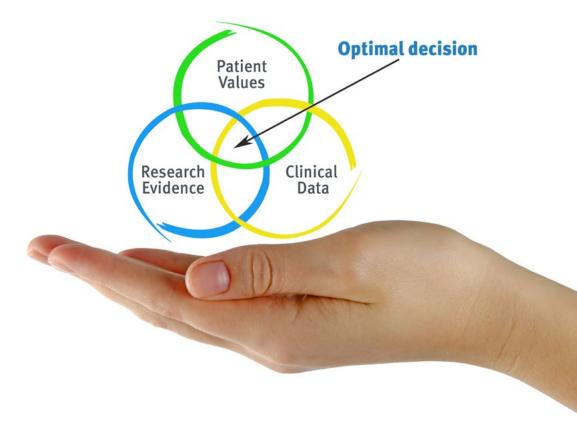


## tech 22 | Methodology

## At TECH Nursing School we use the Case Method

In a given situation, what should a professional do? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Nurses learn better, faster, and more sustainably over time.

With TECH, nurses can experience a learning methodology 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 real conditions in professional nursing 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:

- Nurses who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
- 2. The learning process has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
- 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.





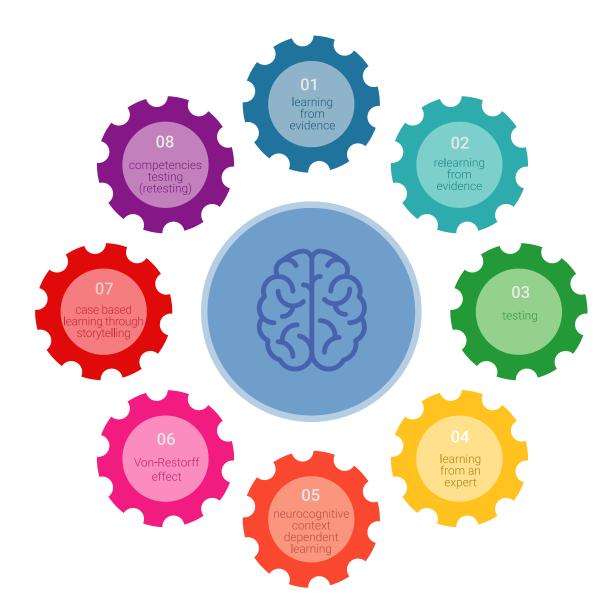
## Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.

The nurse 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.



## Methodology | 25 tech

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

With this methodology we have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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 produced by the specialists who teach the course, specifically for the course, so that the teaching content is really specific and precise.

These contents are then adapted in 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.



## **Nursing Techniques and Procedures on Video**

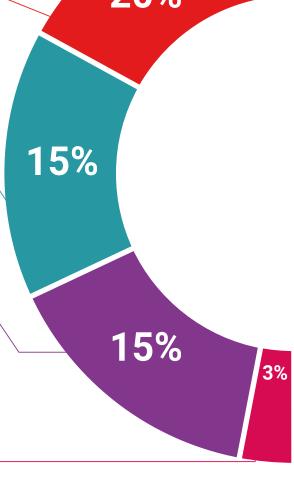
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch them as many times as you 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 exclusive educational system for presenting multimedia content 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.





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**



The student's knowledge is periodically assessed and re-assessed throughout the program, through evaluative and self-evaluative activities and exercises: in this way, students can check how they are doing in terms of achieving their goals.

#### Classes



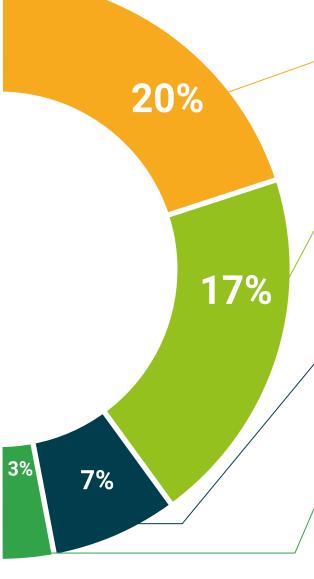
There is scientific evidence suggesting that observing third-party experts can be useful.

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.







## tech 30 | Certificate

This private qualification will allow you to obtain a **Postgraduate Certificate in Environmental Public Health for Nursing** 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 for Nursing

 ${\sf Modality:} \ \textbf{online}$ 

Duration: 6 weeks

Accreditation: 6 ECTS



Mr./Ms. \_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

#### Postgraduate Certificate in Environmental Public Health for Nursing

This is a private qualification of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



<sup>\*</sup>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.

health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning



# Postgraduate Certificate Environmental Public Health for Nursing

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