## Hybrid Professional Master's Degree Update on Otorhinolaryngology





## Hybrid Professional Master's Degree Update on Otorhinolaryngology

Course Modality: Hybrid (Online + Clinical Internship) Duration: 12 months Certificate: TECH Technological University Teaching Hours: 1,620 hours. Website: www.techtitute.com/us/medicine/hybrid-professional-master-degree/hybrid-professional-master-degree-update-otorhinolaryngology

# Index

01	02	03	04	
Introduction	Why Study this Hybrid Professional Master's Degree?	Objectives	Skills	
р. 4	р. 8	р. 12		p. 18
	05	06	07	
	Course Management	Educational Plan	Clinical Internship	
	р. 22	p. 26		p. 30
	08	09	10	
	Where Can I Do the Clinical Internship?	Methodology	Certificate	
	р. 36	p. 42		p. 50

# 01 Introduction

Due to the high prevalence of conditions such as hypoacusis and dysphagia among the world population, Otorhinolaryngology has become one of the most socially relevant medical specialties. This situation has boosted the discipline, which has recently incorporated scientific and technological innovations such as robotic devices used in precision surgeries for conditions such as otosclerosis. Therefore, this clinical area has undergone numerous transformations that require, on the part of the specialist, a complete update of all its procedures. For this purpose, this TECH program combines a period of online learning with an intensive internship in a reference hospital center where you will be able to update your knowledge in the company of prestigious professionals in this health field.



66

This hybrid program will provide you with the latest advances in the surgical approach to chronic rhinosinusitis with nasosinusal polyposis"

## tech 06 | Introduction

Hearing loss in its different degrees of severity affects more than 400 million people worldwide. In addition, other disorders of great relevance such as dysphagia and facial paralysis have also been increasing their prevalence among the population. For this reason, Otorhinolaryngology has become one of the most important clinical specialties today, which has led to numerous medical and technological advances in the discipline.

The professional, therefore, must be up-to-date with these developments in order to carry out their daily work according to the latest clinical postulates. And, therefore, this Hybrid Professional Master's Degree provides an answer to this situation, by providing the latest diagnostic techniques in this specialty. Therefore, throughout this program, the student will be able to delve into the main exploratory procedures, both endoscopic and radiological, to assess the patient with dysphagia. This program also contains the latest scientific evidence in the management of Benign Paroxysmal Positional Vertigo (BPPV).

These, among many other aspects, will be covered during 1500 hours of online learning, followed by a clinical internship of 3 weeks in a prestigious clinical center. In this way, this TECH program is divided into 2 distinct phases. First, an online teaching stage, where students can study at their own pace, without schedules or impositions that alter their daily personal and professional routines.

Secondly, an intensive internship in a reference hospital in the specialty of Otorhinolaryngology. During the internship, the physician will not only have access to real patients, but will also be able to work in a highly demanding professional environment, participating in different clinical processes, and always with the accompaniment of reputable professionals in this health field. This **Hybrid Professional Master's Degree in Update on Otorhinolaryngology** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Development of more than 100 clinical cases presented by medical professionals specialized in Otorhinolaryngology
- 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
- Advanced surgical techniques in Otolaryngology using robotics and high-precision digital devices
- The latest approaches to conditions such as dysphagia and hypoacusis
- A hybrid learning system, which combines the latest theory with intensive practice
- All 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
- Furthermore, they will be able to carry out a clinical internship in one of the best hospitals

Thanks to TECH, you will be able to carry out an intensive 3-week internship in a prestigious clinical center in the area of Otorhinolaryngology where you will participate in various health processes related to the specialty"

### Introduction | 07 tech

66

With this program you will be able to update yourself in a dynamic way and in a real professional environment in the latest diagnostic and exploratory procedures of the voice"

This Hybrid Professional Master's Degree program, of a professionalizing nature and hybrid learning modality, is aimed at updating medical professionals who work in Otorhinolaryngology units and services. The contents are based on the latest scientific evidence, and oriented in an educational way to integrate theoretical knowledge in the medical practice, and the theoretical-practical elements will facilitate the updating of knowledge and allow decision-making in patient management.

Thanks to the multimedia content, developed with the latest educational technology, will allow the medical professional a situated and contextual learning, i.e., a simulated environment that will provide immersive learning programmed to train in real situations. This program is designed around Problem-Based Learning, whereby the professional 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.

You will enjoy an immersive learning experience by coming into contact with real patients presenting with ENT pathologies, dysfunctions and conditions.

This program is completely adapted to your needs, since its focus is oriented to the practicing medical professional.

## 02 Why Study this Hybrid Professional Master's Degree?

In the area of Otorhinolaryngology it is necessary to approach the process of updating knowledge from a perspective that integrates theory and practice, as it is such a specific field of work and subject to numerous novelties. Therefore, this TECH program has taken into account these circumstances, bringing the specialist a program adapted to the real situation of the discipline, using, for this purpose, an online teaching methodology combined with intensive clinical practices. Therefore, this Hybrid Professional Master's Degree will provide the student with a complete update through a dynamic and participative learning experience.

TECH offers you the unique opportunity to get up-todate on the latest procedures in Otorhinolaryngology in real clinical scenarios and with the accompaniment of highly renowned specialists in the specialty"

## tech 10 | Why Study this Hybrid Professional Master's Degree?

### 1. Updating from the latest technology available

The current scenario of Otorhinolaryngology is dominated by numerous technological, scientific and technical advances. Therefore, the use of high-precision robotic devices in surgical interventions has been joined by the latest developments in implants, issues that have made the discipline one of the most advanced. With this in mind, TECH has prepared this program, with which the student will be able to carry out an internship in a high-tech environment, applying cutting-edge procedures using the latest equipment.

### 2. Gaining In-Depth Knowledge from the Experience of Top Specialists

One of the great advantages offered by this program is the possibility of working in a high-level professional environment. Therefore, the student will be able to participate in the clinical activity in the Otorhinolaryngology Service of a first class center together with internationally renowned specialists. In addition, they will have a specifically designated tutor who will ensure that the learning experience is effective.

#### 3. Entering First-Class Clinical Environments

TECH carefully selects all available centers for Internship Programs. Thanks to this, the specialist will have guaranteed access to a prestigious clinical environment in the area of Otorhinolaryngology. In this way, you will be able to see the day-to-day work of a demanding, rigorous and exhaustive sector, always applying the latest theses and scientific postulates in its work methodology.





### Why Study this Hybrid Professional Master's Degree? | 11 tech

### 4. Combining the Best Theory with State-of-the-Art Practice

The academic market often offers didactic programs that are outdated and based purely on theory. This type of approach is far removed from the daily work of the specialist, who requires a more active and dynamic update. Therefore, TECH offers a new learning model, with which the student will be able to put into practice, in a 100% real and intensive scenario, and over 3 weeks, the techniques and procedures acquired theoretically throughout the online phase of the degree.

### 5. Expanding the Boundaries of Knowledge

TECH offers the possibility of doing this Internship Program, notonly in national but also in international centers. This way, the otorhinolaryngologist will be able to expand their frontiers and catch up with the best professionals, who practice in first class centers and in different continents. A unique opportunity that only TECH, the largest online university in the world, could offer.

**666** You will have full practical immersion at the center of your choice"

# 03 **Objectives**

The main objective of this Hybrid Professional Master's Degree in Update on Otorhinolaryngology is to provide the specialist with the latest advances in the discipline. And, for this purpose, it has integrated in a unique program the most advanced theory with an internship in a center of great prestige. In this way, throughout a progressive academic itinerary, the student will be up-to-date on issues such as the management of iatrogenic and traumatic paralysis or open surgery techniques in head and neck tumors.

In this program you will find all the latest developments in Pediatric Otorhinolaryngology, and addresses different pathologies in pediatric patients such as Tonsillitis, Laryngitis and Acute Otitis Media"

## tech 14 | Objectives



### **General Objective**

• This program presents a progressive learning perspective, ranging from the general teaching objectives to the specific ones. Therefore, the general objectives of this Hybrid Professional Master's Degree are to allow students to integrate in their daily work the latest techniques in the approach and management of otorhinolaryngological pathologies and conditions in different types of patients, for which it uses a highly effective teaching methodology in areas such as health care, medicine and medicine of the ear, nose and throat.

Integrate into your daily work, thanks to this TECH program, the latest procedures in Update on Otorhinolaryngology"



## Objectives | 15 tech



### Specific Objectives

### Module 1. General Otorhinolaryngology

- Master understanding of the general aspects of Otorhinolaryngology in its location
- Learn to manage knowledge related to Otorhinolaryngology
- Know the legal aspects surrounding informed consent and data protection
  BORRAR
- Learn to identify the risk factors associated with Otorhinolaryngology
- Manage general aspects of Otorhinolaryngology, such as pain, anticoagulation and hemostasis
- Manage antibiotherapy applied to Otorhinolaryngology (ORL)
- Acquire histological and histopathological concepts in ORL
- Learn the concepts of radiological protection in ORL
- Update on the individual protection of professionals and patients

### Module 2. Oral Cavity and Pharynx Swallowing Disorders

- Have an in-depth understanding of the anatomical and functional characteristics of the oral cavity and pharynx, as well as the cervical esophagus applied to swallowing and the Pathophysiology of impaired swallowing
- Know the epidemiology and risk groups, along with the etiology of dysphagia
- Handle the clinical aspects of dysphagia and its complications, and learn how to clinically and instrumentally examine swallowing disorders
- Learn the medical, rehabilitative, dietary and surgical management of dysphagia

### Module 3. Otology and Audiology

- Delve into the otological concepts and the Physiopathology of hearing loss in middle ear pathology
- Learn the functional management of middle ear pathology. Delve into the most commonly used surgical techniques
- Gain in-depth knowledge of the classification of hearing devices: Benefits and limitations
- Learn how to assess a hearing-impaired patient, decide on the best possible adjustment and evaluate the results

### Module 4. Laryngology, Voice: Assessment of the Normal and Altered Voice

- Describe the anatomy and physiology of phonation and establish the pathophysiological basis of dysphonia
- Classify phonation disorders and perform voice exploration from different assessment perspectives: subjective and perceptual, aerodynamic, endoscopic, and stroboscopic, among others
- Integrate the various exploratory forms and integrate the examination with the therapeutic indication

## tech 16 | Objectives

#### Module 5. Vestibular Otoneurology: Update on Positional Vertigo and Innovative Aspects of Lesser-Known Balance Disorders Within General ORL

- Master the practical aspects of physiology applied to balance and the vestibular system
- Acquire knowledge of clinical and instrumental examination for balance disorders
- Understand the most advanced and up to date clinical aspects of positional vertigo with the most recent guides and multimedia iconography on the different diagnostic and therapeutic maneuvers
- Know a series of much less frequent vestibular syndromes which can be encountered in professional practice and which, if not known, could be difficult to handle
- Learn to approach these problems with diagnostic and therapeutic strategies for balance disorders

### Module 6. Rhinology and Anterior Skull Base

- Assess, indicate and perform different surgical techniques to improve nasal respiratory function through the correct management of the nasal pyramid
- Manage the main complication, septal perforation
- Improve the indication and endoscopic surgical techniques in nasosinus pathologies that are becoming more and more common in ORL practice

### Module 7. Head and Neck Pathology I

- Know the anatomy and physiology of the cervical region, as well as its clinical examination and diagnostic imaging
- Learn about cervical tumor pathology, both benign and malignant, paying special attention to the management of lymphadenopathies of unknown origin and their diagnostic and therapeutic strategy





## Objectives | 17 tech

### Module 8. Head and Neck Pathology II

- Gain in-depth knowledge of the different types of tumor that affect the upper aerodigestive tract
- Become familiar with the multidisciplinary treatment involved in managing these tumors

### Module 9. Update on Facial Paralysis

- Delve into the pathology of the facial nerve, its origin and its form of presentation
- Assess facial paralysis and interpret studies for its effective treatment depending on whether it is in the acute or establish deformity phase

### Module 10. Update in ORL Infections in Childhood

- Understand infectious pathology in childhood, including the general aspects of the immune system in the airway of a child and the antibiotic guidelines
- Apply the best therapeutic and antibiotic strategy in the treatment of each of the most common childhood infections

## 04 **Skills**

Through this program, the professional will be able to update their professional skills in the field of Otorhinolaryngology. Therefore, after completing the program, they will be able to apply to their daily clinical postulates in areas such as swallowing disorders, Otology or Laryngology and voice evaluation methods.



GG

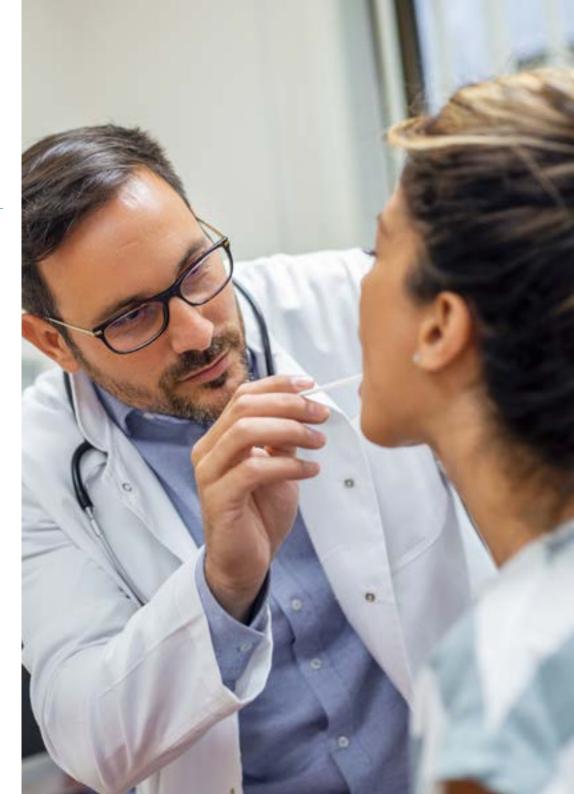
The practical and professional orientation of this program will allow you to update your professional skills in a fast and participative way"

## tech 20 | Skills



**General Skills** 

- Gain an in-depth knowledge of general aspects necessary for the practice of Otorhinolaryngology, especially in the field of clinical management and general clinical management
- Master the anatomical and functional characteristics of the ear, oral cavity and pharynx, as well as the cervical esophagus, applied to swallowing and the pathophysiology of impaired swallowing
- Understand clinical practice in cases of dysphagia and its complications, and learn how to clinically and instrumentally explore swallowing disorders
- Manage dysphagia from a medical, rehabilitative, dietary and surgical point of view



## Specific Skills

- Gain improved knowledge of the characteristics of middle ear pathology that can cause hearing loss, as well as the diagnostic techniques and the basis for indications of functional surgery
- Perform a laryngeal examination based on endoscopy and the sophisticated methods of objective voice analysis.
- Define and learn all the aspects related to systemic examinations of the voice and the therapeutic application.
- Master the practical aspects of physiology applied to balance and the vestibular system
- Know a series of much less frequent vestibular syndromes which can be encountered in professional practice and which, if not known, could be difficult to handle
- Assess, indicate and perform different surgical techniques to improve nasal respiratory function through the correct management of the nasal pyramid, as well as the management of the main complication, i.e., septal perforation
- Improve the indication and endoscopic surgical techniques in nasosinus pathologies that are becoming more and more commonly seen by otolaryngologists.
- Know the anatomy and physiology of the cervical region, as well as its clinical examination and diagnostic imaging

- Master the approach to cervical tumor pathology, both benign and malignant, paying special attention to the management of lymphadenopathies of unknown origin and their diagnostic and therapeutic strategy
- Gain in-depth knowledge of the different types of tumor that affect the upper aerodigestive tract
- Gain a deeper understanding of facial nerve pathology, its origin and how it manifests itself, how to assess it and how to interpret the studies to assess the best indication, both in the acute phase or in the phase where a deformity is already present, where effective corrective treatments can be proposed
- Understand infectious pathology in childhood, including the general aspects of the immune system in the airway of a child and the antibiotic guidelines

Meet the daily challenges of your work with the most advanced techniques thanks to this Hybrid Professional Master's Degree in TECH"

# 05 Course Management

Following the highest pedagogical standards, TECH has been responsible for selecting a teaching staff of great prestige in the area of Otorhinolaryngology. Therefore, this teaching staff has designed the syllabus of this program, integrating not only the most advanced scientific and clinical postulates, but also all their experience in the discipline. In this way, the professional will be able to learn first hand the keys provided by this group of experts gathered in this degree. 2 31 Se 30 J+ 32



The best specialists in Otorhinolaryngology have brought together, in this program, all the latest developments in the discipline, bringing them to you in a comfortable and interactive way"

## tech 24 | Course Management

### Management



### Dr. Gutiérrez Fonseca, Raimundo

- Head of the Otorhinolaryngology Service at the Rey Juan Carlos University Hospital
- Coordinator of the Dysphagia Unit at the Rey Juan Carlos University Hospital
- General Secretary of the Spanish Society of ORL Head and Neck Surgery (SEORL- CCC)
- Associate Chief of Otorhinolaryngology at the Fundación Jiménez Díaz University Hospital
- Founder and Coordinator of the Dysphagia Unit at the Fundación Jiménez Díaz University Hospital
- Member of the Dysphagia Working Group of the European Laryngological Society (ELSOC)
- Associate Professor of Otorhinolaryngology at the Rey Juan Carlos University
- Associate Professor of Otorhinolaryngology at the Autonomous University of Madrid
- Doctor of Medicine Cum Laude from the Department of Surgery at the University of Salamanca
- Degree from the Complutense University of Madrid (Extraordinary Award)
- Specialist in Otorhinolaryngology at the Clinical University Hospital of Salamanca
- Specialist in Laryngology, Diagnosis and Treatment of Malignant Tumors and Benign Pharyngolaryngeal Pathology
- Specialist in Surgical Treatment of Voice Problems
- Specialist in Thyroid and Cervical Surgery
- Expert in Transoral Robotic Surgery (TORS) for Head and Neck Cancer, Pharynx, Larynx and Obstructive Sleep Apnea Syndrome (OSAS)
- Expert in Diagnosis and Treatment of Dysphagia and Swallowing Disorders: Endoscopic Explorations and Videofluoroscopy
- Internship at the Laennec Hospital (Hôpital Laennec) in Paris

### Professors

### Dr. Lavilla Martín de Valmaseda, Maria José

- Specialist in Otorhinolaryngology and Cervicofacial Surgery
- President of the Audiology Commission of the Spanish Society of Otolaryngology (SEORL-CCC)
- Coordinator and Surgeon of the Cochlear Implant Unit of Extremadura. Cáceres
  Hospital Complex
- Specialist in Otorhinolaryngology, Surgeon and Audiologist. Cochlear Implants and Hearing Impairment Unit. Otology Section. Lozano Blesa Clinical University Hospital
- Specialist in Otorhinolaryngology and Cervicofacial Surgery at the Clinical Hospital of Salamanca
- Associate Professor and Researcher of the Department of Surgery and Area of Otorhinolaryngology. Faculty of Medicine, University of Zaragoza
- Professor at the International University of Alicante and SAERA
- Degree in Medicine and Surgery from the University of Zaragoza
- Postgraduate Diploma in Audiology. University of Neurosciences of Salamanca
- Expert in Child Hearing Loss. Alcalá de Henares University
- Audioprosthetic Audiology. University of Alicante
- Member of the Spanish Society of Otorhinolaryngology and Cervicofacial Pathology SEORL PCF

### Dr. De Toro Gil, Laura

- Specialist in Otorhinolaryngology
- Specialist in Otorhinolaryngology at the Rey Juan Carlos University Hospital
- Specialist in Otorhinolaryngology at the University Hospital HLA Moncloa
- Specialist in Otolaryngology at the University Hospital of Guadalajara, Spain
- Specialist in Otorhinolaryngology at the Policlínico HM Cruz Verde de Alcalá de Henares

### Dr. Méndez-Benegassi Silva, Ivan

- Specialist in Otorhinolaryngology and Head and Neck Surgery
- Associate Chief of Otorhinolaryngology, Head and Neck Surgery and of the Multidisciplinary Unit of Respiratory Sleep Disorders at the Rey Juan Carlos University Hospital
- Specialist in Rhinoplasty Surgery at the CEMTRO Clinic
- Specialist in Otorhinolaryngology, Snoring Surgery and Sleep Disorders at the HLA Moncloa University Hospital
- Specialist in Otorhinolaryngology and Head and Neck Surgery at the Sanitas La Moraleja University Hospital
- Specialist in Otorhinolaryngology and Cervicofacial Pathology at the Infanta Leonor University Hospital
- Collaborating Professor at the Rey Juan Carlos University and at the European University of Madrid
- Graduate in Medicine and Surgery, Faculty of Medicine and Dentistry, USC, Galicia, Spain
- Residency in Internal Medicine in Otorhinolaryngology at the Fundación Jiménez Díaz University Hospital and at the Autonomous University of Madrid
- Clinical Rotation in Neurology, Pediatric Neurology and Cardiology at Rhode Island Hospital, Providence and Brown University, US A
- Maxillofacial Surgery Assistant during his residency period at the Fundación Jiménez Díaz University Hospital First Assistant in General Surgery and other surgical specialties
- Certified by the European Board Certificate of Otolaryngology-Head and Neck Surgery of Vienna
- Member of the Spanish Society of Otorhinolaryngology and Cervicofacial Pathology (SEORL-PCF)

## 06 Educational Plan

This program has a syllabus of 10 specific modules through which the specialist will be able to explore the latest innovations in issues such as the surgical treatment of dysphagia or vestibular paroxysmia. In addition, in its online phase, it uses a revolutionary learning methodology: *Relearning*. This teaching system allows the student to study and learn progressively, taking advantage of every minute invested. For all these reasons, this degree is a great opportunity for the specialist, who will obtain a complete update at the end of this academic itinerary.

This program contains all the latest advances in Otorhinolaryngology, making them available to you through the innovative methodology of Relearning"

### tech 28 | Educational Plan

### Module 1. General Otorhinolaryngology

- 1.1. Concept and Positioning of Otorhinolaryngology
- 1.2. Knowledge Management Systems Related to Otorhinolaryngology
- 1.3. Basis of Informed Consent and Data Protection BORRAR
- 1.4. Risk Factors Associated with Otorhinolaryngology (ORL)
- 1.5. Pain Management in ORL
- 1.6. Anticoagulation and Hemostasis Management: Fluid Therapy in ORL
- 1.7. Aspects of Antibiotherapy Management in ORL
- 1.8. Histological and Histopathological Concepts in ORL
- 1.9. Radiological Protection Concepts in ORL
- 1.10. Update knowledge on the individual protection of professionals and patients

### Module 2. Oral Cavity and Pharynx Swallowing Disorders

- 2.1. Anatomo-physiology of Normal and Pathological Swallowing
- 2.2. Epidemiology and Etiopathogenesis of the dysphagia
- 2.3. Clinical Swallowing Disorders
- 2.4. Respiratory and Nutritional Complications: Nutritional Assessment
- 2.5. Clinical Examination of Swallowing Disorders
- 2.6. Instrumental Endoscopic Examination
- 2.7. Instrumental Radiological Examination
- 2.8. Basis of Nutritional Management in Dysphagia
- 2.9. Basis of Rehabilitation Management in Dysphagia
- 2.10. Surgical Treatment of Dysphagia

#### Module 3. Otology and Audiology

- 3.1. Hearing Loss. Classification and Etiology
- 3.2. Hearing Loss Diagnosis
- 3.3. Treating Hearing Loss: Non-implantable Devices
- 3.4. Treating Hearing Loss: Bone Conduction Implants
- 3.5. Treating Hearing Loss: Middle-Ear Implants
- 3.6. Treating Hearing Loss: Cochlear and Brainstem Implants

- 3.7. Audiology Applied to the Selection of Devices
- 3.8. Treatment of Conductive and Mixed Hearing Loss in Chronic Otitis Media and Middle Ear Surgery
- 3.9. Treating Severe and Profound Sensorineural Hearing Loss in Chronic Hearing Problems 3.10. Unilateral Hearing Loss

## **Module 4.** Laryngology, Voice: Assessment of the Normal and Altered Voice

- 4.1. Anatomy and Physiology of Phonation
- 4.2. Pathophysiological Basis of Dysphonia
- 4.3. Clinical Management and Classification of Phonation Disorders
- 4.4. Voice Exploration: Subjective and Perceptual Examination
- 4.5. Voice Exploration: Aerodynamic Examination
- 4.6. Voice Exploration: Endoscopic Examination
- 4.7. Voice Exploration: Stroboscopy
- 4.8. Voice Assessment: Vocal Acoustic Analysis
- 4.9. Integration of Various Examination Techniques
- 4.10. Interaction Between Examination and Treatment Indications

### **Module 5.** Vestibular Otoneurology: Update on Positional Vertigo and Innovative Aspects of Lesser-Known Balance Disorders Within General ORL

- 5.1. Vestibular Anatomy and Physiology
- 5.2. Otoneurology Examination
- 5.3. Benign Paroxysmal Positional Vertigo (BPPV)
- 5.4. BPPV Horizontal Semicircular Canal
- 5.5. Complex BPPV and Less Common Forms
- 5.6. Other Less Common Forms Vestibular Paroxysmia
- 5.7. Other Less Common Forms Superior Semicircular Canal Dehiscence Syndrome (SCDS) and Third Window Syndrome
- 5.8. Bilateral Vestibular CANVAS Syndrome
- 5.9. Persistent Postural Perceptual Dizziness (PPPD)
- 5.10. Vertigo in Emergencies Acute Vestibular Syndrome HINTS Protocol

### Educational Plan | 29 tech

### Module 6. Rhinology and Anterior Skull Base

- 6.1. Applied Anatomy
- 6.2. Subjective and Objective Assessment of the Nasal Form and Function
- 6.3. Basic Surgical Techniques
- 6.4. Advanced Surgical Techniques
- 6.5. Septal Perforation Closure
- 6.6. Nasosinusal Endoscopic Surgery in Acute and Chronic Rhinosinusitis
- 6.7. Nasosinusal Endoscopic Surgery in Chronic Rhinosinusitis with Nasosinusal Polyposis
- 6.8. Endoscopic Dacryocystorhinostomy
- 6.9. Management of CSF Fistulas
- 6.10. Most Common Endoscopic Approaches Used on the Anterior Skull Base

#### Module 7. Head and Neck Pathology I

- 7.1. Anatomy and Physiology of the Cervical Region: Exploration
- 7.2. Epidemiology of Cervical Masses
- 7.3. Benign Cervical Masses
- 7.4. Malignant Cervical Masses
- 7.5. Adenopathies of Unknown Origin
- 7.6. Assessment of Cervical Masses
- 7.7. Imaging Tests of the Neck PET-CT Scans in Cervical Masses
- 7.8. Histological Basis of Cervical Tumor Pathology
- 7.9. Diagnostic Strategy in Cervical Masses
- 7.10. Monitoring of Adenopathies of Unknown Origin

#### Module 8. Head and Neck Pathology II

- 8.1. Basis of Head and Neck Oncology
- 8.2. Tumors of the Oral Cavity and Oropharynx
- 8.3. Rhinopharyngeal or Cavum Tumors
- 8.4. Larynx and Hypopharynx Tumors
- 8.5. Treatment of Pharyngolaryngeal Tumors
- 8.6. Open Surgery in Head and Neck Tumors

- 8.7. Minimally Invasive Surgery: Transoral Laser, Ultrasonic and Robotic Surgery Non-Surgical Treatment
- 8.8. Reconstructive Surgery in Head and Neck Oncology
- 8.9. Non-Surgical Treatment in Head and Neck Oncology
- 8.10. Functional Rehabilitation of the Head and Neck Oncology Patient

#### Module 9. Update on Facial Paralysis

- 9.1. General Aspects of Facial Nerve Pathology
- 9.2. Anatomy and Pathophysiology of Facial Paralysis
- 9.3. Etiopathogenesis of Facial Paralysis
- 9.4. Management of Peripheral Facial Paralysis in the Acute Phase
- 9.5. Radiological Evaluation of Facial Paralysis
- 9.6. Neurophysiological Evaluation of Facial Paralysis
- 9.7. Bell's Palsy and Ramsay Hunt Syndrome
- 9.8. latrogenic and Traumatic Paralysis
- 9.9. Reparation Techniques of the Facial Nerve and Facial Reinnervation
- 9.10. Dynamic and Static Reconstruction Techniques
- 9.11. Rehabilitation Management of Facial Paralysis
- 9.12. Results and Future Treatment of Facial Paralysis

### Module 10. Update in ORL Infections in Childhood

- 10.1. General Aspects of Defensive and Immune Mechanisms of the Airway in Childhood
- 10.2. Childhood Rhinopharyngitis
- 10.3. Childhood Tonsillitis
- 10.4. Childhood Laryngitis
- 10.5. Childhood Sinusitis and Complications
- 10.6. Acute Otitis Media and Mastoiditis in Childhood
- 10.7. Chronic Otorrhea and Recurrent Otitis in Childhood
- 10.8. Adenitis and Adenomegaly in Children
- 10.9. Mumps and Adenomegaly in Children
- 10.10. Therapeutic and Antibiotic Strategy in Childhood

# 07 Clinical Internship

After completing the theoretical and online phase of this program, the student will have access to a clinical internship in a reference health center. Therefore, this internship will be the moment in which they can apply all the new techniques and procedures acquired through TECH's virtual platform. In this way, effective learning is guaranteed, where direct participation in a real environment becomes a basic element of the teaching of this degree.

GG

This program is completed with a clinical internship in a reference center in the specialty, where you will be able to update yourself by carrying out complex health procedures accompanied by great experts in Otorhinolaryngology"

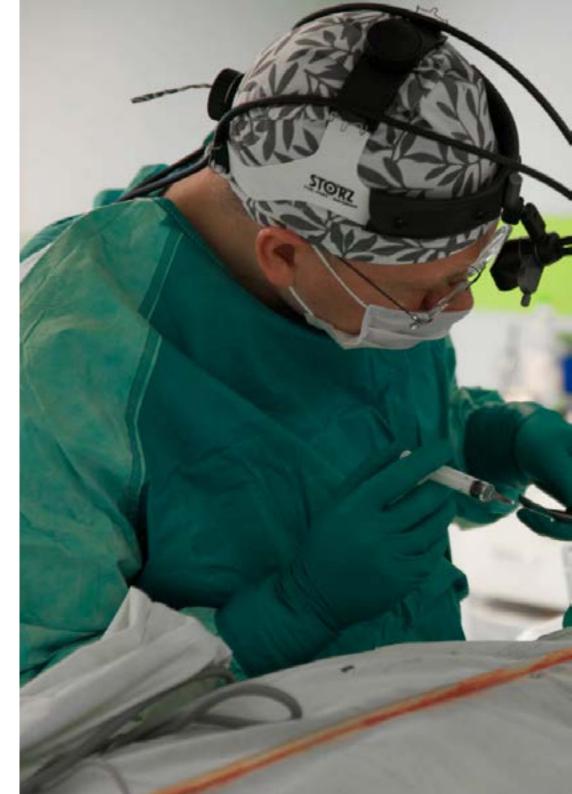
### tech 32 | Clinical Internship

The internship period of this program consists of a clinical internship in a reference hospital center in the area of Otorhinolaryngology. This stay will last 3 weeks, and the student will follow a schedule from Monday to Friday with 8 consecutive hours of practical and participative learning with an assistant specialist.

Therefore, this internship will allow them to assist, assess, diagnose and intervene on real patients with the advice and guidance of a team of reference professionals in this clinical specialty. Accompanied by them, the physician will apply the most innovative procedures, which they will have learned and acquired during the theoretical phase of the Hybrid Professional Master's Degree.

The practical teaching will be carried out with the active participation of the student performing the activities and procedures of each area of knowledge (learning to learn and learning to do), with the accompaniment and guidance of teachers and other fellow trainees that facilitate teamwork and multidisciplinary integration as transversal competencies for the practice of Otorhinolaryngology (learning to be and learning to relate).

The procedures described below will form the basis of the practical part of the training, and their implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:





## Clinical Internship | 33 tech

Module	Practical Activity		
Otology, Audiology and Laryngology Techniques	Use non-implantable devices in the treatment of hearing loss		
	Apply bone conduction and middle ear implants in the patient with hearing loss		
	Indicate the application of cochlear implants in the brain stem in the patient with hearin loss		
	Treat conduction and mixed hearing loss in chronic otitis media		
	Diagnose and treat severe and profound sensorineural hearing loss in the chronic ea		
	Perform voice examination by endoscopy and stroboscopy		
	Assess the voice by performing subjective and perceptual, acoustic-vocal and aerodynamic examinations		
Approach Methods for Swallowing Disorders	Perform endoscopic instrumental examination to address swallowing disorders		
	Perform radiologic instrumental examination of the patient with swallowing disorders		
	Perform dynamic study of swallowing through barium swallows		
	Assess and indicate nutritional diets adapted to the patient with a swallowing disorder		
	Perform laparoscopic Heller's myotomy in the patient with achalasia		
	Perform endoscopic oral myotomy to treat achalasia		
Approach of Head and Neck Pathologies and Rhinology	Perform surgical intervention for septal perforation closure		
	Apply CENS in acute and chronic rhinosinusitis		
	Perform CENS in chronic rhinosinusitis with nasosinusal polyposis		
	Perform endoscopic dacryocystorhinostomy to address communication problems between the lacrimal sac and the nostril		
	Follow-up of adenopathy of unknown origin		
	Assess cervical masses by PET-CT		
	Perform transoral laser, ultrasonic and robotic surgery in head and neck pathologies		
Techniques Applied to Facial Paralysis	Perform radiological assessment of facial palsy		
	Address Ramsay Hunt's palsy by indicating antivirals, corticosteroids, anxiolytics or analgesics, according to the specific case		
	Apply techniques of facial nerve repair and facial reinnervation in cases of facial paralysis		
	Intervene by dynamic and static reconstruction methods in the patient with facial paralysis		

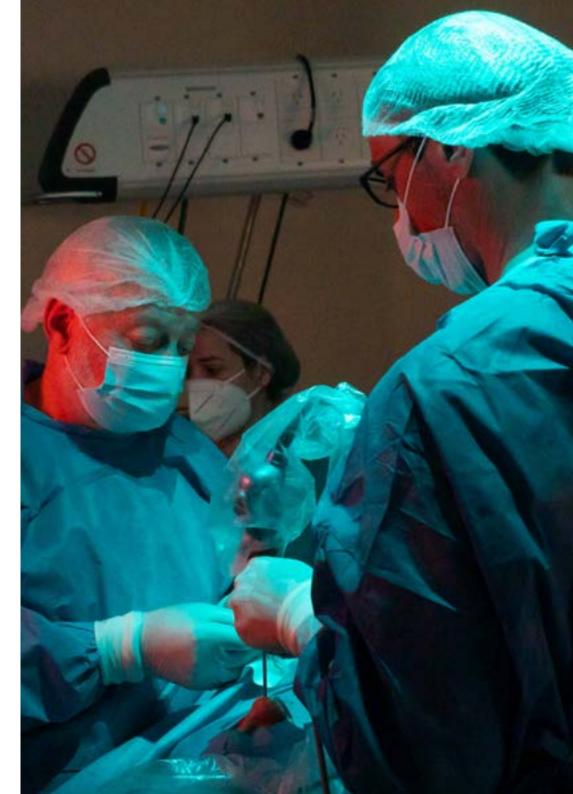
## tech 34 | Clinical Internship

### **Civil Liability Insurance**

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



### **General Conditions of the Internship Program**

The general terms and conditions of the internship program agreement shall be as follows:

1. TUTOR: During the Internship Program, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor, whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

**2. DURATION:** The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

**3. ABSENCE:** If the students does not show up on the start date of the Internship Program, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor. **4. CERTIFICATION:** Professionals who pass the Internship Program will receive a certificate accrediting their stay at the center.

**5. EMPLOYMENT RELATIONSHIP:** The Internship Program shall not constitute an employment relationship of any kind.

**6. PRIOR EDUCATION:** Some centers may require a certificate of prior education for the Internship Program. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

7. DOES NOT INCLUDE: The Internship Program will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed.

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

## 08 Where Can I Do the Clinical Internship?

For this Hybrid Professional Master's Degree, TECH has selected the most prestigious clinical centers in the Otorhinolaryngology Service. Therefore, the student, when enrolling in this program, will have the security of being able to access a reference hospital, where they will be able to work alongside international reference specialists. An opportunity that only this university can offer, and that will help the professional advancement of the physician.

1.1

Where Can I Do the Clinical Internship? | 37 tech

TECH puts the most prestigious international clinical centers within your reach, allowing you to develop professionally alongside the leading specialists in Otorhinolaryngology"

# tech 38 | Where Can I Do the Clinical Internship?

The student will be able to complete the internship of this Hybrid Professional Master's Degree at the following centers:

Country

Spain



Hospital HM Modelo	
Country	City
Spain	La Coruña

Address: Rúa Virrey Osorio, 30, 15011, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Anaesthesiology and Resuscitation - Palliative Care



# Hospital HM Rosaleda

City La Coruña

#### Address: Rúa de Santiago León de Caracas, 1, 15701, Santiago de Compostela, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Hair Transplantation - Orthodontics and Dentofacial Orthopedics



## Hospital HM San Francisco

Country City Spain León

Address: C. Marqueses de San Isidro, 11, 24004, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Update in Anesthesiology and Resuscitation - Trauma Nursing



# Hospital HM Regla

Country City Spain León

Address: Calle Cardenal Landázuri, 2, 24003, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Update on Psychiatric Treatment in Minor Patients



#### **Hospital HM Nou Delfos**

Country	City
Spain	Barcelona

Address: Avinguda de Vallcarca, 151, 08023 Barcelona

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Aesthetic Medicine - Clinical Nutrition in Medicine



#### Hospital HM Madrid

Country	City
Spain	Madrid

Address: Pl. del Conde del Valle de Súchil, 16, 28015, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Palliative Care - Anaesthesiology and Resuscitation



#### Hospital HM Montepríncipe

Country	City
Spain	Madrid

Address: Av. de Montepríncipe, 25, 28660, Boadilla del Monte, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Palliative Care - Aesthetic Medicine



#### Hospital HM Torrelodones

Country	City
Spain	Madrid

Address: Av. Castillo Olivares, s/n, 28250, Torrelodones, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Anaesthesiology and Resuscitation - Palliative Care



# Where Can I Do the Clinical Internship? | 39 tech



#### Hospital HM Sanchinarro

Country City Spain Madrid

Address: Calle de Oña, 10, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Anaesthesiology and Resuscitation - Palliative Care



Hospital HM Puerta del Sur

City

Madrid

Country

Spain

Address: Av. Carlos V, 70, 28938, Móstoles, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Palliative Care - Clinical Ophthalmology



#### **Policlínico HM Arapiles**

Country	City
Spain	Madrid

Address: C. de Arapiles, 8, 28015, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Anaesthesiology and Resuscitation - Pediatric Dentistry



## Hospital HM Vallés

Country	City
Spain	Madrid

Address: Calle Santiago, 14, 28801, Alcalá de Henares, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Gynecologic Oncology - Clinical Ophthalmology

# tech 40 | Where Can I Do the Clinical Internship?



Policlínico HM Cruz Verde Country City Spain Madrid

Address: Plaza de la Cruz Verde, 1-3, 28807, Alcalá de Henares, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Advanced Clinical Podiatry - Optical Technologies and Clinical Optometry



# Policlínico HM Gabinete Velázquez

Country	City
Spain	Madrid

Address: C. de Jorge Juan, 19, 1° 28001, 28001, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Clinical Nutrition in Medicine - Aesthetic Plastic Surgery



Country City

Spain

С

Madrid

Address: Ronda de la Comunicación, 28050. Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Optical Technologies and Clinical Optometry - General and Digestive System Surgery



#### Policlínico HM Moraleja

ountry	City
Spain	Madrid

Address: P.º de Alcobendas, 10, 28109, Alcobendas, Madrid

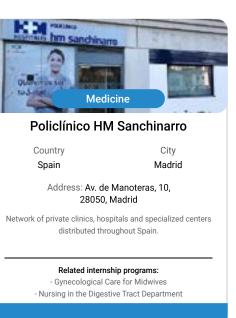
Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Rehabilitation Medicine in Acquired Brain Injury Management





# Where Can I Do the Clinical Internship? | 41 tech





#### Policlínico HM Imi Toledo

Country	
Spain	

City Toledo

Address: Av. de Irlanda, 21, 45005, Toledo

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs: - Electrotherapy in Rehabilitation Medicine - Hair Transplantation

# 09 **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 44 | 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.
- 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 46 | 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 | 47 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 48 | 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 | 49 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.



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.

# 10 **Certificate**

The Hybrid Professional Master's Degree in Update on Otorhinolaryngology guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid Professional Master's Degree diploma issued by TECH Technological University.



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

# tech 52 | Certificate

This **Hybrid Professional Master's Degree in Update on Otorhinolaryngology** contains the most complete and up-to-date program in the professional and academic landscape.

After the student has passed the evaluations, they will receive their corresponding TECH Hybrid Professional Master's Degree Diploma issued by TECH Technological University via tracked delivery.

In addition to the Diploma, students will be able to obtain an academic transcript, as well as a certificate outlining the contents program. In order to do so, students should contact their academic advisor, who will provide them with all the necessary information. Program: Hybrid Professional Master's Degree in Update on Otorhinolaryngology Course Modality: Hybrid (Online + Clinical Internship) Duration: 12 months. Certificate: TECH Technological University

Teaching Hours: 1,620 hours.



\*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

# Hybrid Professional Master's Degree Update on Otorhinolaryngology

Course Modality: Hybrid (Online + Clinical Internship) Duration: 12 months Certificate: TECH Technological University Teaching Hours: 1,620 hours. Hybrid Professional Master's Degree Update on Otorhinolaryngology

