**Postgraduate Diploma** Orbital Pathology and Orbito-Palpebral Trauma Management



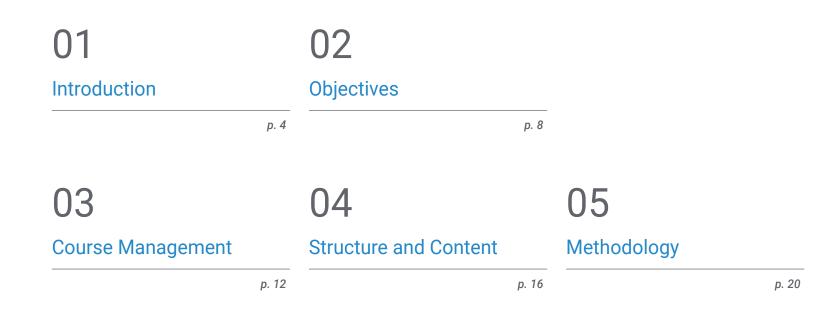


**Postgraduate Diploma** Orbital Pathology and Orbito-Palpebral Trauma Management

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

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-orbital-pathology-orbito-palpebral-trauma-management

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06 Certificate

## 01 Introduction

The ocular structures can be seriously affected as a consequence of sports practice, a car accident, falls, impacts, fights, etc., being the eyelids, the orbit and the lacrimal duct the parts where the damage is usually greater. For this reason, the specialist in this area must know in detail the latest advances in Ophthalmology related to the management of traumatisms of the orbito-palpebral system, since an arduous diagnosis, together with a quick action in the treatment, can considerably reduce the chances of the patient losing his eye or having his sight affected. For this reason, having this program as a guide in its updating will be the best option, since it is a degree designed by experts in the sector and in which the most updated information has been included. All this compacted in a comfortable and accessible online format, so that you can combine it with your practice without any problem.



The health of your patients' eyes is in your hands. Update your knowledge with this Postgraduate Diploma and offer them a better guarantee of recovery with the latest treatments in Ophthalmology"

## tech 06 | Introduction

The causes that can provoke a palpebral, orbital and tear duct trauma are varied: accidents, blows, fights, etc. In addition, the severity of the injury can involve from partial to total loss of sight, which is why the imminent intervention of an Ophthalmology specialist specialized in the orbital area is essential. Thanks to the advances that have been made in this field, professionals nowadays have countless diagnostic tools and strategies, which are increasingly effective, as well as treatments ranging from surgery to the use of specific drugs.

As it is a changing and wide-ranging science, TECH has considered it essential that the graduate has a degree that allows them to keep up to date with all the new developments in this area. Thus was born this Postgraduate Diploma in Orbital Pathology and Orbito-Palpebral Trauma Management, a complete 6-month program that includes 450 hours of the best theoretical, practical and additional material.

It is a degree designed by experts in Ophthalmology and Surgery that covers the newest aspects of palpebral and orbital trauma, as well as the most effective and less invasive exploration techniques for the patient that are currently being used. It also delves into inflammatory and infectious diseases of the orbit, as well as tumor and vascular pathology affecting the eye, deepening its surgical approach.

It is, therefore, a comfortable and versatile option to get up to date thanks to its accessible 100% online format, which will allow the graduate not only to connect to the Virtual Classroom from anywhere and with any device with internet connection, but also to adapt the schedule to their availability. This way, they will be able to combine it perfectly with any other academic, work or personal activity.

This Postgraduate Diploma in Orbital Pathology and Orbito-Palpebral Trauma Management 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 Ophthalmology experts
- 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 be able to update your knowledge on the most effective and less invasive orbital exploration techniques for the patient"

### Introduction | 07 tech

"

A 100% online degree with which you will be able to work on updating your knowledge from wherever you want and with a schedule totally adapted to your availability"

The program's teaching staff includes professionals from the 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, through which the professional must try to solve the different professional practice situations that arise during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts. A program with which you will be able to update your vademecum with the most effective and beneficial ophthalmological pharmacological treatments for your patients' health.

With this program you will get to know in detail the novelties related to inflammatory and infectious diseases affecting the orbit.

# 02 **Objectives**

The objective of this program is to serve as a guide to the graduate in updating their knowledge about orbital pathologies and the management of orbito-palpebral trauma. To accomplish this, TECH will provide the most modern and effective academic tools, which will not only help you achieve your own goals, but also facilitate the experience, making it more enriching and productive.

*G* If you are looking to perfect your skills in the clinical management of palpebral and orbital trauma, with this program you will have achieved it in less than 6 months"

## tech 10 | Objectives



## **General Objectives**

- Delve into benign neoplasms of vascular origin: capillary and intraosseous hemangioma, etc.
- Understand how to perform a complete examination of the trauma patient and which complementary tests to request in each case
- Delve into the specific inflammatory diseases of the orbit; granulomatosis, sarcoidosis, Wegener's disease

TECH invests hundreds of hours in the design of each degree program to adapt them not only to the immediate current market, but also to the needs and demands of its hundreds of thousands of students"



## Objectives | 11 tech



#### **Specific Objectives**

#### Module 1. Palpebral and Orbital Trauma. Orbital Examination

- Acquire a broad knowledge of the management, exploration and surgical technique for the repair of palpebral lacerations with or without involvement of the lacrimal pathway
- Learn how to handle fractures of the orbital floor and other fractures of the rest of the orbital walls (medial, lateral, superior)
- Know how to diagnose other complex fractures of the orbit, as well as orbital foreign bodies, orbital compartment syndrome, traumatic optic neuropathy or traumatic muscle contusion

#### Module 2. Inflammatory and Infectious Diseases of the Orbit

- Learn how to perform a thorough examination of the orbit
- Delve into the differential diagnosis of proptosis
- Understand the etiology, clinical, diagnosis and classification of thyroid orbitopathy. Mild/moderate/severe. Active/inactive
- Obtain a thorough knowledge about the medical treatment of thyroid orbitopathy
- \* Know the different rehabilitative surgical techniques for thyroid orbitopathy
- Delve into Ig4-related disease
- Know the main infectious diseases of the orbit: preseptal cellulitis, orbital cellulitis, mucormycosis

## Module 3. Tumor and Orbital Vascular Pathology. Surgical Approach of the Orbit

- Know the different benign neoplasms of neural origin: swchanoma, neurofibroma, NW meningioma, glioma
- Learn about other benign lesions of the orbit and lacrimal glands
- Understand the most frequent primary malignant lesions: lymphoma, rhabdomyosarcoma
- Delve into the knowledge of the different vascular malformations of the orbit
- Learn how to choose the most appropriate surgical approach for each case

## 03 Course Management

Having a teaching team versed in Ophthalmology and Surgery is one of the strengths of this Postgraduate Diploma. TECH gives its graduates the opportunity to update and expand their knowledge with the help of professionals in the sector with a wide and extensive work experience in the clinical management of patients who have suffered from orbito-palpebral pathologies and trauma. Furthermore, this is a group of specialists characterized by their human quality and commitment to the profession, aspects that will be clearly reflected in the syllabus.

You will have the teaching staff at your disposal to answer any questions you may have during the course of this Postgraduate Diploma"

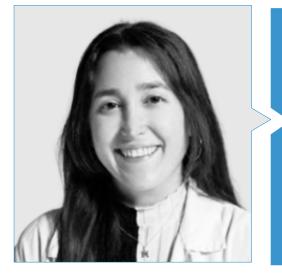
## tech 14 | Course Management

#### Management



#### Ms. Ibáñez Flores, Nuria

- Head of the Oculoplastics Department at the ICR of Barcelona (Institut Català de Retina)
- Adjunct professor of the medical degree at the UIC (International University of Catalonia)
- Director and coordinator of the surgical master's degree of the UIC (International University of Catalonia) in Oculoplastics,
- Orbit and Lacrimal Ducts
- Reviewer of the Archives of the Spanish Society of Ophthalmology
- Member of the Spanish Society of Ocular and Orbital Plastic Surgery (SECPOO)
- Responsible and coordinator of the interhospital sessions of Oculoplastics taught at ICR
- Doctor in Medicine and Surgery from the Autonomous University of Barcelona
- Degree in Medicine and Surgery from the University of Barcelona, Bellvitge Teaching Unit



#### Dr. Pascual González, Macarena

- Medical Specialist in Ophthalmology at General University Hospital Gregorio Marañón. Section of Oculoplasty, Tear
  Ducts and Orbit
- Collaborating lecturer in the subject of Ophthalmology at the Complutense University of Madrid
- Member of the Spanish Society of Ocular and Orbital Plastic Surgery (SECPOO)
- Fellow of European Board of Ophthalmology (FEBO)
- Degree in Medicine from the University of Malaga
- Specialist in Ophthalmology at the General University Hospital Gregorio MarañónMaster in Aesthetic, Regenerative and Anti-Aging Medicine at the Complutense University of Madrid

### Course Management | 15 tech

#### Professors

#### Dr. Zamorano Martín, Francisco

- Fellowship in Oculoplasty at the Conde de Valenciana Ophthalmology Institute in Mexico City, Mexico
- Three masters degrees, four university experts and a course on good clinical practice guidelines for clinical trials
- Participation in three clinical trials
- Participation in the MIROA university expert on ophthalmology
- Participation in the course on Evidence-Based Medicine of the Pan-American Association of Ophthalmology (PAAO)
- Pursuing a doctoral program in medicine at the University of Malaga

#### Dr. Rachwani Anil, Rahul

- Head of the Ophthalmology Service- Hospital Norte de Málaga (Antequera) Ophthalmologist attached to the Vithas Málaga Hospital Oculoplasty Unit
- Ophthalmologist attached to the Oculoplasty Unit- Quirón Malaga Hospital
- Member of the Spanish Society of Ocular and Orbital Plastic Surgery (SECPOO)
- Member of the Spanish Society of Ophthalmology
- Degree in Medicine from the University of Malaga
- \* Specialist in Ophthalmology, of Malaga Regional University Hospital
- Master Degree in Aesthetic, Regenerative and Anti-aging Medicine-Complutense University of Madrid
- Master in Ophthalmology

#### Dr. Ortiz Pérez, Santiago

- \* Clinical fellowship in oculoplastics (Moorfields Eye Hospital) in 2013
- Associate Professor at the University of Granada
- Researcher at the IBS Granada (Institute of Biomedical Research of Granada)
- Director of the Ophthalmology Unit, Virgen de las Nieves Hospital, Granada
- Founding member and current secretary of the Spanish Society of Facial Plastic Surgery (SECPF), member of the Spanish Society of Ocular and Orbital Plastic Surgery (SECPOO), European Society of Ophthalmic Plastic and Reconstructive Surgery (ESOPRS), and Spanish Society of Ophthalmology (SEO)
- Junior Fellowship in Oculoplastics (The Western Ophthalmic and Chelsea and Westminster Hospital London) in 2010
- PhD in Medicine from the University Barcelona 2015
- Degree in Medicine and Surgery from the University of Granada in 2004
- Residency in Ophthalmology. Barcelona Clinic Hospital 2005 2009
- Master in Medical Management and Health Management by the National University of Distance Education (UNED) and the National School of Health in 2019

## 04 Structure and Content

TECH is a pioneer in the online academic environment in the use of the innovative and effective Relearning methodology, which consists mainly in the continuous reiteration of the most important concepts throughout the syllabus. All this, together with the practical resolution of real clinical cases, as well as the availability of additional material in different formats, allow access to a program in which the updating of knowledge occurs naturally and gradually, without having to invest extra hours in memorizing and guaranteeing the durability of this information for a longer period of time.

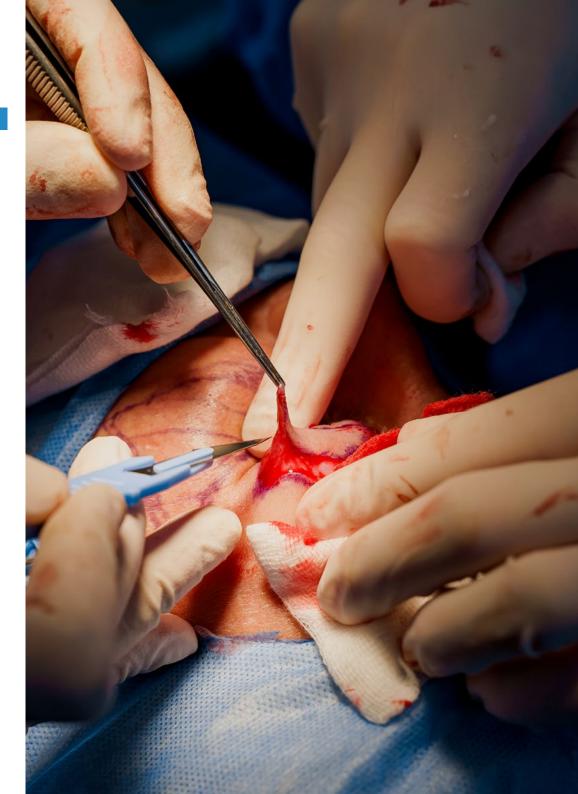
36 Would approv

Would you like to perfect your skills in the surgical approach to the orbit through neoplasia? With this program, you will delve into the most cutting-edge and effective techniques"

## tech 18 | Structure and Content

#### Module 1. Palpebral and Orbital Trauma. Orbital Examination

- 1.1. Assessment of the Traumatic Patient
  - 1.1.1. Stabilization and General Assessment
  - 1.1.2. Intraocular Examination
  - 1.1.3. Evaluation of the Eyelids
  - 1.1.4. Orbital Examination
- 1.2. Repair of Palpebral Lacerations
  - 1.2.1. Repair of Simple Palpebral Lacerations
  - 1.2.2. Repair of Full-Thickness Palpebral Lacerations
- 1.3. Repair of Lacerations Involving the Lacrimal Duct
- 1.4. Fracture of the Floor of the Orbit
  - 1.4.1. Clinic and Presentation. When to Suspect?
  - 1.4.2. Surgical Treatment
  - 1.4.3. Implants
- 1.5. Fracture of Other Orbital Walls
  - 1.5.1. Medial Wall Fracture
  - 1.5.2. Lateral Wall Fracture
  - 1.5.3. Roof Fracture
- 1.6. Complex Fractures
  - 1.6.1. Blow-out Fracture "Blow-Out)
  - 1.6.2. Le-Fort Fractures
  - 1.6.3. Fracture of the Zygomatic-Maxillary Complex
- 1.7. Orbital Foreign Bodies
- 1.8. Orbital Compartment Syndrome
- 1.9. Traumatic Optic Neuropathy
- 1.10. Traumatic Muscular Contusion



### Structure and Content | 19 tech

#### Module 2. Inflammatory and Infectious Diseases of the Orbit

- 2.1. Exploration of the Orbit
  - 2.1.1. Physical Examination of the Orbit
- 2.2. Differential Diagnosis of Proptosis
- 2.3. Thyroid Ophthalmopathy (TO):
  - 2.3.1. Etiology
  - 2.3.2. Clinical Symptoms
  - 2.3.3. Diagnostic
  - 2.3.4. Classification
    - 2.3.4.1 Mild/Moderate/Severe
    - 2.3.4.2 Active/Inactive
    - 2.3.4.3 Patient Quality of Life Tests
- 2.4. Medical Treatment of TO
- 2.5. Surgical Treatment of TO
- 2.6. Specific Inflammatory Diseases of the Orbit
  - 2.6.1. Vasculitis: Granulomatosis With Polyangiitis and Others
  - 2.6.2. Granulomatous Inflammations of the Orbit 2.6.2 1 Sarcoidosis

    - 2.6.2.2 Wegener's Disease
    - 2.6.2.3 Others
- 2.7. IgG4-related Disease
- 2.8. Idiopathic Orbital Inflammatory Disease
  - 2.8.1. Classification
  - 2.8.2. Diagnostic Management: Biopsy vs. Empirical Corticosteroid Therapy
  - 2.8.3. Treatment
- 2.9. Infectious Diseases of the Orbit I
  - 2.9.1. Preseptal Cellulitis
  - 2.9.2. Cellulite
- 2.10. Other Infectious Diseases of the Orbit
  - 2.10.1. Mucormycosis

## **Module 3.** Tumor and Orbital Vascular Pathology. Surgical Approach of the Orbit

- 3.1. Benign Neoplasms of Vascular Origin
  - 3.1.1. Capillary Hemangioma
  - 3.1.2. Intraosseous Hemangioma
- 3.2. Benign Neoplasms of Neural Origin
  - 3.2.1. Schwanoma
  - 3.2.2. Neurofibroma
  - 3.2.3. Optic Nerve Meningioma
  - 3.2.4. Optic Nerve Glioma
- 3.3. Benign Neoplasms of the Lacrimal Gland
- 3.4. Other Benign Lesions of the Orbit
- 3.5. Primary Malignant Neoplasms: Orbital Lymphoma
- 3.6. Primary Malignant Neoplasms: Orbital Rhabdomyosarcoma
- 3.7. Malignant Neoplasms of Lacrimal Gland
- 3.8. Other Malignant Neoplasms of the Orbit
  - 3.8.1. Extension of Periocular Malignant Tumors
  - 3.8.2. Spread of Intraocular Malignant Tumors
  - 3.8.3. Orbital Metastases
- 3.9. Vascular Malformations of the Orbit
  - 3.9.1. Venous Malformation of the Orbit
  - 3.9.2. Veno- Lymphatic Malformations of the Orbit
  - 3.9.3. Arterio- Venous Malformations of the Orbit
  - 3.9.4. Other Orbital Vascular Malformations
- 3.10. Choice of Surgical Approach. Preoperative and Intraoperative Considerations
  - 3.10.1. Anterior Orbitotomy
  - 3.10.2. Medial Orbitotomy
  - 3.10.3. Lateral Orbitotomy
  - 3.10.4. Other Approaches to the Orbit

# 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.



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"

## 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.

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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:

 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.
- 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.



## tech 24 | Methodology

#### **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.

20%

15%

3%

15%

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.

## Methodology | 27 tech



#### **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.

20%

7%

3%

17%



#### **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 Diploma in Orbital Pathology and Orbito-Palpebral Trauma Management guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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"

## tech 30 | Certificate

This Postgraduate Diploma in Orbital Pathology and Orbito-Palpebral Trauma Management contains the most complete and updated Scientific program in the market.

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

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

Title: Postgraduate Diploma in Orbital Pathology and Orbito-Palpebral Trauma Management

Official Nº of Hours: 450 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.

technological university Postgraduate Diploma Orbital Pathology and Orbito-Palpebral Trauma Management » Modality: online » Duration: 6 months » Certificate: TECH Technological University » Dedication: 16h/week » Schedule: at your own pace » Exams: online

## **Postgraduate Diploma** Orbital Pathology and Orbito-Palpebral Trauma Management

