

Postgraduate Certificate

Infectious Pathology in the Complex Chronic Patient





Postgraduate Certificate Infectious Pathology in the Complex Chronic Patient

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

Website: www.techtute.com/us/medicine/postgraduate-certificate/infectious-pathology-complex-chronic-patient

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01

Introduction

Infectious pathologies are a common cause of consultation in the emergency department and lead to numerous hospital admissions. Among Complex Chronic Patients, these conditions are more difficult due to the risk of adverse drug reactions or the prevalence of multidrug-resistant germs. To avoid the most severe consequences, physicians must take a comprehensive approach through the use of antimicrobials and other state-of-the-art treatments driven by the boom in technology and scientific research. In view of this, specialists must acquire new skills to nurture their praxis with the most contemporary techniques. For this reason, TECH has developed this 100% program that provides a disruptive tour of the main advances in this area of care.





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The current importance of Infectious Pathologies makes this Postgraduate Certificate a safe bet for specialization in an increasingly demanding healthcare context"

Individuals suffering from multiple chronic diseases associated with infections often undergo complicated surgical procedures. During these procedures, patients with weakened immune systems can contract pathogens in their incisions that greatly hinder their recovery. Under these circumstances, specialists must follow a series of key steps to identify the type of bacteria or virus involved and its susceptibility to antibiotics. Also, it is essential that physicians remain attentive to signs of infection, which can range from redness to fever or secretions. They can then administer the most appropriate treatments to ensure that the lesions heal properly.

In this context, TECH has implemented a pioneering program for physicians who aspire to integrate multidisciplinary treatments into their daily clinical practice. In this way, the curriculum includes both the etiology of infections and their microbiological diagnosis. On the other hand, the syllabus covers guidelines for the management of joint prosthesis contamination. Also, the didactic materials delve into various intra-abdominal infections, among which cholecystitis and diverticulitis stand out. In this way, physicians acquire advanced skills to diagnose specific pathogens and implement the most appropriate therapies to ensure the well-being of patients. It should be noted that, throughout the agenda, innovation is encouraged to develop new lines of research to improve the care of complex chronic patients.

On the other hand, to reinforce all these contents, the methodology of this program reinforces its innovative character. TECH offers a 100% online teaching environment, adapted to the needs of busy professionals seeking to advance their careers. In addition, it will employ 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.

This **Postgraduate Certificate in Infectious Pathology in the Complex Chronic Patient** 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 Complex Chronic Patients
- ♦ 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



You will effectively manage the Diabetic Foot to prevent infections, thus avoiding damage to nerves and blood vessels after this university program"

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The Relearning method applied by TECH in its programs reduces the long hours of study so common in other teaching systems. Don't miss the opportunity"

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 academic year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

By completing this academic pathway, you will be able to design individualized prevention plans that will improve the quality of life of your patients.

Do you want to specialize in the vaccination of complex chronic patients? Achieve it with this 6-week program.



02

Objectives

This curriculum will allow the physician to delve into the existing relationship between chronic and infectious diseases, being able to identify risk factors. Likewise, they will be able to design and execute diagnostic protocols that allow an efficient detection of these pathologies in Complex Chronic Patients. In addition, experts will optimize treatments for the most prevalent infections, through a multidisciplinary and comprehensive approach. In this way, they will be able to innovate in the healthcare sector by developing strategies to individualize therapies.





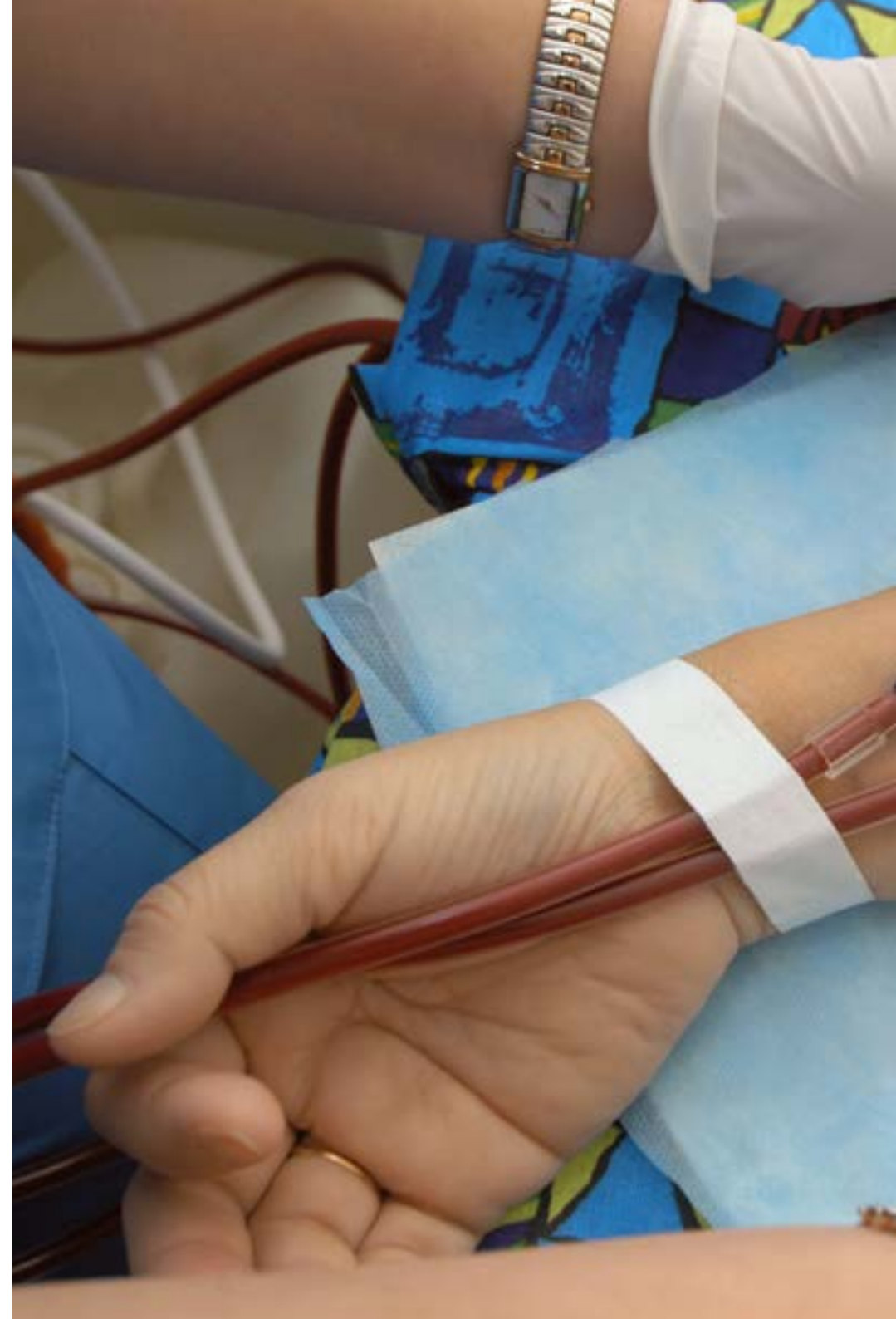
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You will optimize your treatments to combat prevalent infectious pathologies such as Asymptomatic Bacteriuria or Clostridioides Difficile”



General Objectives

- ♦ Examine the medical problems common to most chronic and complex patients
- ♦ Present complementary therapies to the pharmacological approach
- ♦ Delve into the legal basis and bioethical aspects of the care of patients with chronic illnesses
- ♦ Provide a rationale for the Comprehensive Geriatric Assessment (CGA) as a set of tools that allow a diagnostic approach to the complex chronic patient
- ♦ Analyze the main Geriatric Syndromes and their clinical and social importance
- ♦ Assess the incidence and prevalence of nephro-urological diseases in chronic patients
- ♦ Analyze gastrointestinal diseases in patients with chronic medical conditions
- ♦ Investigate, analyze and propose comprehensive strategies for understanding and improving the management of infectious diseases in patients with complex chronic pathology
- ♦ Adequately define endocrinological pathology in chronic and complex patients
- ♦ Seek strategies that improve the patient's quality of life, minimizing the limitations imposed by the disease and its treatments
- ♦ Develop comprehensive care strategies that respond to patients' needs and improve their quality of life
- ♦ Delve into different models of health care for complex chronic patients





Specific Objectives

- Analyze the interaction between chronic diseases and infection
- Evaluate strategies for infectious disease prevention in the complex chronic patient
- Review and evaluate current strategies for infectious disease prevention in the complex chronic patient
- Develop diagnostic protocols that allow for efficient detection of infectious diseases in complex chronic patients

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TECH provides you with a quality and flexible university program. Study it comfortably from your computer or tablet!”

03

Course Management

One of the distinguishing features of TECH is its commitment to educational excellence. For this reason, it has carefully selected an outstanding teaching group to offer a program of the highest quality. In this line, each specialist has an extensive professional background in the field of medical care for complex chronic patients. In this way, they will contribute specialized knowledge to the didactic materials, also using state-of-the-art technology. Therefore, students will be able to immerse themselves in a learning experience that will raise their professional horizons.



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Leading experts in Infectious Pathologies have come together in this program to offer you their extensive knowledge in this healthcare field"

International Guest Director

Awarded by the American Society of Addiction Medicine for his research in this field, Robert W. Kirchoff is considered a prestigious physician specialized in the approach to Substance Use Disorders. In this sense, he has developed most of his career in health institutions of international reference, such as the Mayo Clinic Hospital in Minnesota or the Saint Joseph Mercy Health System in Michigan.

Among his main achievements, his great contribution to the foundation of the Laboratory of Informatics and Machine Learning stands out. In this way, he has contributed significantly to the improvement of hospital resources through Predictive Analytics. He has also used this technological tool belonging to Artificial Intelligence to identify patients at risk of drug dependence and relapse. As a result, it has enabled numerous users to acquire advanced coping strategies in order to avoid drug use.

It should be noted that he balances this work with his facet as a clinical researcher. In this regard, he has an extensive production on subjects such as the applications of Big Data to the field of medicine, the most innovative pharmacological treatments to combat alcohol addiction, translational informatics applied to individuals with psychological disorders, techniques to prevent drug abuse or cutting-edge methodologies for the treatment of drug addiction.

On the other hand, in his firm commitment to the advancement of medical technology, he regularly participates as a speaker at scientific congresses and symposiums on an international scale. Thanks to this, he has facilitated the health community to have a greater knowledge of drug-assisted therapies for chemical dependency. In turn, he has enabled specialists to acquire the skills to get the most out of Clinical Bioinformatics and to optimize both their diagnostics and disease management considerably.



Dr. Kirchoff, Robert W.

- President for Research at Mayo Clinic Hospital in Minnesota, United States
- Medical Director at Foundations Detroit
- President of the American Society for Addiction Medicine
- Founder of the Laboratory of Informatics and Machine Learning at Mayo Clinic Hospital
- Attending Physician at Saint Joseph Mercy Health System in Michigan
- Master of Science in Medical Informatics from The Johns Hopkins University School of Medicine
- Bachelor of Arts, Biology and Chemistry from Albion College
- Internal Medicine Resident Physician at Wayne State University School of Medicine
- General Surgery Residency at Mayo Clinic Hospital
- Board Certified by the American Board of Internal Medicine
- Fellow of the American Board of Preventive Medicine



Thanks to TECH, you will be able to learn with the best professionals in the world"

Management



Dr. Romero Pareja, Rodolfo

- Specialist in Family and Community Medicine
- Medical Director at the Emergency Hospital Nurse Isabel Zendal
- Area Physician, Emergency Department, at the University Hospital of Getafe
- Collaborator of working groups in programs of Medicine; Health Management and Planning for Health Managers; and Emergency and Critical Care
- Doctor of Medicine, University of Oviedo
- Master's Degree in Emergency Medicine from the Complutense La University of Madrid
- Master in Medical Management and Clinical Management by the National School of Health, Instituto Salud Carlos III and Universidad Nacional Educación a Distancia.
- Degree in Medicine and Surgery from the Complutense University of Madrid



Dr. Tejedor López, Luis

- ♦ Specialist in Geriatrics
- ♦ Specialist Physician in Geriatrics, Emergency Hospital Nurse Isabel Zandal
- ♦ Medical Case Manager. HealthMotiv S.L
- ♦ President of the MIR Association Spain
- ♦ Master's Degree in Support Treatment and Palliative Care in Oncology Patients, Isabel I University
- ♦ MBA in Health Management and Administration from the European School of Health Education
- ♦ Medical Specialist in Geriatrics via MIR
- ♦ Degree in Medicine from the University of Navarra

04

Structure and Content

This academic itinerary will provide physicians with a holistic view of the interaction between chronic diseases and infections. To this end, the syllabus will analyze in depth the correct approach to the most common infections in the Complex Chronic Patient (among which Decubitus Ulcers stand out). Likewise, the didactic materials will take into account the use of antimicrobials in users with multiple conditions, offering various advanced therapies with the use of innovative technology. In this sense, the program will be a useful guide to implement treatments and prophylaxis in the most prevalent pathologies.



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A university program that will allow you to practice in simulated environments, with immersive learning aimed at specializing you holistically in real situations"

Module 1. Infectious Pathology in the Complex Chronic Patient

- 1.1. Management of Infections in the Complex Chronic Patient
 - 1.1.1. Use of Antimicrobials in Patients with Multiple Pathologies
 - 1.1.2. Multidrug-Resistance in Complex Chronic Patients
 - 1.1.3. Selection of Antimicrobial Treatment According to the Case
 - 1.1.4. Health Care-associated Infections
- 1.2. Respiratory Infections in the Complex Chronic Patient
 - 1.2.1. Prevalence and Etiology
 - 1.2.2. Microbiological Samples. Indications and Interpretation
 - 1.2.3. Selection of Antimicrobial Treatment in the Complex Chronic Patient
- 1.3. Urinary Infections in the Complex Chronic Patient
 - 1.3.1. Etiology and Use of Microbiological Specimens
 - 1.3.2. Asymptomatic Bacteriuria in the Complex Chronic Patient
 - 1.3.3. Management of Lower Urinary Tract Infection and Catheter-Associated Cystitis
 - 1.3.4. Management of Upper Urinary Tract Infection
- 1.4. Clostridioides Difficile Infections in the Complex Chronic Patient
 - 1.4.1. Management of Clostridioides Difficile Infections in the Complex Chronic Patient
 - 1.4.2. C. difficile Infection Diagnosis
 - 1.4.3. Treatment of First Infection and Recurrences
- 1.5. Skin and Soft Tissue Infections in the Complex Chronic Patient
 - 1.5.1. Management of Skin Infections in Complex Chronic Patients
 - 1.5.2. Management of Decubitus Ulcers in the Complex Chronic Patient
 - 1.5.3. Management of Diabetic Foot in the Complex Chronic Patient
- 1.6. Bacteremia and Endovascular Infections in the Complex Chronic Patient
 - 1.6.1. Management of Bacteremia and Endovascular Infections in the Complex Chronic Patient
 - 1.6.2. Treatment and Monitoring of Bacteremia in Complex Chronic Patients
 - 1.6.3. Management of Infection From Endovascular Devices in Complex Chronic Patients



- 1.7. Infections of Surgical Wounds in Complex Chronic Patients
 - 1.7.1. Scarring in Patients with Chronic Pathology
 - 1.7.2. Etiology of Surgical Wound Infection and Microbiological Diagnosis
 - 1.7.3. Multidisciplinary Treatment of Surgical Wounds in Complex Chronic Patients
- 1.8. Prosthesis Infection in the Complex Chronic Patient
 - 1.8.1. Management of Prosthetic Joint Infection in the Complex Chronic Patient
 - 1.8.2. Etiology and Diagnosis of Prosthetic Infection
 - 1.8.3. Choice of Treatment and Duration
- 1.9. Intra-Abdominal Infection in the Complex Chronic Patient
 - 1.9.1. Management of Cholecystitis in Complex Chronic Patients
 - 1.9.2. Management of Diverticulitis in Complex Chronic Patients
 - 1.9.3. Etiology, Diagnosis and Treatment of Intra-abdominal Abscess in the Complex Chronic Patient
- 1.10. Treatments and Prophylaxis in the Most Prevalent Infectious Pathology
 - 1.10.1. Vaccination in the Complex Chronic Patient
 - 1.10.2. Antimicrobial Prophylaxis in Special Situations
 - 1.10.3. Infection Treatment Tables in the Complex Chronic Patient



No rigid schedules or evaluation timelines. That's what this TECH Global university program is all about!"



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 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. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. 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, trying to recreate the real conditions in the physician'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. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of 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.

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

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



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

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. 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.

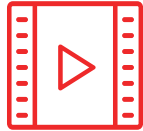
Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

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 highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and 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 the videos as many times as you like.



Interactive Summaries

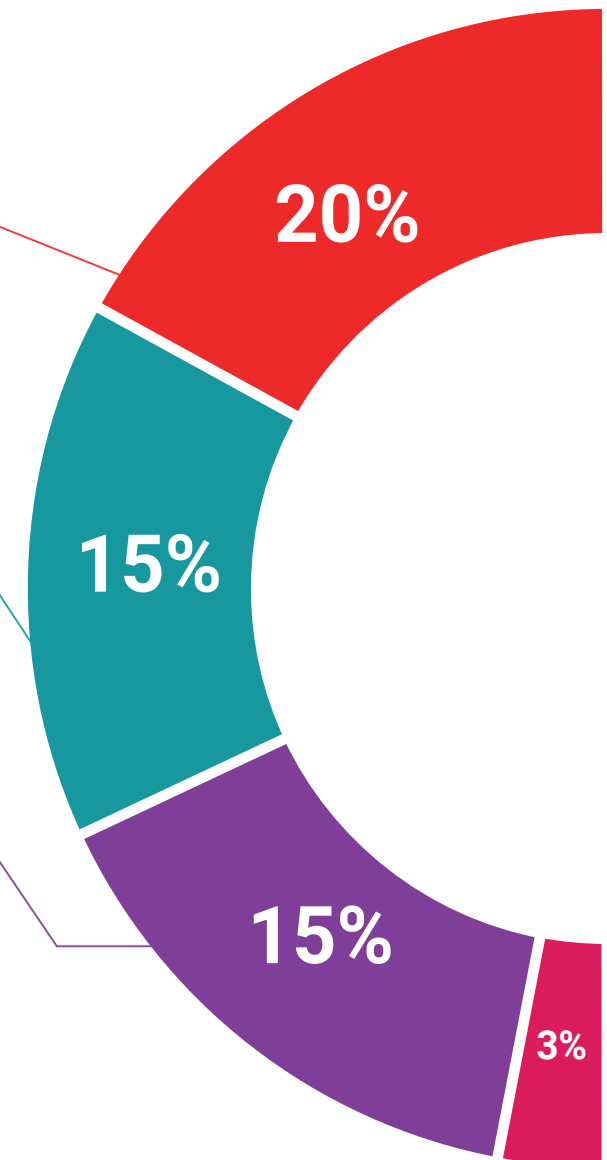
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

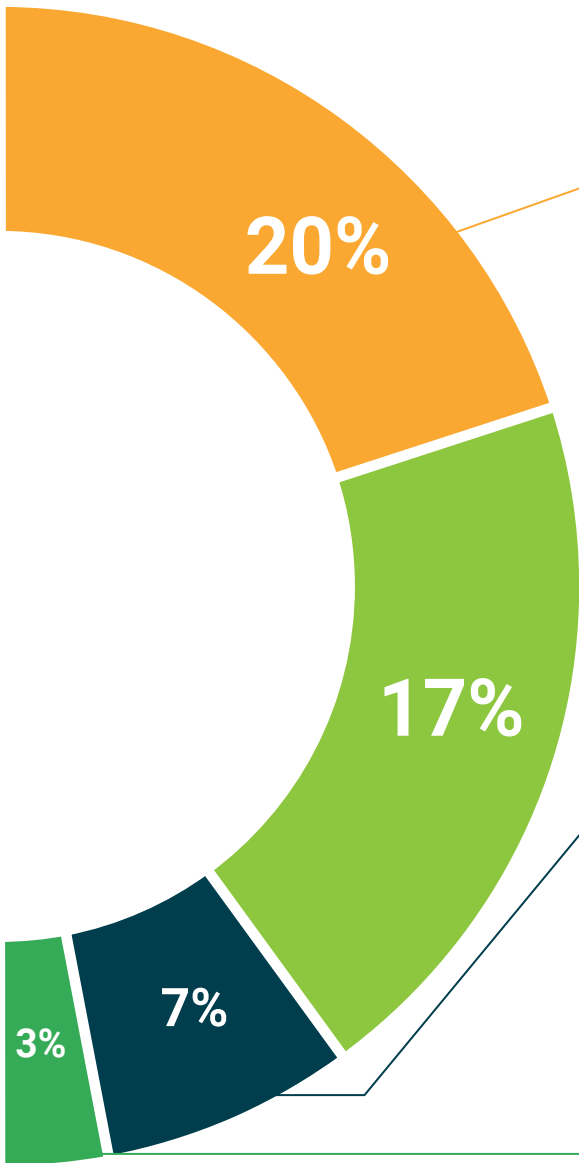
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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 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

This Postgraduate Certificate in Infectious Pathology in the Complex Chronic Patient 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 program will allow you to obtain your **Postgraduate Certificate in Infectious Pathology in the Complex Chronic Patient** 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.

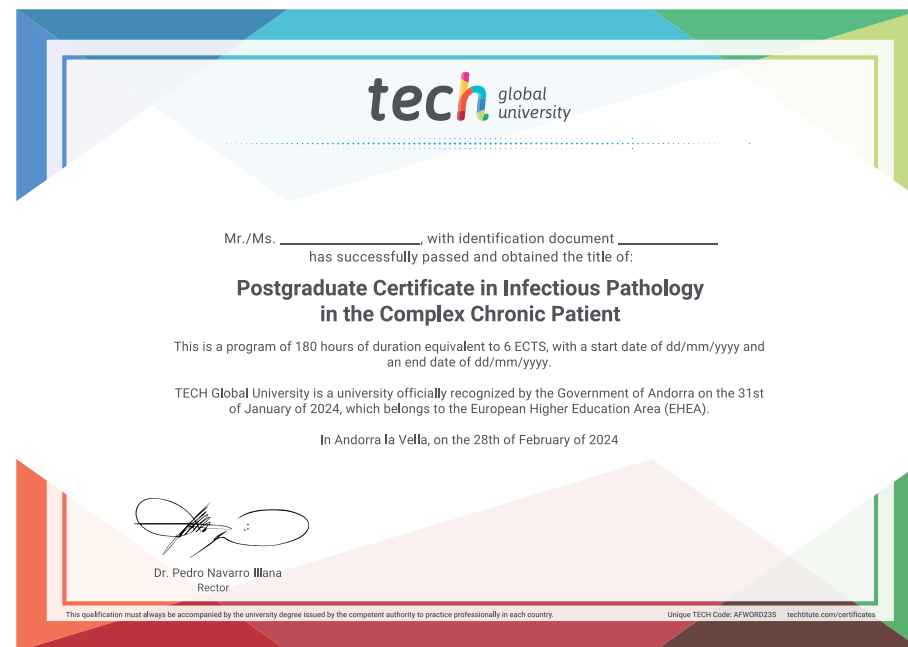
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Postgraduate Certificate in Infectious Pathology in the Complex Chronic Patient

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.



Postgraduate Certificate Infectious Pathology in the Complex Chronic Patient

- » Modality: online
- » Duration: 6 weeks
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- » Credits: 6 ECTS
- » Schedule: at your own pace
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Postgraduate Certificate

Infectious Pathology in the Complex Chronic Patient