



### Postgraduate Diploma

Sports Podiatry and Orthopodology

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 24 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-sports-podiatry-orthopodology

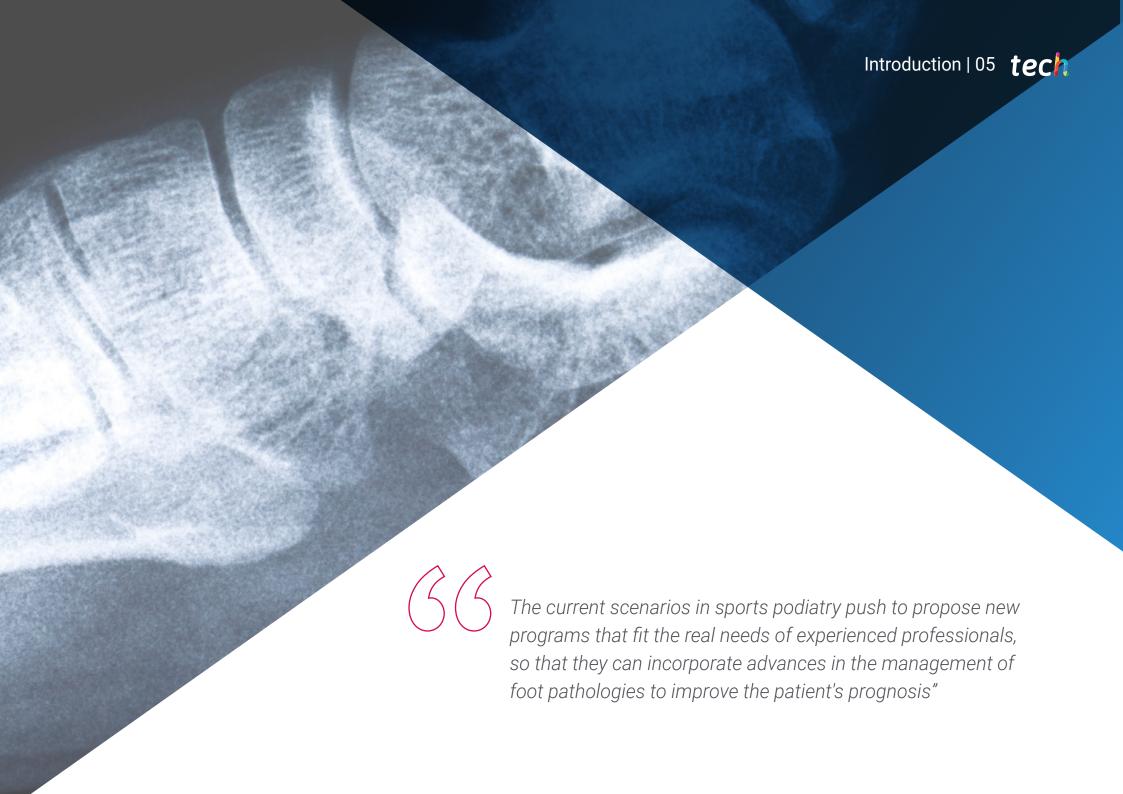
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Introduction Sports podiatry is an important area in the discipline, and at this moment, its field of specialization is beginning a process of expansion due to the boom that the sports habit is experiencing in the population. This program is aimed at updating podiatrists so that they can incorporate advances in sports podiatry and orthopodology into their daily practice, in order to improve their patients' prognosis.



### tech 06 | Introduction

The prominent role that podiatry has been playing in sports makes it worthy of specialization within the different branches of care and research. This program goes in depth into the orthopodological treatment of the different pathologies that affect the athlete from the biomechanical point of view, putting into practice and applying to each sport the techniques and examinations to assess the patient, as well as to reach an adequate diagnosis and treatment.

Additionally, it includes posture analysis from a multidisciplinary point of view, something that is a reality in countries such as France, England or the USA. This multidisciplinary approach, using validated protocols described by the European Association of Posturology, allows reliable and rapid therapeutic results to be obtained thanks to systematized mathematical analysis with 95% confidence intervals and small standard errors. The human organism is a whole greater than the sum of its parts, and therefore, the main aim of this expert is to provide the necessary therapeutic tools to obtain a multidisciplinary approach to posture alterations that allows designing a more holistic treatment of patients, opening a range of possibilities applicable to different specialties, especially podiatry.

It also addresses the new procedures in radiological tests in sports podiatry, as well as their positions in detail, radiobiological mechanisms of action, radioprotection and musculoskeletal ultrasound, increasingly important in the clinical practice of the podiatrist, both in diagnosis and subsequent treatment, making this program a very practical resource for the updating of knowledge in the professional.

This **Postgraduate Diploma in Sports Podiatry and Orthopodology** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- Development of clinical cases presented by experts in podiatry
- The graphic, schematic and practical contents of the course are designed to provide all the essential information required for professional practice
- It contains exercises where the self-assessment process can be carried out to improve learning
- Algorithm-based interactive learning system for decision-making for the patient with foot pathologies and special sporting needs
- Rational drug use guidelines for podiatrists, and clinical practice guidelines on the different musculoskeletal pathologies of the Lower Limb
- All of this will be complemented by 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



### Introduction | 07 tech



This Postgraduate Diploma may be the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge in Sports Podiatry and Orthopodology, you will obtain a qualification endorsed by TECH Global University"

Its teaching staff includes specialists of recognized prestige in Sports Podiatry and Orthopodology, who bring the experience of their work to this training.

Thanks to their multimedia content developed with the latest educational technology, they will allow the podiatrist a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to train in real situations.

This program is designed around Problem-Based Learning, whereby the physician must try to solve the different professional practice situations that arise throughout the program. For this purpose, the physician will be assisted by an innovative interactive video system developed by renowned experts in the field of sports podiatry with extensive teaching experience.

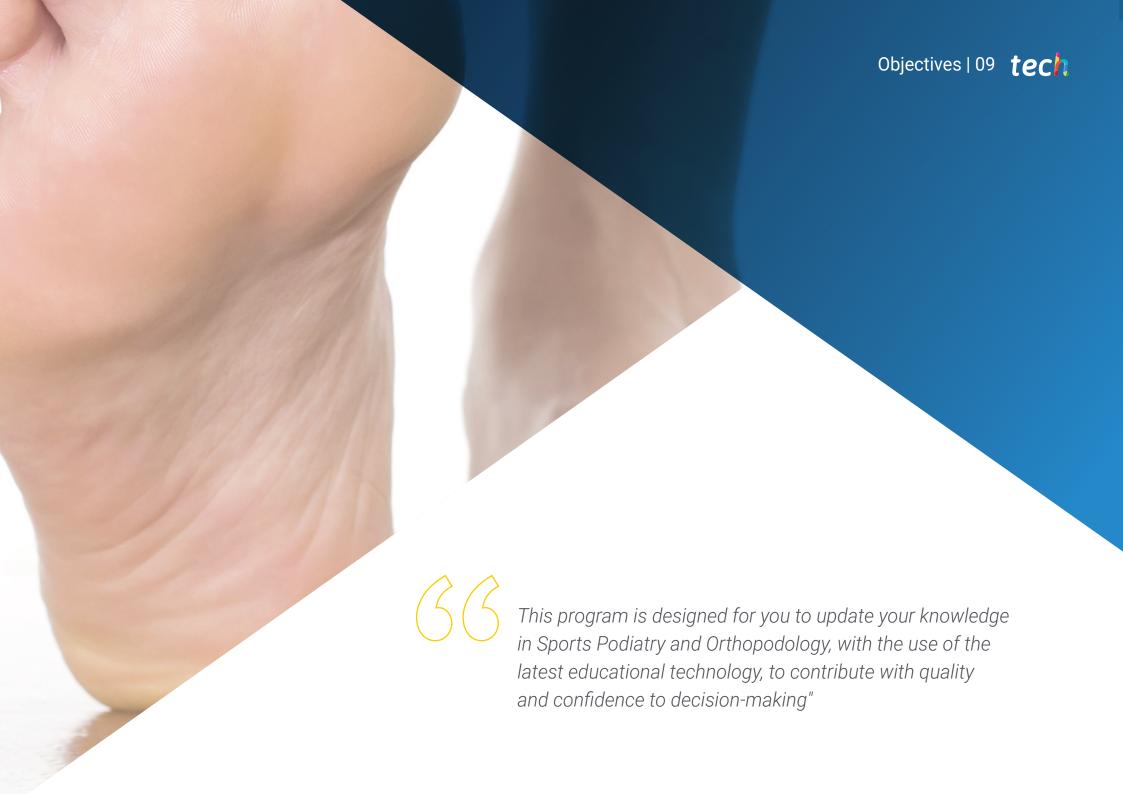
Increase your decision-making confidence by updating your knowledge with this Postgraduate Diploma.

Do not miss this opportunity and choose the best way to stay up to date in Sports Podiatry and Orthopodology.



# 02 Objectives

This program aims to provide podiatrists with up-to-date knowledge on new orthopedic techniques and the approach to the athlete's foot. To this end, it proposes a review of the different pathologies and their orthopedic and medical-surgical management in the context of the latest scientific evidence.



### tech 10 | Objectives



### **General Objective**

• Update the podiatrist in the most used diagnostic and therapeutic procedures in Sports Podiatry and Orthopodology, applying the new models of foot biomechanics in different sports, as well as its influence by surfaces and footwear for the indication of appropriate orthopodological treatments



Take the step to get up to date on the latest developments in Sports Podiatry and Orthopodology"





### Module 1. Advances in Biomechanics Applied to Podiatry

- Update the knowledge of practicing podiatrists in their daily activity with the most current techniques used as diagnostic and therapeutic tools
- Identify and implement the main changes in Podiatric treatments based on the latest scientific evidence

### Module 2. Sports Podiatry

- Identify the causes of the main pathologies of the athlete in the locomotor system and the treatment of choice
- Provide the professionals with sufficient knowledge to develop their clinical practice with efficiency and effectiveness in the global treatment of the different pathologies that affect the athlete from the podiatric point of view
- Establish the types of footwear chosen for the athlete
- Integrate up-to-date knowledge on biomechanics in different sports

### Module 3. Advances in Orthopodology

- Understand the mechanisms of action of plantar orthoses
- Know how to make moulds in an accurate way
- Integrate knowledge of footwear therapy
- Use of splints and prostheses, as well as new materials for podiatric use

### Module 4. Posturology

- Identify the muscle chains involved in posturology
- Program proprioceptive templates for usability in posturology
- Integration of knowledge about different types of insoles: postural and exteroceptive

### Module 5. Diagnostic Imaging Tests in Podiatry

- Know how to use radiological and radiobiological protection correctly
- Correctly use radiology and ultrasound techniques to efficiently interpret
- and provide a correct diagnosis

### Module 6. Anesthesia and Pharmacology Applied to Podiatry

- Be aware of the responsibility of podiatric prescribing and rational use of medication
- Identify and recognize commonly used local anesthetics
- Comprehensive knowledge of conscious sedation
- Apply chemical and radiotherapeutic treatments, as well as antibiotic therapy, analgesia and anti-inflammatories
- Management of the anticoagulated patient
- Deal with diabetic foot treatment
- Perform healing of ulcers and wounds applied to podiatry





### tech 14 | Course Management

### Management



### Dr. Parra Sánchez, Guillermo

- Coordinator of the Foot and Ankle Unit, Gregorio Marañón Hospital, Madrid
- Attending Physician in Orthopedic Surgery and Traumatology
- Honorary Collaborator of the Department of Surgery I. Complutense University of Madrid
- MRCS. Royal College of Physicians and Surgeons of Glasgow
- Degree in Medicine and Surgery. Alcalá de Henares University
- Medical Specialist in Orthopedic Surgery and Traumatology. Doce de Octubre University Hospital, Madrid



### Dr. Cuervas-Mons Cantón, Manuel

- Doctor of Medicine in the Foot and Ankle Unit, Gregorio Marañón Hospital
- Instructor of Advanced Trauma Life Support (ATLS). American College of Surgeons
- Specialist in Orthopedic Surgery and Traumatology. Gregorio Marañon General University Hospital
- Specialist in Orthopedic Surgery and Traumatology. QuirónSalud Madrid UH
- Master's Degree in Clinical, Medical and Welfare Management. CEU Cardenal Herrera University
- Doctor of Medicine. Grade: Outstanding Cum Laude. Complutense University of Madrid
- Director of different Doctoral Theses in Medicine in the Department of Surgery at the Complutense University of Madrid.

### **Professors**

### Dr. Martínez Ayora, Álvaro

- Specialist Physician in Orthopedic Surgery and Traumatology. Foot and Ankle Unit.
   Torrejón University Hospital
- Specialist Physician in Orthopedic Surgery and Traumatology. Gregorio Marañón General University Hospital
- Member of the Spanish Society of Orthopedic Surgery and Traumatology (SECOT) since June 2013
- Member of the Spanish Knee Society (SEROD) since January 2017
- Member of the Spanish Association of Arthroscopy (AEA) since March 2017
- Degree in Medicine and Surgery from the Autonomous University of Madrid.
- Master's Degree in Update on Orthopedic Surgery and Traumatology. CEU Cardenal Herrera University
- Postgraduate Diploma in Orthopedic Surgery and Traumatology of the Spine and Tumors and Infections of the Locomotor System. CEU Cardenal Herrera University

### Dr. Arnal Burro, Javier

- Resident Intern of Traumatology and Orthopedic Surgery, Gregorio Marañón General University Hospital
- Collaborating Doctor of Practical Teaching, Department of Surgery I, Faculty of Medicine Complutense University of Madrid
- Degree in Medicine from the University of Zaragoza
- Publication: "A retrospective comparative cohort study of Radial Head Arthroplasty versus resection in complex Elbow Dislocations"
- C. Oral: Fractures of the Talar Neck Long-term Results Benjumea-Carrasco A, Cuervas-Mons M, Martínez Ayora A, Arnal Burró J, Vaquero Martín F.J.

### Dr. Álvarez Baena, Lucía

- Specialist in Anesthesiology and Resuscitation Gregorio Marañon General University Hospital. Specialist in Anesthesiology and Resuscitation Infanta Leonor UH
- Master's Degree in Update on Anesthesiology and Resuscitation CEU Cardenal Herrera University
- Degree in Medicine. Faculty of Medicine. Complutense University of Madrid
- Best Oral Communication Award at the National Congress of the Pediatric Anesthesia Section of the Spanish Society of Anesthesiology, Resuscitation, and Pain Therapy. SEDAR
- Member of the Spanish Group of Multimodal Rehabilitation. (GERM)



Take the step to get up to date on the latest developments in Sports Podiatry and Orthopodology"





### tech 18 | Structure and Content

### Module 1. Advances in Biomechanics Applied to Podiatry

- 1.1. Modern Biomechanical Terminology
- 1.2. Strength
- 1.3. Mechanics
- 1.4. A.S.A Rotational Equilibrium Model
- 1.5. Tissue Stress Theory and its Clinical Application
- 1.6. Biomechanical Examination of the Foot and Ankle
- 1.7. Biomechanics and Gait Pathology: The Abductor Gyrus

### Module 2. Sports Podiatry

- 2.1. Biomechanical Exploration of the Athlete
- 2.2. Sports Footwear
- 2.3. Neuromuscular Bandages
- 2.4. Dynamic Tape
- 2.5. Biomechanics of Soccer
- 2.6. Biomechanics of Running
- 2.7. Biomechanics of Cycling: Bikefitting
- 2.8. Interpretation of Pressure Platforms
- 2.9. Optical Capture Techniques in Sports Assessment

### Module 3. Advances in Orthopodology

- 3.1. History of Orthopodology
- 3.2. Mechanisms of Action of Plantar Orthoses
- 3.3. Casting
- 3.4. Shoe Therapy
- 3.5. Manufacturing Processes for Plantar Orthoses
- 3.6. Splints and Prosthetics and Digital Orthosiology
- 3.7. Orthotic Treatment of Highly Prevalent Pathologies





### Structure and Content | 19 tech

### Module 4. Posturology

- 4.1. Basis of Posturology
- 4.2. Posturodynamics
- 4.3. Normal and Pathological Posture
- 4.4. Proprioceptive Insoles
- 4.5. Posture and Sport
- 4.6. Osteopathy the Lower Limb

### Module 5. Diagnostic Imaging Tests in Podiatry

- 5.1. Radiological Protection: Radiological and Radiobiology Protection
- 5.2. Radiology and Ultrasound

### Module 6. Anesthesia and Pharmacology Applied to Podiatry

- 6.1. Local Anesthetics
- 6.2. Conscious Sedation
- 6.3. Manual of Recommendations for the Handling of Cytostatic Medications
- 6.4. Antibiotherapy, Analgesia, and Anti-inflammatory Drugs
  - 6.4.1. Analgesics
  - 6.4.2. Antibiotics
- 6.5. Anticoagulated Patient. Antithrombotic Prophylaxis
- 6.6. Diabetic Foot
- 6.7. Ulcer and Wound Care
- 6.8. Magistral Formulas





### tech 22 | Methodology

#### 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.



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:

- 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.



### Methodology | 25 tech

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.

### tech 26 | Methodology

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**

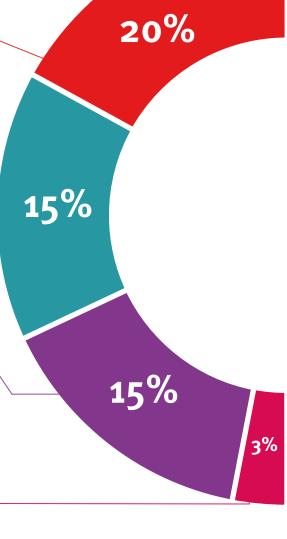
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many 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.



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.

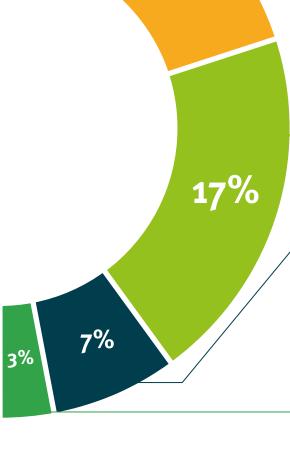
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **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.





20%





### tech 30 | Certificate

This private qualification will allow you to obtain a **Postgraduate Diploma in Sports Podiatry and Orthopodology** 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** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Postgraduate Diploma in Sports Podiatry and Orthopodology

Modality: online

Duration: 6 monts

Accreditation: 24 ECTS



Mr./Ms. \_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

#### Postgraduate Diploma in Sports Podiatry and Orthopodology

This is a private qualification of 720 hours of duration equivalent to 24 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



<sup>\*</sup>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.

tech global university Postgraduate Diploma



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