

# Postgraduate Certificate Chronic Kidney Disease





## Postgraduate Certificate Chronic Kidney Disease

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/pk/medicine/postgraduate-certificate/chronic-kidney-disease](http://www.techtute.com/pk/medicine/postgraduate-certificate/chronic-kidney-disease)

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Certificate

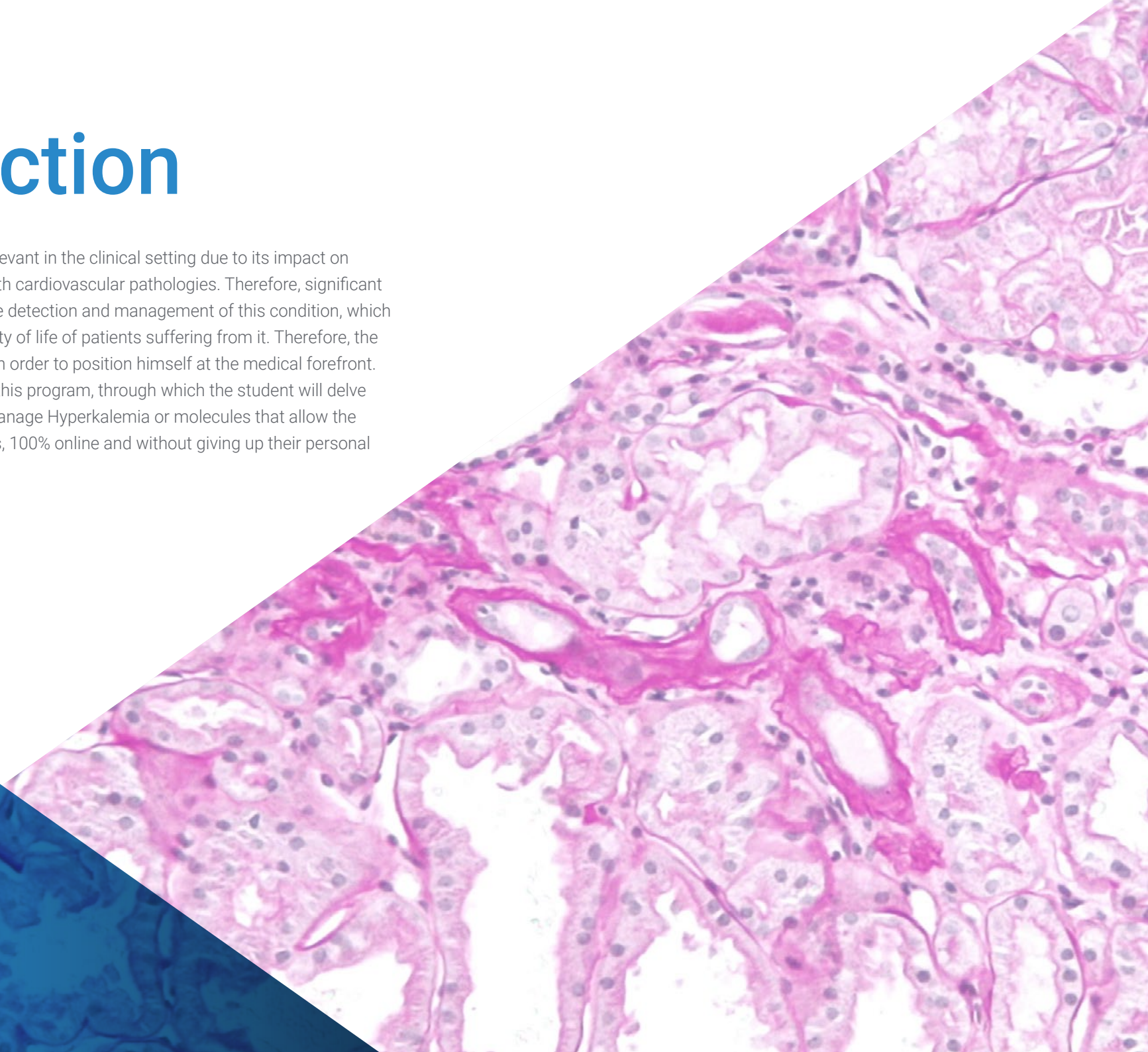
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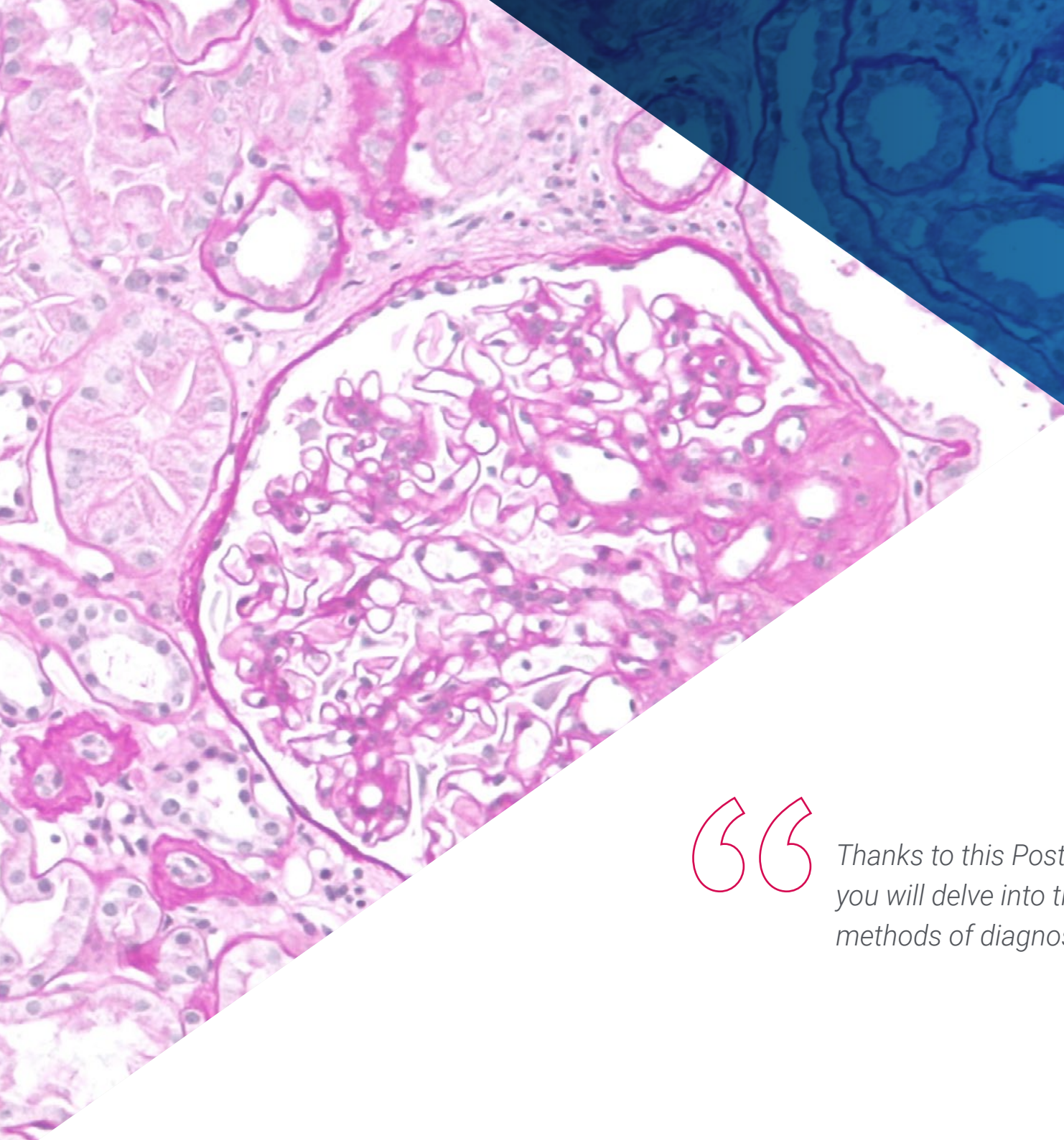
# 01

# Introduction

Chronic Kidney Disease is highly relevant in the clinical setting due to its impact on public health and its association with cardiovascular pathologies. Therefore, significant advances have been achieved in the detection and management of this condition, which has significantly improved the quality of life of patients suffering from it. Therefore, the specialist is obliged to know them in order to position himself at the medical forefront. Consequently, TECH has designed this program, through which the student will delve into the up to date drugs used to manage Hyperkalemia or molecules that allow the treatment of Anemia in CKD. All this, 100% online and without giving up their personal and professional obligations.







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*Thanks to this Postgraduate Certificate,  
you will delve into the up-to-date  
methods of diagnosis of CKD”*

As a result of continuous scientific research, the detection, diagnosis and treatment of Chronic Kidney Disease (CKD) has undergone a remarkable evolution in recent years. Along these lines, cutting-edge laboratory tests have been developed to evaluate renal function and detect the presence of lesions early on. Likewise, advanced drugs and therapies have been developed that help to delay the progression of the pathology and address associated complications. Given the positive impact these advances have on patients, knowledge of them is mandatory for physicians who wish to optimize their professional update.

For this reason, TECH has developed this Postgraduate Certificate, with the idea in mind of guaranteeing a complete update in the management of Chronic Kidney Disease by the specialist. During 150 hours of intensive study, you will learn about the recent risk factors of this condition or the new molecules that contribute to treat anemia in CKD, among other issues.

This program will be taught in a 100% online format, preserving that students can enjoy the didactic content at any time and place, as long as they have a device with Internet access. In addition, you will enjoy the latest multimedia resources, including explanatory videos and interactive summaries, and you will be able to choose the ones that best suit your study needs.

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

- ◆ Practical cases presented by specialists in Nephrology and Internal medicine
- ◆ 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



*Complete your medical update in 150 hours and through the best educational methodology of the pedagogical panorama”*

“

*In only 6 weeks, you will learn about the up to date molecules that allow the treatment of anemia in CKD”*

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.

*Enjoy didactic contents presented in interactive summaries and simulations of real cases to complete your update in an enjoyable way.*

*You will analyze the up to date modifiable and non-modifiable risk factors of CKD thanks to this program that only TECH offers you.*





# 02 Objectives

The purpose of this program is to provide the specialist with the most advanced techniques to diagnose, treat and optimally manage CKD. By completing this program, professionals will delve into concepts for better care of patients with CKD, which will allow them to position themselves at the medical forefront in just 150 hours.





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*If you have a digital device with Internet connection, you will be able to access this 100% online program whenever and wherever you want”*



## General Objectives

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- ◆ Care for patients with chronic kidney disease and its most frequent complications
- ◆ Care for patients with acute renal failure and its complications, as well as to understand the objective of initiating renal replacement therapy, its indications and management
- ◆ Have an overview of Nephrology as a specialty with its different branches of knowledge and a global approach to the patient
- ◆ Understand and learn the branches that are emerging within the specialty such as diagnostic and interventional nephrology, onconeurology, or cardioneurology





## Specific Objectives

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- ◆ Understand and know CKD as a systemic disease, as well as its particularities
- ◆ Understand the most common complications in patients with CKD
- ◆ To know the particularities of patients with CKD in different special clinical situations (indication of anticoagulation, dyslipidemia, cardiovascular risk)

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*TECH offers you the best didactic tools so that, through 150 hours of intensive learning, you can get up to date in the management of CKD”*



03

# Course Management

This Postgraduate Certificate has an educational faculty composed of recognized experts in the field of Nephrology. These professionals, who are involved in leading hospitals, have extensive skills in the management of renal diseases, surgical procedures and dialysis techniques. The knowledge acquired by the student, therefore, will be aligned with the latest advances in the field of CKD.



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*You will delve into the up to date cardiovascular and inflammatory implications in Chronic Kidney Diseases together with the best specialists in Nephrology”*

## Management



### Dr. Ribas Closa, Andrés

- Nephrology Del Mar Hospital, Barcelona
- Expert in Clinical Ultrasound at the Francisco de Vitoria University
- Master's Degree in Infectious Diseases and Antimicrobial Treatment from the CEU Cardenal Herrera University
- Degree in Medicine from the Autonomous University of Barcelona



### Dr. Angulo, Josep María

- Head of Nephrology Service at Fundació Althaia in Manresa
- Head of Nephrology Service at the Hospital de Palamós
- Professor of Nephrology at the International University of Catalonia
- Former President of the Catalan Societies of Nephrology and Arterial Hypertension
- Specialization in Nephrology by the Hospital de Bellvitge
- Postgraduate degree in Basic Nephrology from the University of Minnesota
- Degree in Medicine and Surgery from the University of Barcelona
- Member of Spanish Society of Nephrology and Arterial Hypertension





## Professors

### Dr. Outón, Sara

- ◆ Nephrologist at Consorci Sanitari Alt Penedès-Garraf
- ◆ Pediatric Nephrologist in the University of California
- ◆ Degree in Medicine from the University of Santiago de Compostela

# 04

# Structure and Content

This program will offer a wide variety of concepts in the context of Chronic Kidney Disease (CKD). In this way, students will gain up-to-date knowledge on the diagnosis of CKD, cardiovascular and inflammatory manifestations, and immune responses. In addition, the contents of this Postgraduate Certificate will be available in a 100% online format, offering physicians the flexibility to enjoy them anytime, anywhere.





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*TECH's Relearning methodology will allow you to enjoy the didactic contents based on your own study pace to optimize your updating process”*



## Module 1. Chronic Kidney Disease(CKD)

- 1.1. Epidemiology and diagnosis of CKD
  - 1.1.1. Epidemiology of CKD in our setting
  - 1.1.2. Global Burden of Disease
  - 1.1.3. Diagnosis. KDIGO 2021-2022 Guidelines
  - 1.1.4. Chronic Kidney Disease vs. Renal Aging
- 1.2. Risk Factors
  - 1.2.1. Non-modifiable risk factors
  - 1.2.2. Modifiable risk factors
  - 1.2.3. Sarcopenia and fragility
- 1.3. Anemia and Chronic Kidney Disease
  - 1.3.1. Definition and management of Anemia in Chronic Kidney Disease Patients
  - 1.3.2. New molecules for the treatment of anemia in CKD patients
  - 1.3.3. Iron Metabolism in Chronic Kidney Disease
- 1.4. Bone mineral metabolism in CKD
  - 1.4.1. Mineral metabolism alterations: Calcium, phosphorus, Klotho, PTH, FGF-23 and Vitamin D
  - 1.4.2. Primary vs. secondary hyperparathyroidism in CKD patients
  - 1.4.3. New molecules for the treatment of secondary hyperparathyroidism
  - 1.4.4. Osteoporosis in CKD
- 1.5. Cardiovascular alterations and Inflammation in CKD
  - 1.5.1. Cardiac remodeling in CKD
  - 1.5.2. Vascular calcification in CKD
  - 1.5.3. Cardiovascular study of the patient with CKD
- 1.6. Hyperkalemia in Chronic Kidney Disease
  - 1.6.1. Management of the patient with hyperkalemia
  - 1.6.2. New drugs for the treatment of hyperkalemia





- 1.7. Nutrition in Chronic Kidney Disease
  - 1.7.1. Health education in the patient with CKD
  - 1.7.2. Malnutrition in Chronic Kidney Disease
  - 1.7.3. Nutritional Supplements
- 1.8. Anticoagulation in the CKD Patient
  - 1.8.1. Indications in Atrial Fibrillation
  - 1.8.2. Antivitamin K in CKD
  - 1.8.3. New oral anticoagulants in CKD
- 1.9. Dyslipidemia and Cardiovascular Risk in CKD
  - 1.9.1. Indication for treatment with lipid-lowering drugs in CKD
  - 1.9.2. Global cardiovascular risk in patients with CKD
- 1.10. Immunological response in CKD
  - 1.10.1. COVID19 infection and vaccines
  - 1.10.2. Hepatitis B and C Virus Prophylaxis

“Enroll in this Postgraduate Certificate and enjoy the most up to date knowledge on Chronic Kidney Disease”

# 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 Chronic Kidney Disease guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



The image features two black graduation caps (mortarboards) against a bright blue sky with light, wispy clouds. One cap is in the foreground on the left, and another is slightly behind it to the right. The caps are tilted upwards. The bottom right corner of the image is a white diagonal shape that contains text.

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*Successfully complete this program  
and receive your university qualification  
without having to travel or fill out  
laborious paperwork”*



This **Postgraduate Certificate in Chronic Kidney Disease** contains the most complete and up-to-date scientific on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery\*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Certificate in Chronic Kidney Disease**

Official N° of Hours: **150 h.**



\*Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION 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  
personalized service innovation  
knowledge present quality  
development languages  
virtual classroom



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