

Postgraduate Diploma

Multidrug-Resistant Bacteria
in Human Microbiology and
Animal Health for Nursing



Postgraduate Diploma Multidrug-Resistant Bacteria in Human Microbiology and Animal Health for Nursing

- » Modality: online
- » Duration: 6 months.
- » Certificate: TECH Global University
- » Accreditation: 18 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/nursing/postgraduate-diploma/postgraduate-diploma-multidrug-resistant-bacteria-human-microbiology-animal-health-nursing

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01

Introduction

At the intersection of Human Microbiology and Animal Health, the growing threat of Multidrug-Resistant Bacteria poses significant challenges for Nursing professionals. These microorganisms, capable of resisting a variety of antibiotics, not only complicate the clinical management of infections, but also put global public health at risk. Given this situation, professionals have a responsibility to incorporate into their clinical procedures the most cutting-edge techniques for both prevention and control of these emerging conditions. To help them with this task, TECH is creating a revolutionary undergraduate program focused on the management of antimicrobial resistance in humans and animals. In addition, the program is delivered in a convenient 100% online format.



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Thanks to this Postgraduate Diploma, based on Relearning, you will implement the most innovative infection control strategies to prevent the transmission of Multidrug-Resistant Bacteria"

The World Health Organization estimates that more than 700,000 people die each year due to infections caused by antibiotic-resistant bacteria. This concern is compounded by the rise of Multidrug-Resistant Bacteria, capable of resisting multiple classes of antimicrobials in both human and animal health settings. In this context, nurses play a crucial role in early identification, clinical management and implementation of infection control strategies to mitigate the impact of these microorganisms. Therefore, it is essential for professionals to keep abreast of the latest scientific findings on this subject in order to gain a better understanding of how to treat such infections.

Faced with this scenario, TECH presents a complete Postgraduate Diploma in Multidrug-Resistant Bacteria in Human Microbiology and Animal Health for Nursing.

The academic itinerary will delve into the mechanisms of acquired resistance to antibiotics, which will help graduates to quickly identify infections caused by resistant microorganisms. Likewise, the syllabus will analyze the implication of bacteria in the food chain from the approach of One Health approach. This will enable nurses to holistically understand the spread of resistance and its implications in both humans and animals. In addition, the program will provide practitioners with strategic plans to reduce the risk of selection and spread of antibiotic rejection.

Moreover, the methodology of this program reinforces its innovative character. TECH offers a 100% online educational environment, adapted to the needs of busy professionals seeking 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, nurses will have access to a rich library of multimedia resources in different audiovisual formats (such as interactive summaries) for a dynamic update.

This **Postgraduate Diploma in Multidrug-Resistant Bacteria in Human Microbiology and Animal Health for Nursing** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ The development of practical cases presented by experts in Microbiology, Medicine and Parasitology
- ♦ 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 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



You will 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 delve into the One Health strategy, a holistic approach that will allow you to better address zoonotic diseases and environmental threats that affect Public Health”

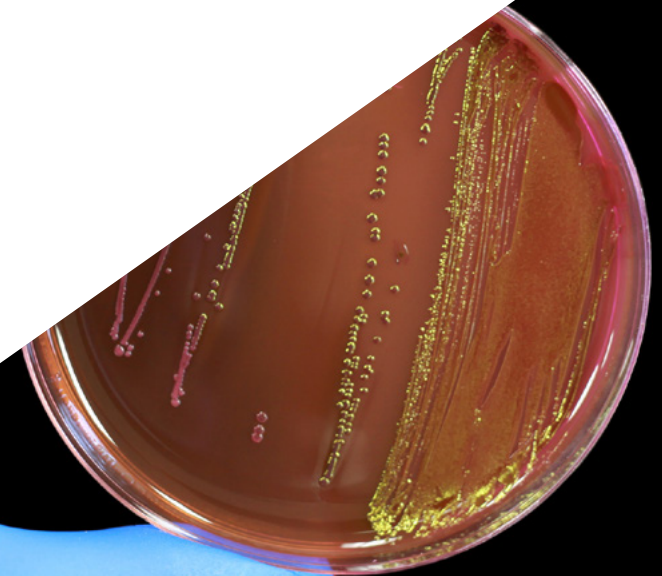
The program’s teaching staff includes professionals from the sector who contribute their work experience to this specializing program, as well as renowned specialists from leading societies and prestigious universities.

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 incorporate state-of-the-art preventive measures against bacterial resistance in animals into your practice? Achieve it with this program.

TECH's 100% online methodology will allow you to broaden your academic horizons while you develop your full-time healthcare activity.



02

Objectives

Through this Postgraduate Diploma, nursing personnel will be able to lead initiatives for the management and prevention of Multidrug-Resistant Bacteria in both human and animal health environments. Upon completion of the syllabus, graduates will incorporate state-of-the-art measures to prevent bacterial resistance into their clinical practice. In addition, nurses will develop advanced skills to comprehensively care for patients affected by multidrug-resistant infections, including the management of associated complications. In addition, experts will be able to provide specialized advice in Human Microbiology and Animal Health.





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You will gain advanced competencies to perform optimal clinical management of infections caused by Multidrug-Resistant Bacteria”

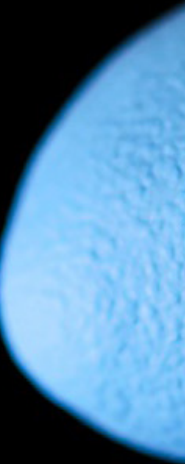


General Objectives

- ♦ Understand how bacterial resistance evolves as new antibiotics are introduced into clinical practice
- ♦ Study the presence of multidrug-resistant bacteria in the environment and wildlife, as well as to understand their potential impact on public health
- ♦ Acquire knowledge on the dissemination of resistant bacteria in food production



This Postgraduate Diploma allows you to exercise in simulated environments, which provide immersive learning programmed to specialize in real situations"





Specific Objectives

Module 1. Multidrug-Resistant Bacteria in Human Pathology

- ♦ Evaluate the causes of antibiotic resistance, from the lack of new antibiotics, to socioeconomic factors and health policies
- ♦ Examine the current status of antibiotic resistance in the world, including global statistics and trends in different regions

Module 2. Antimicrobial Resistance in Animal Health

- ♦ Analyze the causes and mechanisms of bacterial resistance in the veterinary field, including the dissemination of antibiotic resistance genes
- ♦ Identify the species of multi-resistant bacteria of major veterinary importance, and understand their impact on animal health
- ♦ Establish preventive and control measures against bacterial resistance in animals, including systems and processes for the appropriate use of antibiotics, and alternatives to antibiotics in livestock and aquaculture
- ♦ Determine the objectives of the One Health strategy and its application in the study and control of multidrug-resistant bacteria

Module 3. Multi-drug Resistant Bacteria in the Food Chain

- ♦ Analyze the role of the food chain in the spread of bacterial resistance to antibiotics through food of animal and plant origin, as well as through water



03

Course Management

For the design and delivery of this Postgraduate Diploma, TECH has a first class teaching staff composed of authentic references in Multidrug-Resistant Bacteria in Human Microbiology and Animal Health. These professionals have a wide professional background, where they have been part of renowned health institutions to contribute to optimize the welfare of patients. Therefore, they have developed a variety of teaching materials that stand out for their quality and application to the requirements of today's labor market. In this way, nurses will be guaranteed access to an academic experience that will significantly raise their professional horizons.



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You will have the support of a teaching team highly specialized in Multidrug-Resistant Bacteria in Human Microbiology and Animal Health"

Management



Dr. Ramos Vivas, José

- Director of the Banco Santander-Universidad Europea del Atlántico Chair in Innovation
- Researcher at the Center for Innovation and Technology of Cantabria (CITICAN)
- Academic of Microbiology and Parasitology at the European University of the Atlantic
- Founder and former director of the Cellular Microbiology Laboratory of the Valdecilla Research Institute (IDIVAL)
- PhD in Biology from the University of León
- Doctor in Sciences from the University of Las Palmas de Gran Canaria
- Degree in Biology from the University of Santiago de Compostela
- Master's Degree in Molecular Biology and Biomedicine from the University of Cantabria
- Member of: CIBERINFEC (MICINN-ISCIII), Member of the Spanish Society of Microbiology and Member of the Spanish Network of Research in Infectious Pathology



Professors

Dr. Alegría González, Ángel

- ◆ Researcher and Academician in Food Microbiology and Molecular Genetics of the University of León
- ◆ Researcher in 9 projects funded by public competitive calls
- ◆ Principal Investigator as beneficiary of an Intra-European Marie Curie Fellowship (IEF-FP7) in a project associated to the University of Groningen (The Netherlands)
- ◆ PhD in Food Biotechnology from the University of Oviedo - CSIC
- ◆ Degree in Biology from the University of Oviedo
- ◆ Master's Degree in Food Biotechnology from the University of Oviedo

Dr. Acosta Arbelo, Félix

- ◆ Researcher at the University Institute IU-ECOQUA of the ULPGC
- ◆ Academician in the Area of Animal Health, Infectious Diseases in the Faculty of Veterinary Medicine, ULPGC
- ◆ European Specialist in Aquatic Animal Health by the European Committee of Veterinary Specialization
- ◆ Specialist in Microbiology and Immunology, Marqués de Valdecilla University Hospital, Cantabria
- ◆ Doctor in Veterinary Medicine, University of Las Palmas de Gran Canaria (ULPGC)
- ◆ Degree in Veterinary Medicine, University of Las Palmas de Gran Canaria (ULPGC)

04

Structure and Content

With this Postgraduate Diploma, nurses will have a thorough understanding of the microbiology of Multidrug-Resistant Bacteria. The syllabus will delve into the mechanisms of acquired antibiotic resistance, which will allow professionals to identify early infections caused by resistant bacteria. In line with this, the syllabus will provide graduates with the most effective the most innovative strategies to both prevent and control the spread of microbial resistance in the food chain. In addition, the program will focus on the impact the program will focus on the impact of resistances detected in animals and in the environment on Public Health.





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You will develop competencies in the implementation and evaluation of effective infection control measures to reduce the transmission of Multidrug-Resistant Bacteria”

Module 1. Multidrug-Resistant Bacteria in Human Pathology

- 1.1. Mechanisms of Acquired Resistance to Antibiotics
 - 1.1.1. Acquisition of Resistance Genes
 - 1.1.2. Mutations.
 - 1.1.3. Acquisition of Plasmids
- 1.2. Mechanisms of Intrinsic Resistance to Antibiotics
 - 1.2.1. Blockage of Antibiotic Entry
 - 1.2.2. Modification of the Antibiotic Target
 - 1.2.3. Inactivation of the Antibiotic
 - 1.2.4. Antibiotic Expulsion
- 1.3. Chronology and Evolution of Antibiotic Resistance
 - 1.3.1. Discovery of Antibiotic Resistance
 - 1.3.2. Plasmids
 - 1.3.3. Evolution of Resistance
 - 1.3.4. Current Trends in the Evolution of Antibiotic Resistance
- 1.4. Antibiotic Resistance in Human Pathology
 - 1.4.1. Increased Mortality and Morbidity
 - 1.4.2. Impact of Resistance on Public Health
 - 1.4.3. Economic Cost Associated with Antibiotic Resistance
- 1.5. Multidrug-Resistant Human Pathogens
 - 1.5.1. *Acinetobacter Baumannii*
 - 1.5.2. *Pseudomonas Aeruginosa*
 - 1.5.3. *Enterobacteriaceae*
 - 1.5.4. *Enterococcus Faecium*
 - 1.5.5. *Staphylococcus Aureus*
 - 1.5.6. *Helicobacter Pylori*
 - 1.5.7. *Campylobacter Spp*
 - 1.5.8. *Salmonellae*
 - 1.5.9. *Neisseria Gonorrhoeae*
 - 1.5.10. *Streptococcus Pneumoniae*
 - 1.5.11. *Hemophilus Influenzae*
 - 1.5.12. *Shigella Spp*





- 1.6. Bacteria Highly Dangerous to Human Health: Update of the WHO List
 - 1.6.1. Critical Priority Pathogens
 - 1.6.2. High Priority Pathogens
 - 1.6.3. Pathogens with Medium Priority
- 1.7. Analysis of the Causes of Antibiotic Resistance
 - 1.7.1. Lack of New Antibiotics
 - 1.7.2. Socioeconomic Factors and Health Policies
 - 1.7.3. Poor Hygiene and Sanitation
 - 1.7.4. Health Policies and Antibiotic Resistance
 - 1.7.5. International Travel and Global Trade
 - 1.7.6. Dispersal of High-Risk Clones
 - 1.7.7. Emerging Pathogens with Resistance to Multiple Antibiotics
- 1.8. Antibiotic Use and Abuse in the Community
 - 1.8.1. Prescription
 - 1.8.2. Acquisition
 - 1.8.3. Misuse of Antibiotics
- 1.9. Current Status of Antibiotic Resistance in the World
 - 1.9.1. Global Statistics
 - 1.9.2. Central and South America
 - 1.9.3. Africa
 - 1.9.4. BORRAR
 - 1.9.5. North America
 - 1.9.6. Asia and Oceania
- 1.10. Perspectives on Antibiotic Resistance
 - 1.10.1. Strategies to Mitigate the Problem of Multi-Drug Resistance
 - 1.10.2. International Actions
 - 1.10.3. Actions at the Global Level

Module 2. Antimicrobial Resistance in Animal Health

- 2.1. Antibiotics in the Veterinary Field
 - 2.1.1. Prescription
 - 2.1.2. Acquisition
 - 2.1.3. Misuse of Antibiotics
- 2.2. Multidrug-Resistant Bacteria in the Veterinary Field
 - 2.2.1. Causes of Bacterial Resistance in the Veterinary Field
 - 2.2.2. Dissemination of Antibiotic Resistance Genes (ARGs), Especially through Horizontal Transmission Mediated by Plasmids
 - 2.2.3. Mobile Colistin Resistance Gene (*mcr*)
- 2.3. Multidrug-Resistant Bacterial Species of Veterinary Importance
 - 2.3.1. Pet Pathogens
 - 2.3.2. Cattle Pathogens
 - 2.3.3. Pig Pathogens
 - 2.3.4. Poultry Pathogens
 - 2.3.5. Goat and Sheep Pathogens
 - 2.3.6. Fish and Aquatic Animal Pathogens
- 2.4. Impact of Multi-Resistant Bacteria in Animal Health
 - 2.4.1. Animal Suffering and Losses
 - 2.4.2. Impact on Household Livelihoods
 - 2.4.3. Generation of "Superbugs"
- 2.5. Multidrug-Resistant Bacteria in the Environment and Wildlife
 - 2.5.1. Antibiotic Resistant Bacteria in the Environment
 - 2.5.2. Antibiotic Resistant Bacteria in Wildlife
 - 2.5.3. Antimicrobial Resistant Bacteria in Marine and Inland Waters
- 2.6. Impact of Resistances Detected in Animals and in the Environment on Public Health
 - 2.6.1. Shared Antibiotics in Veterinary Medicine and Human Medicine
 - 2.6.2. Transmission of Resistance from Animals to Humans
 - 2.6.3. Transmission of Resistance from the Environment to Humans

- 2.7. Prevention and Control
 - 2.7.1. Preventive Measures Against Bacterial Resistance in Animals
 - 2.7.2. Systems and Processes for the Effective Use of Antibiotics
 - 2.7.3. Role of Veterinarians and Pet Owners in the Prevention of Bacterial Resistance
 - 2.7.4. Treatments and Alternatives to Antibiotics in Animals
 - 2.7.5. Tools for Limiting the Emergence of Antimicrobial Resistance and its Spread in the Environment
- 2.8. Strategic Plans to Reduce the Risk of Selection and Spread of Antimicrobial Resistance
 - 2.8.1. Monitoring and Surveillance of the Use of Critical Antibiotics
 - 2.8.2. Training and Research
 - 2.8.3. Communication and Prevention
- 2.9. One Health Strategy
 - 2.9.1. Definition and Objectives of the One Health Strategy
 - 2.9.2. Application of the One Health Strategy in the Control of Multidrug-Resistant Bacteria
 - 2.9.3. Success Stories Using the One Health Strategy
- 2.10. Climate Change and Antibiotic Resistance
 - 2.10.1. Increase in Infectious Diseases
 - 2.10.2. Extreme Climatic Conditions
 - 2.10.3. Displacement of Populations

Module 3. Multi-drug Resistant Bacteria in the Food Chain

- 3.1. Multi-drug Resistant Bacteria in the Food Chain
 - 3.1.1. The Role of the Food Chain in the Spread of Antimicrobial Resistance
 - 3.1.2. Antimicrobial Resistances in Food (ESBL, MRSA, and Colistin)
 - 3.1.3. The Food Chain within the One Health Approach
- 3.2. Dissemination of Antimicrobial Resistance through Food
 - 3.2.1. Food of Animal Origin
 - 3.2.2. Food of Plant Origin
 - 3.2.3. Dissemination of Resistant Bacteria through Water

- 3.3. Spread of Resistant Bacteria in Food Production
 - 3.3.1. Spread of Resistant Bacteria in Food Production Environments
 - 3.3.2. Spread of Resistant Bacteria through Food Handlers
 - 3.3.3. Cross-Resistance between Biocides and Antibiotics
- 3.4. Antimicrobial Resistance in Salmonella Spp
 - 3.4.1. AmpC-, ESBL- and Carbapenemase-Producing Salmonella Spp
 - 3.4.2. Resistant Salmonella Spp in Humans
 - 3.4.3. Antibiotic Resistant Salmonella Spp in Farm and Meat Animals
 - 3.4.4. Multidrug-Resistant Salmonella Spp in Humans
- 3.5. Antimicrobial Resistance in Campylobacter Spp
 - 3.5.1. Antimicrobial Resistance in Campylobacter Spp
 - 3.5.2. Antimicrobial Resistant Campylobacter Spp in Foods
 - 3.5.3. Multi-Drug Resistant Campylobacter Spp
- 3.6. Antimicrobial Resistances in Escherichia Coli
 - 3.6.1. AmpC, ESBL and Carbapenemase Producing E. Coli
 - 3.6.2. Antimicrobial Resistant E. Coli in Farm Animals
 - 3.6.3. Antimicrobial Resistant E. Coli in Food
 - 3.6.4. Multidrug-Resistant E. Coli
- 3.7. Antimicrobial Resistance in Staphylococci
 - 3.7.1. Methicillin-Resistant S. Aureus (MRSA)
 - 3.7.2. MRSA in Food and Farm Animals
 - 3.7.3. Methicillin-Resistant Staphylococcus Epidermidis (MRSE)
 - 3.7.4. Multidrug-Resistant Staphylococcus Spp
- 3.8. Antimicrobial Resistance in Enterobacteria
 - 3.8.1. *Shigella Spp*
 - 3.8.2. *Enterobacter Spp*
 - 3.8.3. Other Environmental Enterobacteriaceae
- 3.9. Antimicrobial Resistance in Other Food-Borne Pathogens
 - 3.9.1. *Listeria Monocytogenes*
 - 3.9.2. *Enterococcus Spp*
 - 3.9.3. *Pseudomonas Spp*
 - 3.9.4. *Aeromonas Spp* and *Plesiomonas Spp*
- 3.10. Strategies to Prevent and Control the Spread of Microbial Resistance in the Food Chain
 - 3.10.1. Preventive and Control Measures in Primary Production
 - 3.10.2. Preventive and Control Measures in Slaughterhouses
 - 3.10.3. Preventive and Control Measures in Food Industries



With the highest rated study methods in online teaching, this program will allow you to advance unstoppably in your growth as a Nurse. Enroll now!"

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 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.

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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. 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.

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 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.



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.





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 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.



06 Certificate

The Postgraduate Diploma in Multidrug-Resistant Bacteria in Human Microbiology and Animal Health for Nursing guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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 Diploma in Multidrug-Resistant Bacteria in Human Microbiology and Animal Health for Nursing** endorsed by **TECH Global University**, the largest digital university in the world..

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 Diploma in Multidrug-Resistant Bacteria in Human Microbiology and Animal Health for Nursing**

Modality: **online**

Duration: **6 months**.

Accreditation: **18 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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