

# Postgraduate Certificate

## Degenerative and Infectious Pathology in the Rheumatic Patient





## Postgraduate Certificate Degenerative and Infectious Pathology in the Rheumatic Patient

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

Website: [www.techtitute.com/us/medicine/postgraduate-certificate/degenerative-infectious-pathology-rheumatic-patient](http://www.techtitute.com/us/medicine/postgraduate-certificate/degenerative-infectious-pathology-rheumatic-patient)

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# 01

# Introduction

Rheumatic diseases are a group of pathologies that affect the musculoskeletal system, such as arthritis or lupus. These have a high prevalence in the population, and their incidence is increasing due to the aging of the population and factors such as obesity. Degenerative and Infectious Pathology in the Rheumatic Patient is one of the main complications that occur in these patients, and its treatment requires comprehensive and multidisciplinary care. For this reason, there is a growing need for specialized training in this field for healthcare professionals. TECH offers a 100% online program to meet this need and provide high quality and updated knowledge in the management of these pathologies.





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*Would you like to acquire a complete and updated training in Degenerative and Infectious Pathology in the Rheumatic Patient? Don't miss the opportunity to join this Postgraduate Certificate! With TECH, you will have access to quality information and a team of highly trained professionals”*

Degenerative and Infectious Pathology in the Rheumatic Patient is a topic of great importance in today's medicine. Patients with rheumatic diseases, such as rheumatoid arthritis or osteoarthritis, are prone to degenerative and infectious pathologies, which can be disabling and limit their life quality. The understanding of these pathologies and their proper management are fundamental for the treatment and care of these patients.

For this reason, it is necessary to have highly trained professionals in this field and this Postgraduate Certificate in Degenerative and Infectious Pathology in the Rheumatic Patient is an excellent opportunity to acquire specialized and updated knowledge about these pathologies.

The program's agenda comprehensively addresses the most common degenerative and infectious pathologies in patients with rheumatic diseases, from their etiopathogenesis to the therapeutic options available. Diagnostic techniques are analyzed and the physiopathology of musculoskeletal pathophysiology associated with age and the most frequent fractures in emergency and consultation are discussed in depth. In addition, soft tissue injuries, musculoskeletal infections and joint trauma are studied.

The degree will be taught 100% online, allowing the necessary flexibility for students and avoiding unnecessary travel. The Relearning pedagogical methodology will be used, which focuses on meaningful learning and constant updating of knowledge, so that students can apply it in their daily practice. This Postgraduate Certificate represents a unique opportunity for the professional development of physicians and specialists in the area of rheumatology and musculoskeletal medicine.

This **Postgraduate Certificate in Degenerative and Infectious Pathology in the Rheumatic 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 health experts focused on Degenerative and Infectious Pathology in the Rheumatic Patient
- ◆ 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



*Strengthen your knowledge and help your patients: Get trained in Degenerative and Infectious Pathology in the Rheumatic Patient with this Postgraduate Certificate”*

“

*This degree offers you quality training provided by experts in the area of Rheumatic Patient Pathology. Sign up now and become a specialist in the care of these patients!”*

*With the knowledge you will acquire in this Postgraduate Certificate in Degenerative and Infectious Pathology in the Rheumatic Patient, you will propel your career towards change.*

*With TECH you will have a complete and updated curriculum, taught by experts in the field of Rheumatology. Register now and take control of your professional future!*

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

Its 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 an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.



# 02 Objectives

The purpose of this Postgraduate Certificate is to provide students with specialized training in degenerative and infectious pathologies affecting the locomotor system in the geriatric population. This program allows students to understand the different manifestations of these pathologies in the different anatomical structures, to know the most current procedures for their approach and to recognize the most advanced therapeutic measures, both pharmacological and non-pharmacological, for each of the situations that may arise in these pathologies.







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*Are you a healthcare professional looking to expand your knowledge and skills in the field of Degenerative and Infectious Pathology in the Rheumatic Patient? Stop looking for more and sign up for the Postgraduate Certificate”*



## General Objectives

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- ◆ Deepen in the processes of aging, its clinical, diagnostic and prognostic implications
- ◆ Investigate the specific biological and physiological determinants of geriatric patients
- ◆ Learn more about the reasons why pathologies manifest themselves differently in geriatric patients, as well as the pharmacological characteristics that condition their treatments
- ◆ Update knowledge of the biopsychosocial determinants related to the aging process
- ◆ Promote comprehensive and holistic care in geriatric patients with rheumatic pathologies, whether measured by the immune system, bone metabolism, paraneoplastic or degenerative manifestations







## Specific objectives

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- ◆ Integrate the manifestations of degenerative and infectious pathology of the locomotor system in the geriatric patient broken down by anatomical structures
- ◆ Be aware of the most current procedures in the approach to degenerative and infectious pathologies of the locomotor system in the geriatric population
- ◆ Identify the most advanced pharmacological and non-pharmacological therapeutic measures in each of the situations that may occur in degenerative and/or infectious pathologies of the locomotor system



*Correctly identify pelvic and hip fractures in the elderly and become a highly sought-after expert in a growing field"*

03

# Course Management

This high-level educational program in Degenerative and Infectious Pathology in the Rheumatic Patient has been designed with the objective of providing students with a comprehensive understanding of rheumatic diseases and their pathogenesis. For this reason, the selected professors are experts in the field and are committed to teaching the latest diagnostic and treatment techniques for Degenerative and Infectious Pathologies affecting the musculoskeletal system. This Postgraduate Certificate is designed by top experts to prepare students for a successful career in the field of rheumatology and to meet the challenges of an increasingly aging population prone to degenerative and infectious diseases of the musculoskeletal system.







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*Students pursuing this degree will benefit from a multidisciplinary approach that includes areas such as epidemiology, surgical and conservative treatment, and implant management”*

## Management



### Dr. Garcia Martir, Alvaro

- ◆ Rheumatology Specialist at the Tajo University Hospital
- ◆ Physician specializing in Rheumatology at the University Hospital 12 de Octubre
- ◆ Associate Professor of Rheumatology at the University Alfonso X, El Sabio
- ◆ Research Sufficiency by the Complutense University of Madrid
- ◆ Degree in Medicine from the Cantabria University
- ◆ Master's Degree in Rheumatic Diseases mediated by the Immune System, Rey Juan Carlos University and the Spanish Society of Rheumatology
- ◆ EFSUMB Certification: Musculoskeletal Ultrasound level 1
- ◆ Levels A and B of musculoskeletal ultrasound of the Spanish Society of Sports Medicine



## Professors

### Dr. From Santiago Moraga, Mar

- ◆ Spine Unit Physician at the Hospital del Tajo
- ◆ Specialist in Orthopedic and Traumatologic Surgery
- ◆ Degree in Medicine from the Complutense University of Madrid
- ◆ Master's Degree in Research and Specialized Treatment of Pain by the University of Valencia

### Dr. Álvarez Collado, Carlos Juan

- ◆ Physician of the Arthroscopy and Sports Medicine Unit of the Tajo University Hospital
- ◆ Medical Specialist in Orthopedic Surgery and Traumatology
- ◆ Degree in Medicine from the Complutense University of Madrid
- ◆ Master's Degree in Medical and Clinical Management
- ◆ Own Master's Degree of the National University of Distance Education in collaboration with the National School of Health
- ◆ Master's Degree in Orthopedic Surgery and Traumatology by CEU Cardenal Herrera University

### Dr. Parra, Francisco Javier

- ◆ Area Specialist Physician at Tajo Hospital
- ◆ Physician at the Toledo Integral Medical Institute
- ◆ Area Specialist Physician at Principe of Asturias University Hospital, Alcala of Henares
- ◆ Specialist in Orthopedic and Trauma Surgery
- ◆ Physician at the Virgen del Mar Arthroscopy Unit
- ◆ Degree in Medicine from the Autonomous University Madrid
- ◆ Postgraduate Certificate of Advanced Studies from the Complutense University of Madrid
- ◆ Certificate of professional update in Orthopedic Surgery and Traumatology by the Spanish Society of Orthopedic Surgery and Traumatology

# 04

## Structure and Content

This 100% online degree has a clear structure and is organized around a module with 10 different complementary items. The topics to be covered in the program are wide and varied, ranging from the etiopathogenesis of osteoarthritis to the treatment of soft tissue injuries. Diagnostic techniques for osteoarthritis are discussed within the program, including the most common ones used in the office, as well as other less known ones. In addition, special attention will be paid to age-associated musculoskeletal deterioration and the most frequent fractures in emergency and consultation in the elderly, including their epidemiology and socioeconomic cost. Finally, musculoskeletal infections and soft tissue injuries, such as traumatic and inflammatory muscle injuries, will be discussed in depth.





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*In this Postgraduate Certificate you will find a study plan designed to favor autonomous and effective learning in a practical and 100% online way”*

## Module 1. Degenerative and infectious pathology

- 1.1. Arthrosis
  - 1.1.1. Etiopathogenesis. Primary and Secondary Arthrosis
  - 1.1.2. Role of Non-Bony Structures in Osteoarthritis
  - 1.1.3. Molecular Biology of Osteoarthritis
- 1.2. Diagnostic Techniques for Osteoarthritis
  - 1.2.1. Reality of the Techniques we Request in the Practice
  - 1.2.2. From Conventional Radiography to Nuclear Medicine
  - 1.2.3. Other Techniques
- 1.3. Musculoskeletal Deterioration Associated with Aging Fractures in the Elderly
  - 1.3.1. Age-associated Musculoskeletal Pathophysiology: Sarcopenia and Osteopenia
  - 1.3.2. Epidemiology and Socioeconomic Cost
  - 1.3.3. Most Frequent Fractures in the Emergency and Consultation Room
- 1.4. Pelvis and Hip Fractures in the Elderly
  - 1.4.1. Epidemiology Socioeconomic Implications and Public Health Issues
  - 1.4.2. Diagnosis and Classification
  - 1.4.3. Treatment
- 1.5. Degenerative and Traumatic Pathology of the Elderly Spine
  - 1.5.1. Characteristics and Pathophysiology of Aging at the Spinal Level
  - 1.5.2. Fractures Specific to Geriatric Age
  - 1.5.3. Degenerative Disc, Joint and Canal Pathology
  - 1.5.4. Therapy Options
- 1.6. Other Arthropathies
  - 1.6.1. Neuropathic Arthropathy
  - 1.6.2. Hemorrhagic Arthropathy
  - 1.6.3. Other Arthropathic Disorders
- 1.7. Overview of Osteoarthritis Treatment
  - 1.7.1. Conservative Treatment
  - 1.7.2. Surgical Treatment with Joint Preservation
  - 1.7.3. Prosthetic Treatment



- 1.8. Musculoskeletal Infections
  - 1.8.1. Soft Tissue Infections
  - 1.8.2. Bone Infections: Osteomyelitis
  - 1.8.3. Joint Infections
  - 1.8.4. Implant Infections
- 1.9. Soft Tissue Injuries
  - 1.9.1. Traumatic and Inflammatory Muscle Injuries
  - 1.9.2. Degenerative, Traumatic and Inflammatory Tendon Injuries
  - 1.9.3. Synovial Bursa Pathology
- 1.10. Joint Trauma
  - 1.10.1. Contusions
  - 1.10.2. Sprains
  - 1.10.3. Dislocation

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*This academic program will provide you with the best teaching methodology, 100% online and adaptable to your educational and professional needs Don't wait any longer and enroll with TECH”*





# 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. 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, 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 Degenerative and Infectious Pathology in the Rheumatic Patient guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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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 Degenerative and Infectious Pathology in the Rheumatic Patient** contains the most complete and up-to-date scientific program 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 diploma 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 Degenerative and Infectious Pathology in the Rheumatic Patient**

Official N° of hours: **150 h.**



\*Apostille Convention. In the event that the student wishes to have their paper diploma 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  
development languages  
virtual classroom



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