



## Postgraduate Certificate

Degenerative Shoulder Pathology

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

We bsite: www.techtitute.com/in/medicine/postgraduate-certificate/degenerative-shoulder-pathology

## Index

 $\begin{array}{c|c} 01 & 02 \\ \hline & & \text{Objectives} \\ \hline & & & \\ \hline & &$ 

06 Certificate

p. 32





### tech 06 | Introduction

Advances in technology have offered new diagnostic tools and modalities, such as imaging techniques that allow more detailed visualization of shoulder structures and more accurate identification of lesions. Advanced surgical techniques, such as arthroscopy and robotic-assisted surgery, have also been developed, offering less invasive approaches and greater precision in the treatment of degenerative shoulder pathology. This leads shoulder surgeons to keep abreast of the latest scientific advances, research and clinical studies in the field of degenerative shoulder pathology.

For this reason, TECH has developed this Postgraduate Certificate that offers the graduate a complete update on Degenerative Shoulder Pathology. This is a program that will comprehensively address the most relevant concepts in this area, focusing on traumatic complications in shoulder arthroplasty, post-traumatic omarthrosis and rotator cuff arthropathy. In addition, he will delve into the conservative and surgical treatment of primary omarthrosis, as well as advances and approaches in shoulder prostheses.

All this, in addition, under a 100% online methodology, which gives the medical specialist the alternative of coordinating his personal and work activities with those of his update. Likewise, the program implements in its curriculum one of the most revolutionary methods in the academic field, the Relearning system. This method ensures that the expert retains concepts in less time, more effectively and without much effort.

This Postgraduate Certificate in Degenerative Shoulder Pathology 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 expert orthopedic surgeons.
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice.
- Practical exercises where self-assessment can be used to improve learning.
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection



You will delve into the historical perspective of shoulder arthroplasty and expand your knowledge of the most recent advances in the field"



You will explore shoulder arthroplasty in detail thanks to real cases that have driven research in this field"

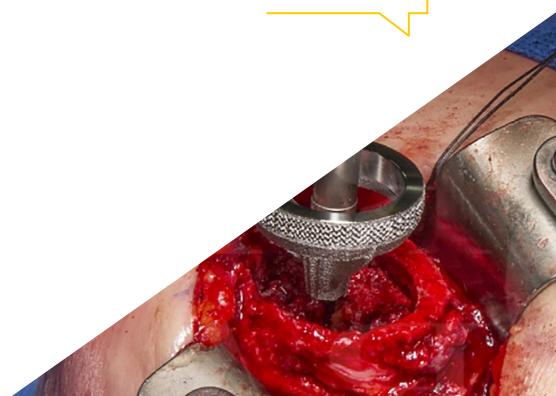
The program's teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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.

You will implement to your medical practice the latest scientific evidence in shoulder prostheses.

You will delve into the conservative treatment of primary osteoarthritis to offer your patients effective therapeutic options.



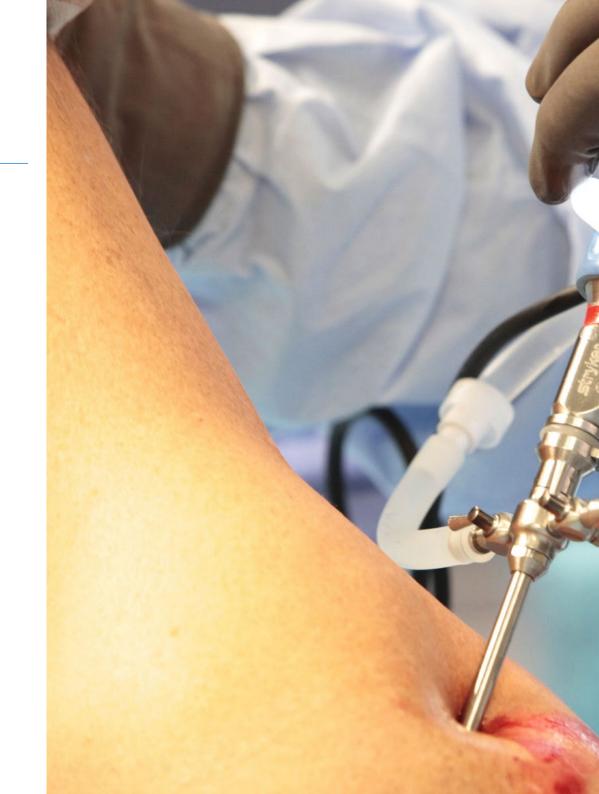


### tech 10 | Objectives



### **General Objectives**

- Analyze the macroscopic anatomy of the shoulder
- Determine the different approaches to open surgery
- Introducing the arthroscopic portals of shoulder surgery
- Delve into new technologies in anatomy and shoulder surgery
- Examine the usefulness of different radiological techniques in the diagnosis of certain shoulder pathologies
- Define ultrasound scans as a treatment technique in some shoulder pathologies.
- Expose the usefulness of nuclear medicine in shoulder pathology
- Compile the different objective, subjective and quality of life scales
- Show embryology of the shoulder
- Grouping of shoulder pathologies affecting children: dysplasias, fractures and other acquired pathologies
- Development of rheumatologic, tumor and infectious diseases
- Deepening the role of anesthesia in the shoulder







### **Specific Objectives**

- Delve into in the scientific evidence in shoulder arthroplasty
- Investigate primary omarthrosis from the point of view of its etiology, anamnesis and conservative and surgical treatments
- Master the therapeutic indications in post-traumatic osteoarthritis and expose surgical techniques
- Address avascular necrosis, etiology and indications for conservative and surgical treatment
- Define possible traumatic complications and indications for conservative and surgical treatment
- Expose the mechanical complications and their therapeutic algorithm
- Develop the subject of infectious complications and their adequate treatment from a multidisciplinary point of view, both medical and surgical



You will delve into the different classifications of primary omarthrosis and their relevance in clinical decision making"





### tech 14 | Course Management

### Management



### Dr. Ana Belén Fernández Cortina

- Traumatologist at Cosaga Hospital
- · Traumatologist (Shoulder Visiting Fellow) at the Massachusetts General Hospita
- · Traumatologist at the Ourense University Hospital Complex
- · Traumatologist at Gambo General Rural Hospital
- · Journal Clinical Epidemiology Reviewer Affiliation: Clinical epidemiology
- Scientific Journal Medical Science Melvile USA Reviewer
- PhD in Medicine and Surgery from the Complutense University of Madrid
- Specialist in Orthopedic and Trauma Surgery
- $\boldsymbol{\cdot}\;$  Degree in Medicine and Surgery from the University of Santiago de Compostela
- Member of: Spanish Association of Orthopedic Surgery and Traumatology (SECOT), Spanish Society of Shoulder and Elbow Surgery (SECHC), Spanish Association of Arthroscopy (AEA), Spanish Society of Sports Traumatology (SETRADE)



### Dr. Vanesa López Fernández

- · Attending Doctor of Orthopedic Surgery and Traumatology, Arthroscopy Unit at the Hospital Rey Juan Carlos
- · Attending Doctor of Orthopedic Surgery and Traumatology at the Fundación Jiménez Díaz Hospital.
- · Clinical and research fellowship in shoulder, hand and upper limb surgery at the Clinique Generale d'Annecy
- Clinical and research fellowship in shoulder and elbow surgery under the supervision of Dr. Emilio Calvo and Dr. Foruria at the Jiménez Díaz Foundation.
- Professor and member of the scientific committee of the CURSOCOT for the training of residents and attendings (recertification courses) in Orthopedic Surgery and Traumatology.
- Honorary Professor of Orthopedic Surgery and Traumatology Universidad Rey Juan Carlos.
- Dr. in Medicine from the University of Santiago de Compostela with a doctoral thesis entitled "Effect of intra-articular hyaluronic acid in experimental synovitis".
- · Degree in Medicine from the Santiago de Compostela University
- · Master's Degree in Orthopedic Surgery and Traumatology from San Pablo CEU University.
- · Postgraduate Diploma in Orthopedic Surgery and Upper Limb Traumatology from San Pablo CEU University.
- Postgraduate Diploma in Orthopedic Surgery and Traumatology of the Pelvis, Hip and Pediatric Traumatology from San Pablo CEU University.
- Postgraduate Diploma in Orthopedic Surgery and Traumatology of the knee, ankle and foot by San Pablo CEU University.
- $\cdot \ \, \text{Postgraduate Diploma in Orthopedic Surgery and Traumatology of the Spine, Tumors and Infections, San Pablo CEU University}$

### tech 16 | Course Management

#### **Professors**

#### Dr. María Brotat Rodríguez

- Specialist Orthopedic Surgery and Traumatology Doctor at Infanta Elena University Hospital
- Traumatology and Orthopedic Surgery Specialist: Palencia Medical Clinic
- Traumatology and Orthopedic Surgery Specialist Specialist, Palencia University Welfare Complex
- Traumatology and Orthopedic Surgery Specialist at Our Lasy of Sonsoles Hospital
- Specialist in Traumatology and Orthopedic Surgery at Valladolid University Clinical Hospital
- Traumatology and Orthopedic Surgery Traumatology and Orthopedic Surgery Teaching Collaborator Infanta Elena University Hospital
- Teaching collaborator of the Department of Anatomy at the University of Valladolid.
- Teaching collaborator with family doctors in the Palencia University Welfare Complex
- Fellowship in shoulder and elbowUniversity College London Hospital/St. John and St. Elisabeth hospital
- Degree in Medicine from the Complutense University of Madrid
- Postgraduate degree in Biomedical Sciences from the Madrid Complutense University.
- Master's Degree in Knee Pathology from the International University of Andalusia
- Master's Degree in Shoulder Pathology from the International University of Andalusia

### Dr. Byron Torres

- Orthopedic Orthopedic Traumatologist Doctor
- Doctor in Hospital Metropolitano, Hospital Vozandes, Hospital De Los Valles, Salud S.A., Ecua sanitas S.A.
- Professor of the Orthopedics and Traumatology Postgraduate Course of the P.U.C.E.
- Professor of the Orthopedics and Traumatology Postgraduate Course of the Loja National University / Pichincha Clinic.
- Professor of the International Course on Sports Traumatology
- Fellow in Shoulder and Elbow Reconstructive and Arthroscopic Surgery at the Humanist Center and Concordia Hospital.
- Fellow in Shoulder and Elbow Reconstructive and Arthroscopic Surgery at Imbanaco Medical Center
- Fellowship in Knee Surgery and Sports Medicine by the Latin American Society of Arthroscopy
- Medical Degree from Central University of Ecuador.
- Doctor of Medicine and Surgery, School of Medicine
- $\bullet \ \ \text{Specialist in Orthopedics and Traumatology from the International University of Ecuador.}$
- Member of: Founder of the Ecuadorian Society of Shoulder and Elbow Surgery, American Academy of Orthopedics of Traumatology AAOS, Ecuadorian Society Of Traumatology, Latin American Society Of Knee Arthroscopy And Sports Traumatology S.L.A.R.D.



### Course Management | 17 tech

### Dr. Juan Arturo Hurtado Chávez

- Traumatologist at the San Gabriel Clinic
- Traumatologist at Luis Alberto Barton Thompson Hospital
- Traumatologist at Providencia Clinic
- Traumatologic Emergency Care Doctor at San Bernardo Clinic
- Health Officer and Chief of the Medical Department, Peruvian Navy
- Teacher in Undergraduate, Internship and Residency in Orthopedics and Traumatology at the Mayor Santiago Távara Naval Medical Surgery Center
- Speaker at SLAOT Forums
- Fellow in Shoulder Surgery from the University of Geneva
- Orthopedic Surgeon from the San Marcos National Higher University
- Medical Surgeon, Tacna Private University
- Postgraduate degree in Orthopedic Surgery and Traumatology from the San Marcos National Higher University

#### Dr. Fiona Ashton

- Specialist in Orthopedics and General Surgery
- Upper Limb Specialist
- Specialist in Pediatric Orthopedics
- Spine Surgery Specialist
- Foot and Ankle Surgery Specialist
- Specialist in Hand and Wrist Surgery
- Specialist in Shoulder and Elbow Surgery
- Postgraduate in Research by MD Medical Sciences
- Medical Degree from the University of Edinburgh.

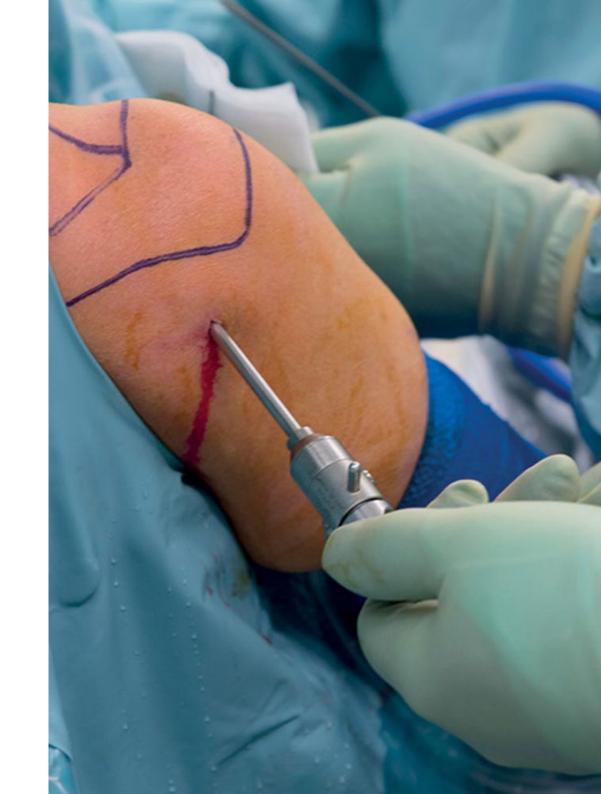
### tech 18 | Course Management

### Dr. Ana Alfonso Fernández

- Area Specialist at the University Hospital of Álava
- Area Specialist Doctor at Sierrallana Hospital
- Fellowship in Upper Extremity Surgery at the University of Ottawa.
- Area Specialist Doctor at the Marqués de Valdecilla University Hospital
- Associate Professor in the Department of Medical and Surgical Sciences
- Orthopedic Surgery and Traumatology of the University of Cantabria
- Degree in Medicine and Surgery from the University of Santiago de Compostela
- Doctor of Medicine, University of Cantabria, Spain
- Member of: Spanish Society of Orthopaedic Surgery and Traumatology (SECOT)

#### Dr. Paul Patiño

- Arthroscopic Surgeon and Traumatologist at Angel Foianini Clinic
- General Director and head surgeon of the arthroscopic surgery team of Artrocentro
- Arthroscopic Surgeon and Traumatologist at Private Bank Health Fund and Incor Clinic
- Orthopedic surgeon specialized in shoulder and elbow pathology.
- Surgeon from the Universidad Mayor of San Simón
- Postgraduate Certificate in Arthroscopic Surgery from the National Autonomous University of Mexico
- Postgraduate Certificate in Articular Surgery and Arthroscopy from the National Autonomous University of Mexico
- High Specialization Program in Shoulder Surgery of the Catholic University of Buenos Aires
- Research Fellow in Arthroscopic Surgery and Sports Medicine



#### Dr. Iván Navas Clemente

- Medical Specialist in Internal Medicine at the Hospital Universitario Rey Juan Carlos
- Assistant Doctor of the Emergency Department at the University Hospital of Fuenlabrada
- Residency in Internal Medicine at the University Hospital of Fuenlabrada
- Lecturer associated with the Faculty of Medicine of the Rey Juan Carlos University
- Master's Degree in Infectious Diseases and Antimicrobial Treatment from Cardenal Herrera University
- Degree in Medicine from the University of Alcalá de Henares

#### Dr. Pablo Andrés Di Giacomo

- Staff Doctor in Upper Limb Surgery at Sanatorio Trinidad de Palermo
- Doctor in the Health Department of the Argentine Naval Prefecture Welfare Department
- Upper Extremity Surgeon at the Virreyes Clinic
- Staff Doctor in Upper Extremity Surgery and outpatient service at the Julio Méndez Sanatorium
- Head of Upper Limb Surgery Team at OPSA FATSA
- Upper Limb Surgeon at the Ateneo Sanatorium
- Traumatologist at the Emergency Medical Clinic Belgrano Branch
- Outpatient Traumatologist at the Trinidad Sanatorium
- Staff Doctor in Upper Limb Surgery at Centro Traumatologico del Oeste
- A.A.O.T. Certified Orthopedic and Traumatology Doctor
- Medical Auditor at the German Hospital
- Traumatology and Orthopedics Resident Instructor at the Dr. Julio Méndez Sanatorium
- Chief Resident of Traumatology and Orthopedics at the Sanatorio Dr. Julio Méndez

- University Specialist in Shoulder and Elbow Surgery
- University Specialist in Medical Auditing
- Specialist in Orthopedics and Traumatology by the Argentine Association of Orthopedics and Traumatology
- Specialist in Orthopedics and Traumatology by the National Ministry of Health
- Postgraduate Degree in Medical Auditing from the Argentine Catholic University (UCA)
- Postgraduate Degree in Extracorporeal Shock Waves from the Argentine Catholic University (UCA)
- Postgraduate Degree as Shoulder and Elbow Surgeon Specialist from the Argentine Catholic University (UCA)
- Postgraduate Degree as Shoulder and Elbow Surgeon Specialist from the Argentine Catholic University (UCA)
- Medical Degree from the University of Buenos Aires
- Fellowship in Hand Surgery
- Fellowship in Hand Surgery at the Center for Traumatology, Orthopedics and Rehabilitation (CTO)

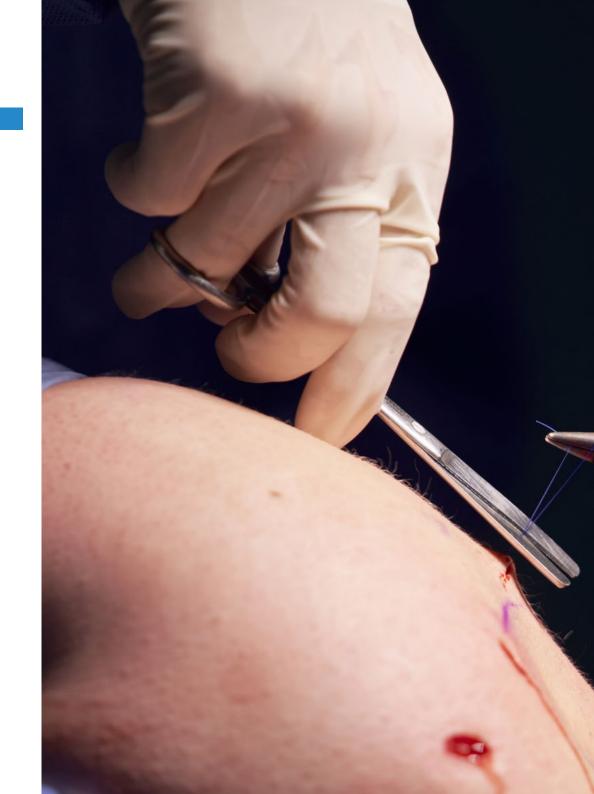


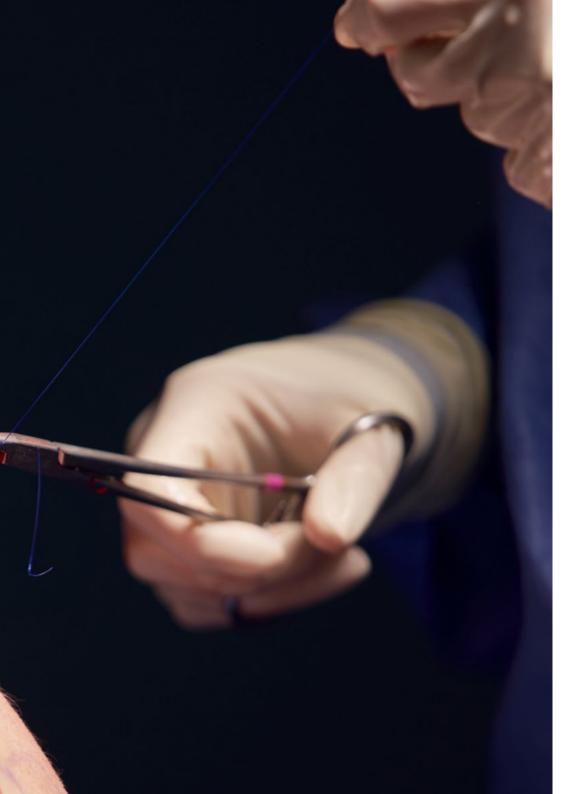


### tech 22 | Structure and Content

### Module 1. Degenerative shoulder

- 1.1. Scientific evidence in shoulder prostheses
  - 1.1.1. Shoulder arthroplasty. Historical Perspective
  - 1.1.2. Shoulder Arthroplasty Archives
  - 1.1.3. Scientific evidence in shoulder prostheses
- 1.2. Primary osteoarthritis. Conservational Treatment
  - 1.2.1. Etiology of primary omarthrosis
  - 1.2.2. Anamnesis and Physical Examination
  - 1.2.3. Classification of primary omarthrosis
  - 1.2.4. Indications for conservative treatment
- 1.3. Primary osteoarthritis: Surgical Treatment. Techniques
  - 1.3.1. Surgical Management
  - 1.3.2. Therapeutic Algorithms Implant indication
  - 1.3.3. Surgical techniques in primary omarthrosis
- 1.4. Rotator Cuff Arthropathy. Conservative and surgical treatment. Surgical Techniques.
  - 1.4.1. Rotator Cuff Arthropathy
  - 1.4.2. Conservative Treatment
  - 1.4.3. Surgical Management
  - 1.4.4. Surgical Techniques
- 1.5. Omartrosis postraumática: Conservative and surgical treatment. Surgical Techniques
  - 1.5.1. Conservative Treatment
  - 1.5.2. Surgical Management
  - 1.5.3. Surgical Techniques
- 1.6. Omarthrosis and avascular necrosis. Conservative and surgical treatment Surgical Techniques
  - 1.6.1. Etiologies of avascular necrosis
  - 1.6.2. Conservative Treatment
  - 1.6.3. Surgical Management
  - 1.6.4. Surgical Techniques.
- 1.7. Traumatic Complications in Shoulder Arthroplasty
  - 1.7.1. Periprosthetic fractures in shoulder arthroplasty.
  - 1.7.2. Dislocation in shoulder arthroplasty
  - 1.7.3. Neurological injuries in shoulder arthroplasty





### Structure and Content | 23 tech

- 1.8. Mechanical Complications in Shoulder Arthroplasty
  - 1.8.1. Aseptic loosening in shoulder arthroplasties
  - 1.8.2. Scapular notching in shoulder arthroplasties
  - 1.8.3. Therapeutic Algorithms
- 1.9. Infectious Complications in Shoulder Arthroplasty
  - 1.9.1. Infection in Shoulder Arthroplasty
  - 1.9.2. Medical treatment of shoulder arthroplasty infection
  - 1.9.3. Surgical treatment in shoulder arthroplasty
- 1.10. Shoulder arthrodesis. Indications and surgical techniques
  - 1.10.1. Indications for shoulder arthrodesis
  - 1.10.2. Surgical Technique
  - 1.10.3. Complications of shoulder arthrodesis



You will explore the most advanced surgical techniques in the treatment of primary osteoarthritis and improve your surgical skills"





### tech 26 | 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 | 29 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.

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**

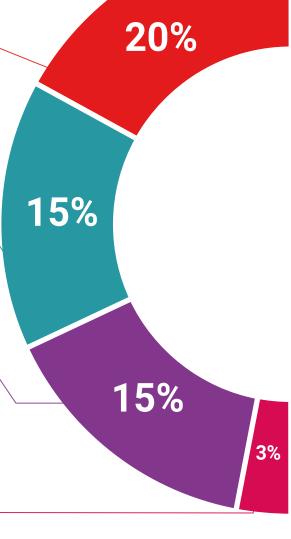
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many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

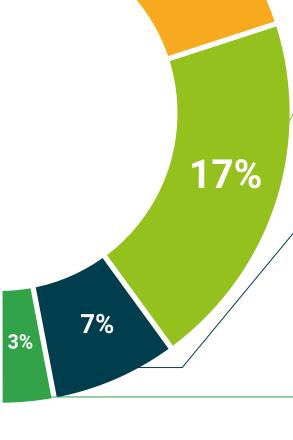
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **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.









### tech 34 | Certificate

This **Postgraduate Certificate** in **Degenerative Shoulder Pathology** 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.

Program: Postgraduate Certificate in Degenerative Shoulder Pathology
Official No. of Hours: 150 h.



<sup>\*</sup>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.

health confidence people

education information tutors
guarantee accreditation teaching
institutions technology learning



# Postgraduate Certificate Degenerative Shoulder Pathology

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

