

Postgraduate Certificate

Cardio-Respiratory Pathologies in the Complex Chronic Patient





Postgraduate Certificate Cardio-Respiratory Pathologies 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/cardio-respiratory-pathologies-complex-chronic-patient

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01

Introduction

According to the World Health Organization, cardiovascular diseases are the leading cause of death and disability in middle-aged people worldwide. In fact, they are responsible for more than 4 million deaths in Europe every year. In this context, the main healthcare institutions are constantly seeking to incorporate experts in pathologies such as Arterial Hypertension, Cardiac Arrhythmias or Endocarditis into their teams. The objective is for these professionals to provide the most modern medical care services, using the latest technology. In view of this, TECH has developed a training program dedicated to the approach of long-term conditions. Moreover, it is delivered in a 100% online modality, adapting to the schedules of busy specialists.





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You will effectively identify cardiovascular risk factors to drive early diagnosis, all thanks to this advanced 100% online program"

Peripheral arterial disease is a chronic condition that affects the blood vessels that supply blood to the extremities. This pathology is commonly associated with risk factors such as Smoking, Diabetes and High Cholesterol. Faced with important symptoms, such as intermittent claudication, loss of muscle mass or skin changes, experts need to apply the most contemporary treatments in order to manage and follow up, aimed at improving the quality of life of individuals.

To help them with this update, TECH has implemented a Postgraduate Certificate that will optimize the intervention in the treatment of Cardio-Respiratory conditions. Designed by an experienced teaching staff, the curriculum will focus on long-standing diseases, including Dyslipidemia and Obstructive Sleep Apnea.

In line with this, the syllabus will delve into the approach to the pathologies, taking into account factors such as diet, organic repercussions and even new treatments using innovative, recently developed pharmacology. In addition, emphasis will be placed on how professionals can enhance the management of difficult cases, using state-of-the-art technology and computerized medical records.

In order to consolidate these contents, the methodology of this program reinforces its innovative character. TECH will offer a 100% online educational environment, where the only requirement is that students have an electronic device with Internet access to expand their knowledge and acquire new skills to enrich their clinical practice.

It should be noted that this program will employ the revolutionary *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.

This **Postgraduate Certificate in Cardio-Respiratory Pathologies 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 perform the most accurate monitoring of Cor Pulmonale, adjusting therapies and optimizing outcomes"

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You will offer innovative proposals with which to improve the care of the main chronic Cardiorespiratory conditions"

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.

Are you looking to specialize in the approach to users with Valvulopathies? Achieve it in 6 weeks with this revolutionary program.

Benefit from all the benefits of the Relearning methodology, which will allow you to organize your time and pace of study, adapting to your schedule.



02 Objectives

This study plan will provide students with a global and integral vision of each of the natural stages of chronic diseases. In this way, graduates will establish areas of improvement in the care of these pathologies, offering personalized services of the highest quality. They will also promote the use of emerging technologies for users with complex needs. On the other hand, students will enhance their critical spirit and capacity for innovation, in order to provide solutions that involve greater integration between multidisciplinary teams that offer assistance to users with long-term pathologies.





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You will use the latest drugs to treat conditions such as Dyslipidemia, Arterial Hypertension and Obstructive Sleep Apnea”



General Objectives

- ◆ Develop a global vision and a comprehensive approach in each of the phases of the natural history of chronic disease
- ◆ Analyze and intervene in the treatment of these cardiorespiratory diseases, achieving better preventive control and management
- ◆ Design strategies to deal with chronicity that break down the traditional division between health and social care
- ◆ Support the idea that the central element of chronic disease management models is an active and informed patient, interacting with a practical, prepared and proactive professional team





Specific Objectives

- ♦ Establish areas for improvement in the care of chronic cardiorespiratory diseases
- ♦ Propose greater integration between primary and hospital care, nursing, patients and physicians
- ♦ Enhance case management, the use of technology and computerized medical records in the care of chronic patients with complex needs
- ♦ Support the creation or consolidation of hospital teams to support surgical services in the care of patients with chronic disease



Access a world-class educational experience today , that will elevate your professional horizons"

03

Course Management

Loyal to its philosophy of offering the highest quality education, TECH has carefully selected a teaching team specialized in the care of Complex Chronic Patients. In fact, these specialists have accumulated years of experience working in prestigious hospitals. This has enabled them to remain at the forefront of technology, incorporating into their clinical practice the latest trends to provide quality services. In this way, these professionals pour their extensive knowledge into the didactic materials, so that graduates are nourished by it and can provide personalized medical care, according to the needs of users.



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A specialized team will share with you the keys for the optimal management of Cardio-respiratory diseases in Complex Chronic Patients"

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

Professors

Dr. Ortiz Barraza, Evelyn Iveth

- ♦ Specialist in Internal Medicine
- ♦ Internal Medicine Specialist in the Functional Rehabilitation Unit, at the Emergency Hospital Nurse Isabel Zandal
- ♦ Specialist in Internal Medicine in the Cardiovascular Risk and Cardiometabolic Medicine Unit, Hospital Ramón y Cajal
- ♦ Master's Degree in HIV Infection from the Universidad Rey Juan Carlos
- ♦ Degree in General Medicine from the University of Caldas
- ♦ Member of: Spanish Society of Infectious Diseases and Clinical Microbiology Vascular Risk Group, Clinical Ultrasound and Infectious Diseases, the Spanish Society of Internal Medicine (SEMI)

04

Structure and Content

This training will provide students with a guide to diagnose and assess the needs of patients suffering from complex chronic conditions. The syllabus will address in detail diseases such as Ischemic Heart Disease or Pulmonary Thromboembolism. In this way, graduates will identify their risk factors and apply the most appropriate treatments. In addition, the program will delve into the effects of smoking and its relationship with Obstructive Pulmonary Disease. Moreover, the program will promote innovation by encouraging students to develop strategies to deal with chronicity.

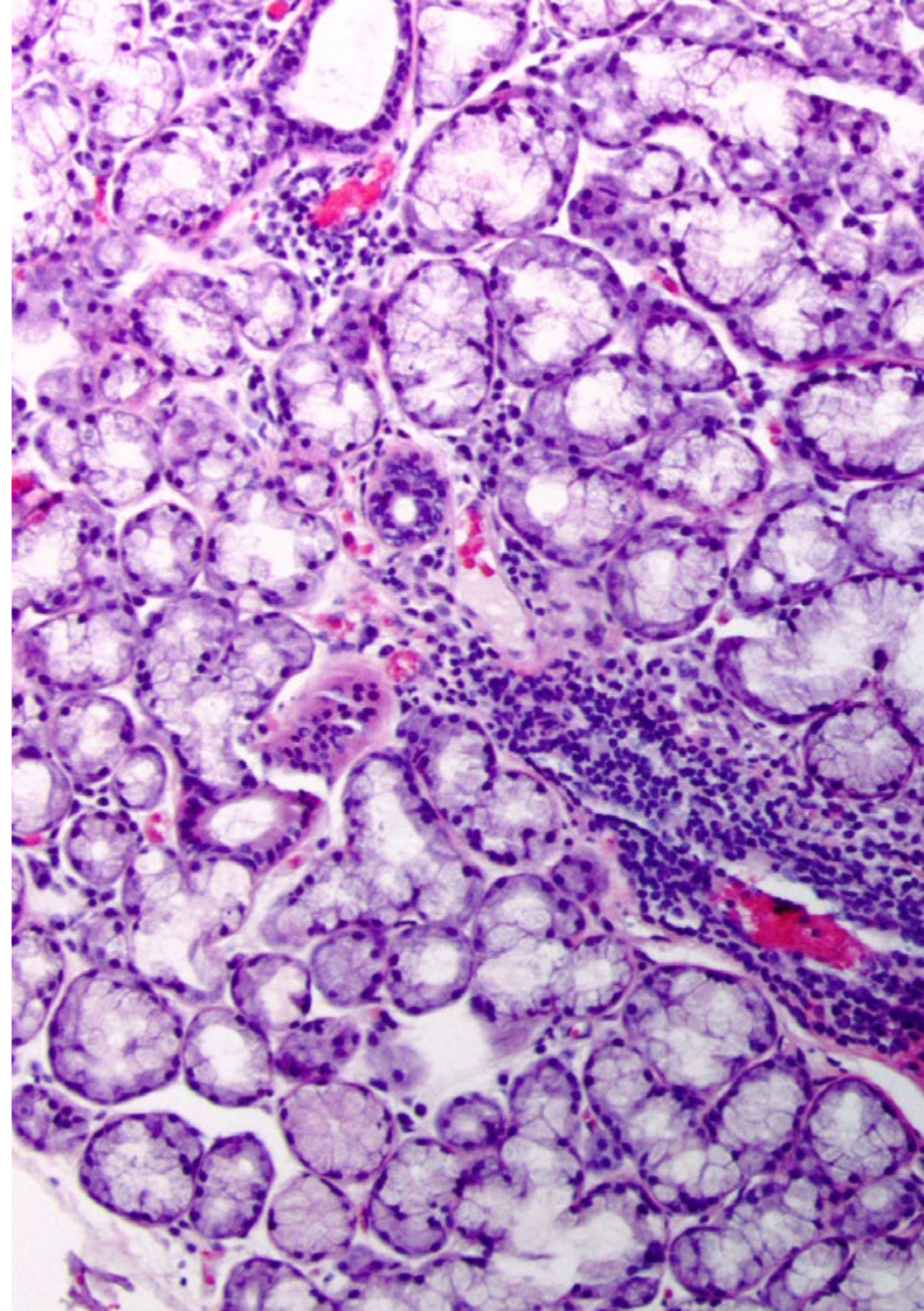


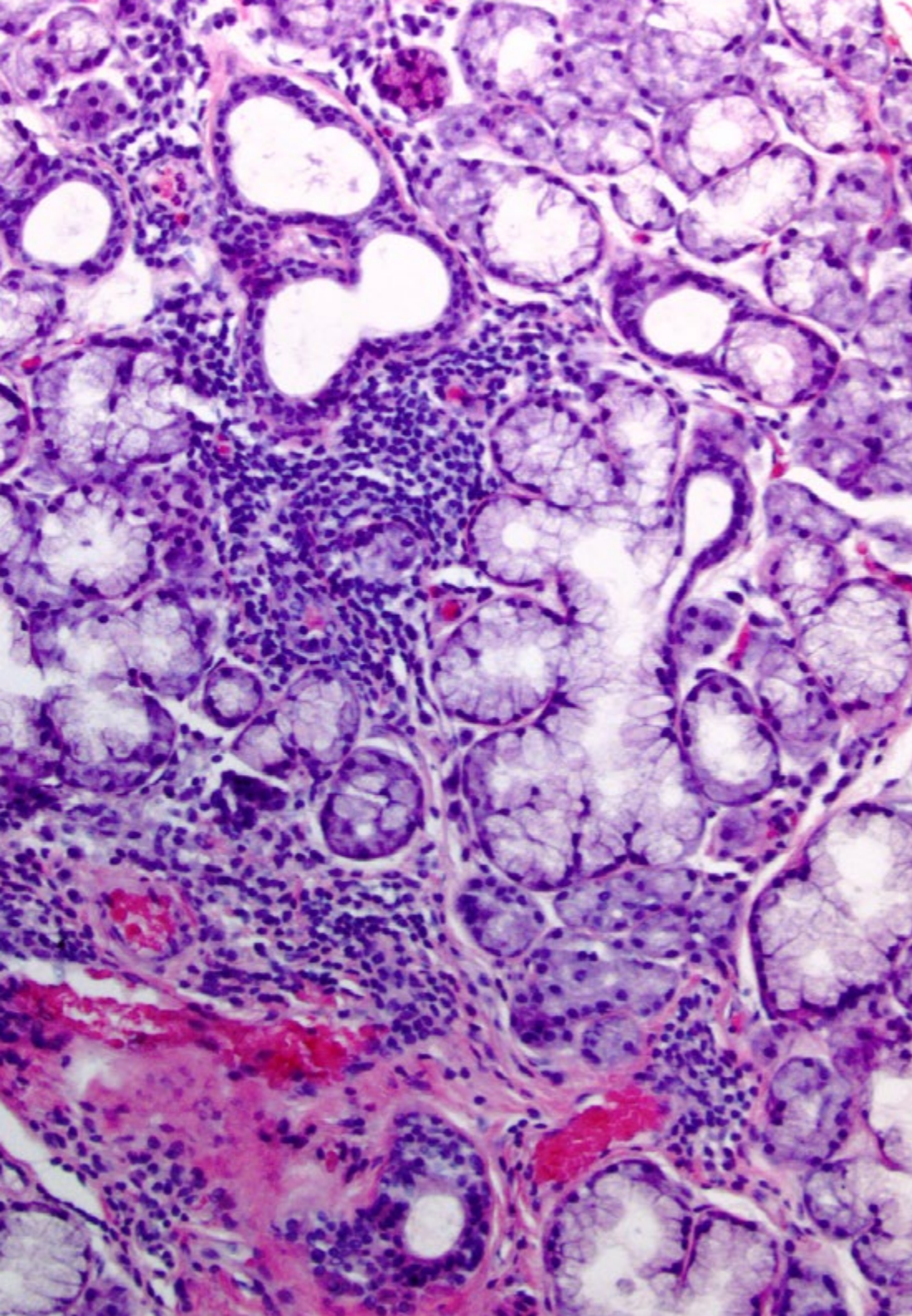
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TECH will provide you with a flexible and quality university program. Take it comfortably from your mobile, computer or tablet”

Module 1. Cardio-Respiratory Pathologies in the Complex Chronic Patient

- 1.1 Heart Failure in the Complex Chronic Patient
 - 1.1.1. Heart Failure Units
 - 1.1.2. Home Treatment and Management of the Complex Chronic Patient. Expert Patient Program
 - 1.1.3. Telemonitoring or Structured Follow-up of Heart Failure with Telephone Calls to this Type of Patient
- 1.2. Ischemic Heart Disease in the Complex Chronic Patient
 - 1.2.1. Management of Coronary Atherosclerosis in Complex Chronic Patients
 - 1.2.2. Cardiovascular Risk Factors in the Complex Chronic Patient
 - 1.2.3. Treatment and Follow-up of the Chronic Patient. Discharge Planning
- 1.3. Valvulopathies in the Complex Chronic Patient
 - 1.3.1. Management of the Chronic Patient with Valvulopathies
 - 1.3.2. Complications of Valvular Prostheses in the Complex Chronic Patient
 - 1.3.3. Complex Chronic Patient Follow-Up
- 1.4. Arterial Hypertension in the Complex Chronic Patient
 - 1.4.1. Management of Arterial Hypertension in Complex Chronic Patients
 - 1.4.2. Organic Repercussions of Hypertension in the Complex Chronic Patient
 - 1.4.3. Treatment of Arterial Hypertension in Complex Chronic Patients
- 1.5. Dyslipidemia in the Complex Chronic Patient
 - 1.5.1. Management of Dyslipidemia in Complex Chronic Patients
 - 1.5.2. Diet for this Type of Patient
 - 1.5.3. New Drugs for the Treatment of Dyslipidemia in the Complex Chronic Patient
- 1.6. Peripheral Arterial Disease in the Complex Chronic Patient
 - 1.6.1. Management of Peripheral Arterial Disease in Complex Chronic Patients
 - 1.6.2. Risk Factors in the Complex Chronic Patient
 - 1.6.3. Follow-up of the Complex Chronic Patient with Peripheral Arterial Disease
- 1.7. Chronic Obstructive Pulmonary Disease in the Complex Chronic Patient
 - 1.7.1. Tobacco Use in the Complex Chronic Patient
 - 1.7.2. Management of Repeat Admissions. Discharge Planning
 - 1.7.3. Follow-up and Treatment of Obstructive Pulmonary Disease in the Complex Chronic Patient





- 1.8. Chronic Cor Pulmonale in the Complex Chronic Patient
 - 1.8.1. Management of Cor Pulmonale in Complex Chronic Patients
 - 1.8.2. Follow-Up of Cor Pulmonale in the Complex Chronic Patient
 - 1.8.3. Treatment
- 1.9. Pulmonary Thromboembolism in the Complex Chronic Patient
 - 1.9.1. Risk Factors in the Complex Chronic Patient
 - 1.9.2. Follow-Up of Pulmonary Thromboembolism in the Complex Chronic Patient
 - 1.9.3. Treatment of Pulmonary Thromboembolism in the Complex Chronic Patient
- 1.10. Obstructive Sleep Apnea Syndrome in the Complex Chronic Patient
 - 1.10.1. Regulation of Ventilation in the Complex Chronic Patient
 - 1.10.2. Obesity in the Complex Chronic Patient
 - 1.10.3. Obstructive and Central Apnea in the Complex Chronic Patient



Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"

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

The Postgraduate Certificate in Cardio-Respiratory Pathologies 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.





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 Cardio-Respiratory Pathologies 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.

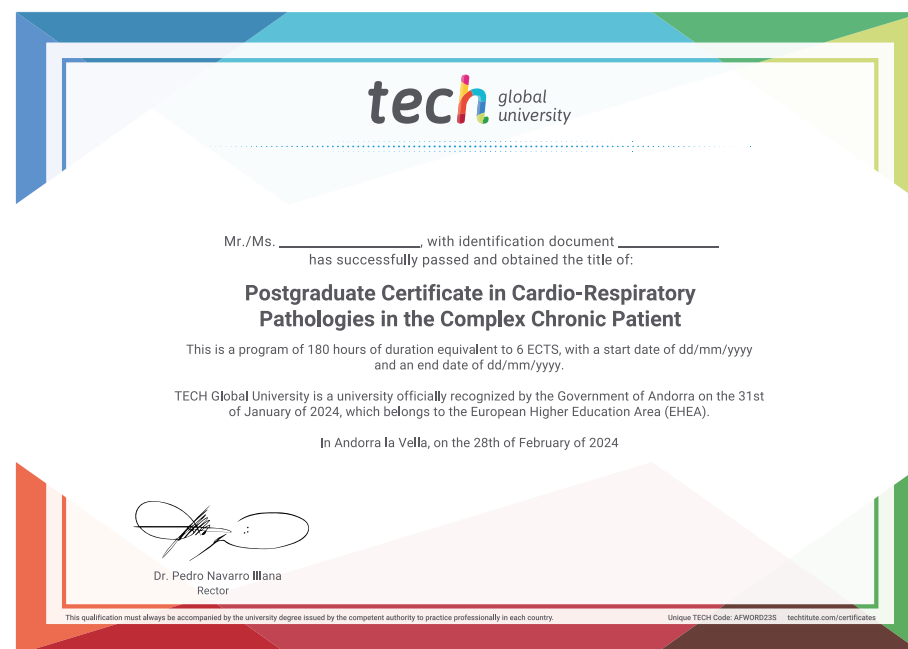
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Cardio-Respiratory Pathologies 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.

future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

tech global
university

Postgraduate Certificate
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Postgraduate Certificate

Cardio-Respiratory Pathologies in the Complex Chronic Patient

