

# Postgraduate Diploma

## Management of Ankle Surgery Complications





## Postgraduate Diploma Management of Ankle Surgery Complications

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 18 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-management-ankle-surgery-complications](http://www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-management-ankle-surgery-complications)

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# 01

# Introduction

Osteoarthritis at the tibio-peroneal-astragal joint level is one of the most frequent pathologies, which generates a significant level of disability in patients who suffer from it. As such, it can develop from a heavy load driver to a professional basketball player in the NBA. Its approach requires a high degree of knowledge and expertise in surgical techniques. Given its complexity and the need for specialization in this area, TECH has created this 100% online program, which addresses ankle osteoarthritis and arthroplasty, the most common problems in the rearfoot, as well as skin defects and infections of the bones of the foot and ankle. All this, through a theoretical-practical syllabus and high quality multimedia content, prepared by professional orthopedic surgeons from relevant hospitals.





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*You will achieve in only 6 months the knowledge update you are looking for in the Management of Ankle Surgery Complications"*

Nowadays, medical professionals face great challenges derived from the intervention in patients suffering from ankle injuries, such as osteoarthritis or osteomyelitis in the bones of the foot. These two pathologies require advanced and precise knowledge of the processes, both in diagnosis and management, as well as in the possible complications that may arise.

A specialization increasingly required due to the increase of patients suffering from flat feet, cape foot, primary and post-traumatic osteoarthritis or require reconstruction of skin defects in this lower limb of the human body. In this sense, technological and technical advances have revolutionized and significantly modified the treatment and prognosis of these complications, which are quite frequent in the foot and ankle area. Faced with this reality, TECH has created this Postgraduate Diploma in Management of Ankle Surgery Complications through a 100% online program, taught by professional teachers with extensive experience in this subspecialty.

In this way, over the course of 6 months, the specialist will learn about the latest developments in the approach to patients with hindfoot injuries, and will be offered the most innovative techniques in the treatment of ankle osteoarthritis or the most appropriate surgical indications and their decision algorithm. All this will be possible thanks to an extensive range of teaching resources, including video summaries of each topic, videos in detail, essential readings and clinical cases, which make up the library of this program.

A qualification with a theoretical-practical approach, which is an excellent opportunity for the medical professional to be able to comfortably study a Postgraduate Diploma, whenever and wherever they want. All you need is an electronic device with an internet connection to access the content hosted on the virtual campus. You will also be able to distribute the course load according to your needs, making this program an ideal option for those seeking to balance their personal responsibilities with a quality university education.

This **Postgraduate Certificate in Management of Ankle Surgery Complications** complete and up-to-date scientific program on the market.

It's most outstanding features are:

- ♦ Practical cases presented by experts in 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 the self-assessment process can be carried out 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.



*A Postgraduate Diploma that will provide you with a new vision in the approach to osteoarthritis at the tibio-peroneal-astragal joint level"*

“*Undoubtedly an educational option, designed and conceived for professionals who wish to balance their responsibilities with quality teaching*”

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

Its multimedia content, developed with the latest educational technology, will allow the professional a situated and contextual learning, that is, a simulated environment that will provide an immersive training programmed to train in real situations.

This program is designed around Problem-Based Learning, whereby the psychologists must try to solve the different professional practice situations that arise throughout the program. For this purpose students will be assisted by an innovative interactive video system developed by renowned experts.

*A 100% online program that will allow you to be aware of the current surgical approach to patients with hindfoot pathologies.*

*Easily delve into the most innovative surgical techniques for the treatment of ankle osteoarthritis through multimedia resources.*



# 02 Objectives

New technologies have had a significant influence on current techniques to approach ankle surgeries, which is why this Postgraduate Diploma offers the specialist the most recent scientific evidence in this area. This will allow the specialist to be aware of the solution methods, the determination of a patient suitable or not for certain interventions or the advances in the management of ankle osteoarthritis and arthroplasty at the end of this program. The expert faculty of this program will accompany the professional to achieve these goals successfully.





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*You have 450 teaching hours of advanced and recent content on the most frequent complications in ankle surgery”*



## General Objectives

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- ♦ Mention frequent complications and how to avoid them
- ♦ Update inclusion and exclusion criteria for patients who are candidates for ankle prosthesis treatment
- ♦ Analyze in depth the basic principles and biomechanics of ankle prostheses
- ♦ List criteria for selection of ideal patients for each surgical technique
- ♦ Detail indispensable principles for the realization of a graft or flap in the coverage of skin defects at the level of the foot and ankle



*The case studies and detailed videos provide you with an eminently practical vision, which will lead you to integrate new techniques into your daily practice"*





## Specific Objectives

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### Module 1. Hindfoot Pathology

- ♦ Develop european and leading society guidelines and update literature and articles of interest
- ♦ Specify the surgical indications and their decision algorithm
- ♦ Establish contraindications as well as special situations

### Module 2. Ankle Arthrosis and Arthroplasty

- ♦ Generate specialized knowledge on the pathophysiology of ankle osteoarthritis
- ♦ Develop the most innovative surgical techniques for the treatment of ankle osteoarthritis
- ♦ Determine the criteria for the selection of the ideal patients for each surgical technique

### Module 3. Reconstruction of Cutaneous Defects of the Foot and Ankle Osteomyelitis of Bones of the Foot and Ankle

- ♦ Understand the pathophysiology of osteomyelitis
- ♦ Examine the anatomy of the leg, ankle, and foot area to develop anatomical guides
- ♦ Determine high and low complexity techniques to provide a range of options
- ♦ Select the appropriate graft or flap based on the type of defect present

# 03

## Course Management

The excellent knowledge in lower limb surgery, as well as the performance of this specialty in reference hospitals have been decisive in the selection of the teaching team that integrates this university qualification. Their exceptional professional background is a guarantee for the specialist who attends this program to obtain an adequate update in this subspecialty. Likewise, the proximity of the teaching staff will allow them to resolve any doubts that may arise regarding the syllabus of this 100% online program.



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*TECH has selected for this Postgraduate Diploma a team of professionals specialized in traumatology from leading hospitals"*

## International Guest Director

Awarded by the American Orthopedic Foot and Ankle Society for his innovative clinical treatments, Dr. John Kwon is a renowned surgeon highly specialized in the approach to traumatic injuries of the lower limbs. In this line, he has carried out his work in health institutions of international reference, including the Massachusetts General Hospital or the Mercy Medical Center in Baltimore.

In this way, he has contributed to the optimal recovery of numerous patients suffering from pathologies such as complex fractures in the tibioperoneoastotalar joint, cartilage disorders and even ligament ruptures due to sports accidents. It should be noted that he is an expert in the application of external fixation techniques, which has allowed him to offer users comprehensive and personalized treatments to optimize their quality of life significantly.

On the other hand, he has balanced this work with his facet as a researcher. In this regard, he has published scientific articles in specialized medical journals on subjects such as the most sophisticated surgical procedures for the correction of deformities such as bunions, therapeutic methods for the management of bone infections or application of ultrasound processes to guide a wide range of interventions ranging from plantar fasciitis to retrocalcaneal bursitis.

In his unwavering commitment to medical excellence, he participates as a speaker at multiple conferences on a global scale. As such, he shares with the global medical community both his findings and his extensive work experience. This has led to significant advances in the healthcare field, greatly increasing practitioners' knowledge of cutting-edge therapies to effectively treat foot and ankle problems. Thanks to this, professionals have improved their care for users, while at the same time optimizing their results considerably.



## Dr. Kwon, John

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- ♦ Head of the Foot and Ankle Service at Massachusetts General Hospital, United States
- ♦ Orthopedic Foot and Ankle Surgeon at Mercy Medical Center of Baltimore
- ♦ Chief Clinical Officer at Israel Deaconess Medical Center of Boston
- ♦ Combined Orthopedic Residency at Massachusetts General Hospital, Brigham Hospital and Boston Children's Hospital
- ♦ Internship in Internal Medicine at McGaw Medical Center of Northwestern University
- ♦ B.S. in Medical Sciences from New York Medical College
- ♦ B.S. in Biology from Wesleyan University



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

## Management



### Dr. Pacheco Gutiérrez, Victor Alexander

- ◆ Surgeon Specialist in Orthopedics and Sports Medicine at the Dr. Sulaiman Al Habib Hospital in Dubai
- ◆ Medical advisor for baseball, boxing and cycling teams
- ◆ Specialty in Orthopedics and Traumatology.
- ◆ Degree in Medicine
- ◆ Sports Medicine Fellowship in Sportsmed
- ◆ Member of the American Academy of Orthopedic Surgeons

## Professors

### Dr. López Guevara, Daniel

- ◆ Medical Sonographer and Specialist in Traumatology and Orthopedics
- ◆ Medical specialist in Traumatology and Orthopedic Surgery in various clinical centers in the city of Valencia
- ◆ Specialist in Reconstructive Microsurgery
- ◆ Graduate in Medicine and Surgery
- ◆ Traumatology and Orthopedics Specialty
- ◆ Fellowship in Orthopaedic Trauma at Harborview Medical Center, University of Washington
- ◆ Fellowship at Wake Forest Baptist Health, U.S.A.

### Dr. Morrillo, Francisco

- ◆ Medical Specialist in Traumatology and Orthopedics
- ◆ Postgraduate Professor of Traumatology and Orthopedics
- ◆ Instructor in Microsurgery
- ◆ Graduate in Medicine and Surgery
- ◆ Traumatology and Orthopedics Specialty
- ◆ Microsurgical Technique at the Experimental Surgery Center, Sabadell



**Dr. Díaz Figueroa, Omar**

- Specialist in Reconstruction of Complex Extremity Injuries
- Specialist in Hand Surgery and Reconstructive Microsurgery
- Graduate in Medicine and Surgery
- Traumatology and Orthopedics Specialty
- Subspecialty in Reconstructive Microsurgery at The Campbell Clinic, United States

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

# 04

## Structure and Content

The effectiveness of the *Relearning* method, based on the reiteration of content, has led TECH to use it in all of its programs. Thanks to this system, the specialist will be able to reduce the long hours of memorization and study, in addition to cementing in a more efficient way the concepts addressed in this Postgraduate Diploma. In this way, the professional will delve into the latest techniques used for the diagnosis of hindfoot pathologies and the management of the different complications that can occur in ankle surgery. You will also be able to expand this information through a multimedia resource library, available 24 hours a day.





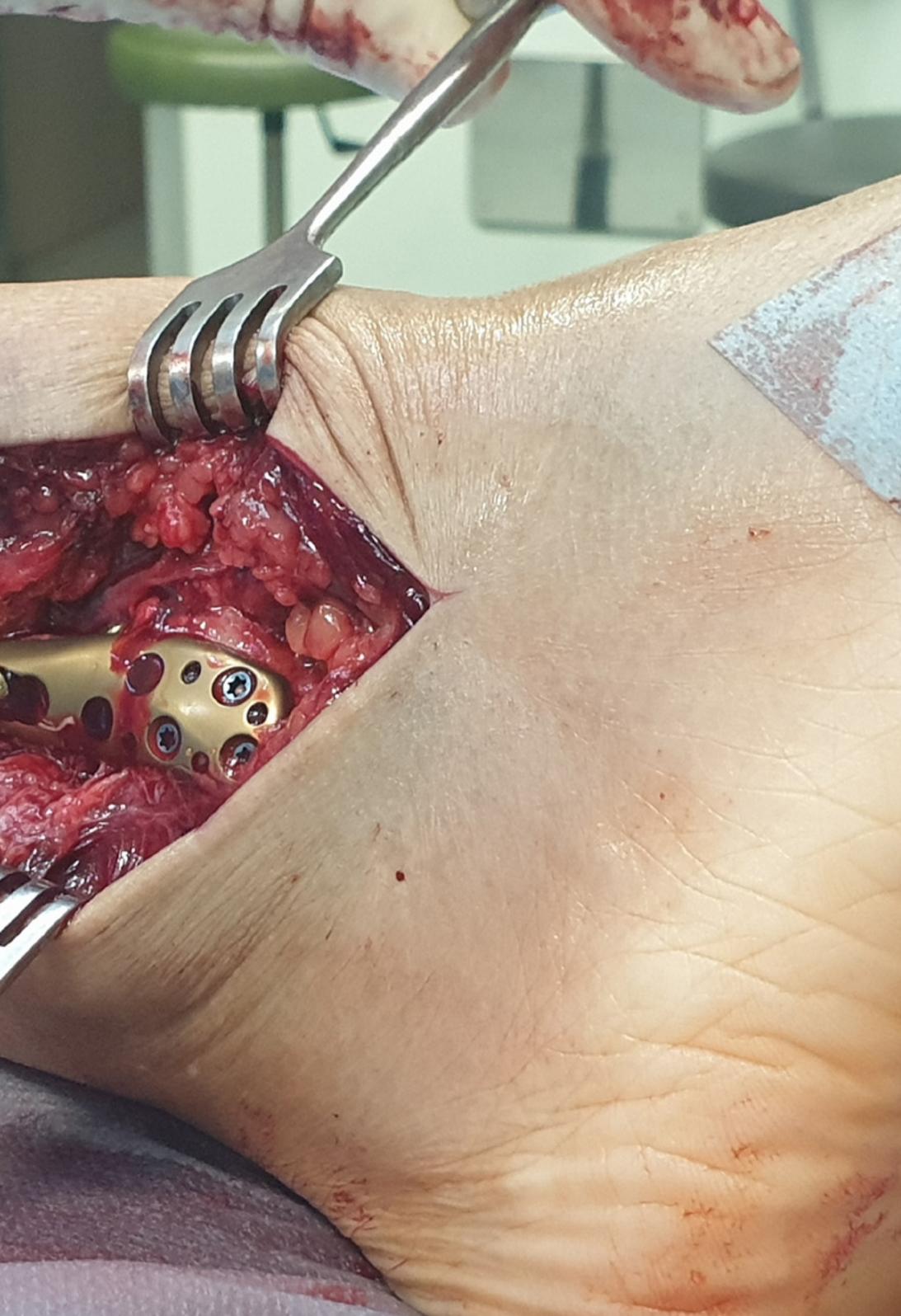
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*The multimedia pills will help you with their dynamism to get up to date on hindfoot pathologies and ankle osteoarthritis and arthroplasty"*

## Module 1. Hindfoot Pathology

- 1.1. Posterior Tibial Insufficiency
  - 1.1.1. Anatomy
  - 1.1.2. Indications - Contraindications
  - 1.1.3. Surgical Technique
  - 1.1.4. Post-Operative
- 1.2. Peroneal Tendon Injuries
  - 1.2.1. Anatomy
  - 1.2.2. Approach Route
  - 1.2.3. Surgical Technique
  - 1.2.4. Rescue Techniques
- 1.3. Achilles Injuries
  - 1.3.1. Anatomy
  - 1.3.2. Surgical Technique
  - 1.3.3. Rescue Techniques
- 1.4. Plantar Fasciitis
  - 1.4.1. Anatomy
  - 1.4.2. Surgical Technique
  - 1.4.3. Rescue Techniques
- 1.5. Pes Cavus
  - 1.5.1. Anatomy
  - 1.5.2. Surgical Technique
  - 1.5.3. Post-Operative
- 1.6. Subtalar Arthrodesis
  - 1.6.1. Indications - Contraindications
  - 1.6.2. Surgical Technique
  - 1.6.3. Post-Operative
- 1.7. Triple Arthrodesis
  - 1.7.1. Anatomy
  - 1.7.2. Boarding Routes
  - 1.7.3. Surgical Technique
  - 1.7.4. Rescue Techniques





- 1.8. Posterior Tibial Nerve Compression
  - 1.8.1. Anatomy
  - 1.8.2. Surgical Technique
  - 1.8.3. Post-Operative
  - 1.8.4. Treatment of Sequelae
- 1.9. Osteochondral Injury of Talus
  - 1.9.1. Anatomy
  - 1.9.2. Boarding Routes
  - 1.9.3. Surgical Technique
  - 1.9.4. Post-Operative
  - 1.9.5. Complications
- 1.10. Treatment of Sequelae
  - 1.10.1. Acute - Chronic Infection
  - 1.10.2. Role of Arthroscopy in Sequelae
  - 1.10.3. Pseudarthrosis.
  - 1.10.4. Rescue with External Fixator

**Module 2. Ankle Arthrosis and Arthroplasty**

- 2.1. Ankle Arthrosis
  - 2.1.1. Etiology
  - 2.1.2. Signs and Symptoms
  - 2.1.3. Image Interpretation
  - 2.1.4. Conservative Treatment Alternatives
- 2.2. The Role of Arthroscopy in Osteoarthritis of the Ankle
  - 2.2.1. Scope of Treatment
  - 2.2.2. Benefit of the Treatment
  - 2.2.3. Surgical Technique
- 2.3. Ankle Arthrodiastasis
  - 2.3.1. Scientific Evidence
  - 2.3.2. Indications
  - 2.3.3. Surgical Technique

- 2.4. Osteochondral Injury of the Thallus
  - 2.4.1. Reconstructive Alternatives
  - 2.4.2. Scientific Evidence
  - 2.4.3. Surgical Technique
  - 2.4.4. Clinical Cases
- 2.5. Arthrodesis of Ankle
  - 2.5.1. Indications
  - 2.5.2. Contraindications
  - 2.5.3. Arthroscopic Ankle Arthrodesis
  - 2.5.4. Tibiotalar and Tibiotalocalcaneal Arthrodesis with Plates
  - 2.5.5. Tibiotalocalcaneal Arthrodesis with Retrograde Nailing
- 2.6. Supramalleolar Osteotomy in Ankle Osteoarthritis
  - 2.6.1. Indications
  - 2.6.2. Contraindications
  - 2.6.3. Surgical Technique
  - 2.6.4. Scientific Evidence
- 2.7. Total Ankle Arthroplasty
  - 2.7.1. Evolution of the Technique
  - 2.7.2. Implants
  - 2.7.3. The Winning Patient
  - 2.7.4. Indications
  - 2.7.5. Contraindications
  - 2.7.6. Complications
- 2.8. Total Ankle Arthroplasty with Osteochondral Defect of Talar Dome
  - 2.8.1. Definition
  - 2.8.2. Surgical Technique
  - 2.8.3. Postoperative Management
- 2.9. Total Ankle Arthroplasty with Valgus Deformity
  - 2.9.1. Definition
  - 2.9.2. Surgical Technique
  - 2.9.3. Postoperative Management

- 2.10. Total Ankle Arthroplasty with Varus Deformity
  - 2.10.1. Definition
  - 2.10.2. Surgical Technique
  - 2.10.3. Postoperative Management

### Module 3. Reconstruction of Cutaneous Defects of the Foot and Ankle Osteomyelitis of Bones of the Foot and Ankle

- 3.1. Anatomy of the Foot and Ankle Applied to the Reconstruction of Skin and Bone Defects
  - 3.1.1. Functional Anatomy
  - 3.1.2. Anatomical Guide to Soft Tissue Reconstruction
  - 3.1.3. Anatomical Guide for Bone Tissue Reconstruction
- 3.2. General Principles of Soft Tissue Reconstruction
  - 3.2.1. Surgical Equipment
  - 3.2.2. Patient Assessment and Decision-Making
  - 3.2.3. Preparation and Initial Management of Skin Defects of the Foot and Ankle
- 3.3. Soft Tissue Reconstruction with Low Complexity Procedures
  - 3.3.1. Negative Pressure Therapy
  - 3.3.2. Acellular Dermal Matrix
  - 3.3.3. Skin Grafts
- 3.4. Soft Tissue Reconstruction with Pedicled Regional Flaps
  - 3.4.1. Indications
  - 3.4.2. Preoperative Planning and Most Commonly Used Flaps
  - 3.4.3. Complications
- 3.5. Soft Tissue Reconstruction with Microsurgical Techniques
  - 3.5.1. Indications
  - 3.5.2. Preoperative Planning and Most Commonly Used Free Flaps
  - 3.5.3. Complications
- 3.6. Reverse Sural Flap
  - 3.6.1. Anatomy
  - 3.6.2. Flap Design
  - 3.6.3. Surgical Dissection Technique



- 3.7. Supramalleolar Flap
  - 3.7.1. Anatomy
  - 3.7.2. Flap Design
  - 3.7.3. Surgical Dissection Technique
- 3.8. Anterolateral Thigh Flap
  - 3.8.1. Anatomy
  - 3.8.2. Flap Design
  - 3.8.3. Surgical Dissection Technique
- 3.9. Antebrachial Radial Artery Flap
  - 3.9.1. Anatomy
  - 3.9.2. Flap Design
  - 3.9.3. Dissection Technique
- 3.10. Osteomyelitis of Bones of the Foot and Ankle
  - 3.10.1. Osteomyelitis
  - 3.10.2. Management of Bone Defects Secondary to Osteomyelitis
  - 3.10.3. Role of Soft Tissue Reconstruction in the Management of Foot and Ankle Infections

“A unique, key, and decisive educational experience to boost your professional development”

05

# Methodology

This academic program offers students a different way of learning. Our methodology follows a cyclical learning process: **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 assess 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

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

*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 prepared with unprecedented success in all clinical specialties regardless of surgical load. Our educational 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 adapted in 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.

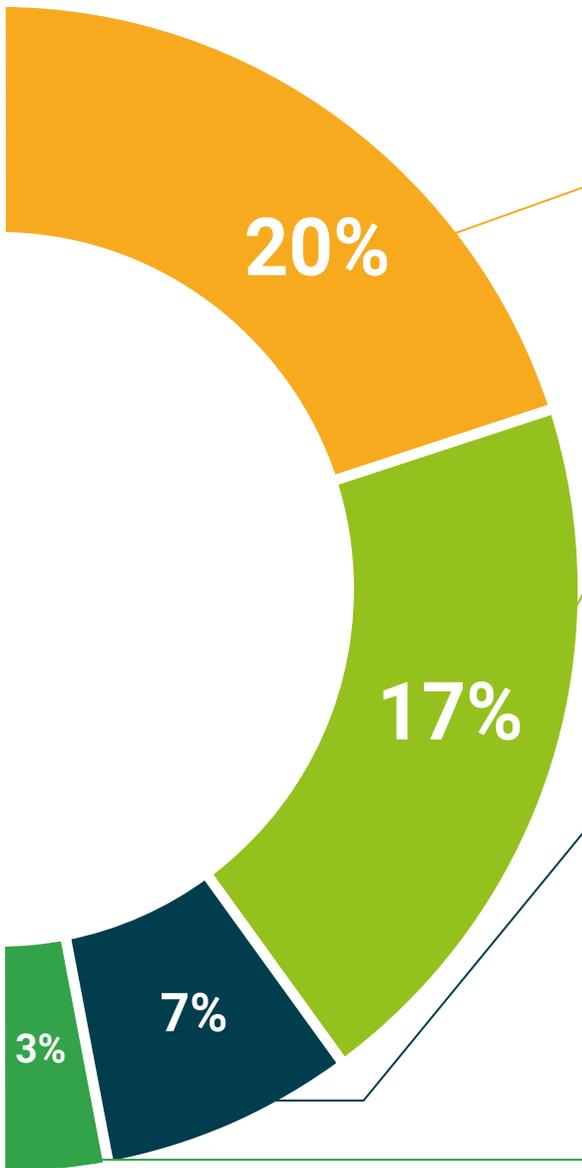
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### 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 assess and re-assess 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 Diploma in Management of Ankle Surgery Complications guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.





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

This program will allow you to obtain your **Postgraduate Diploma in Management of Ankle Surgery Complications** 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.

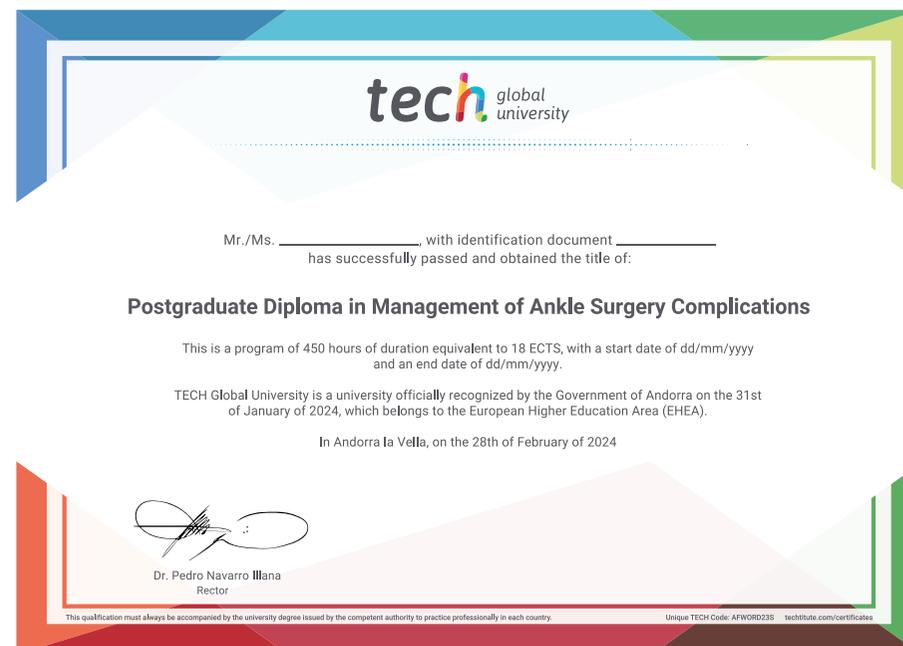
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Management of Ankle Surgery Complications**

Modality: **online**

Duration: **6 months**

Credits: **18 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.



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