



# Postgraduate Certificate Functional and Pathological Voice Assessment

» Modality: online

» Duration: 12 weeks

» Certificate: TECH Global University

» Credits: 12 ECTS

» Schedule: at your own pace

» Exams: online

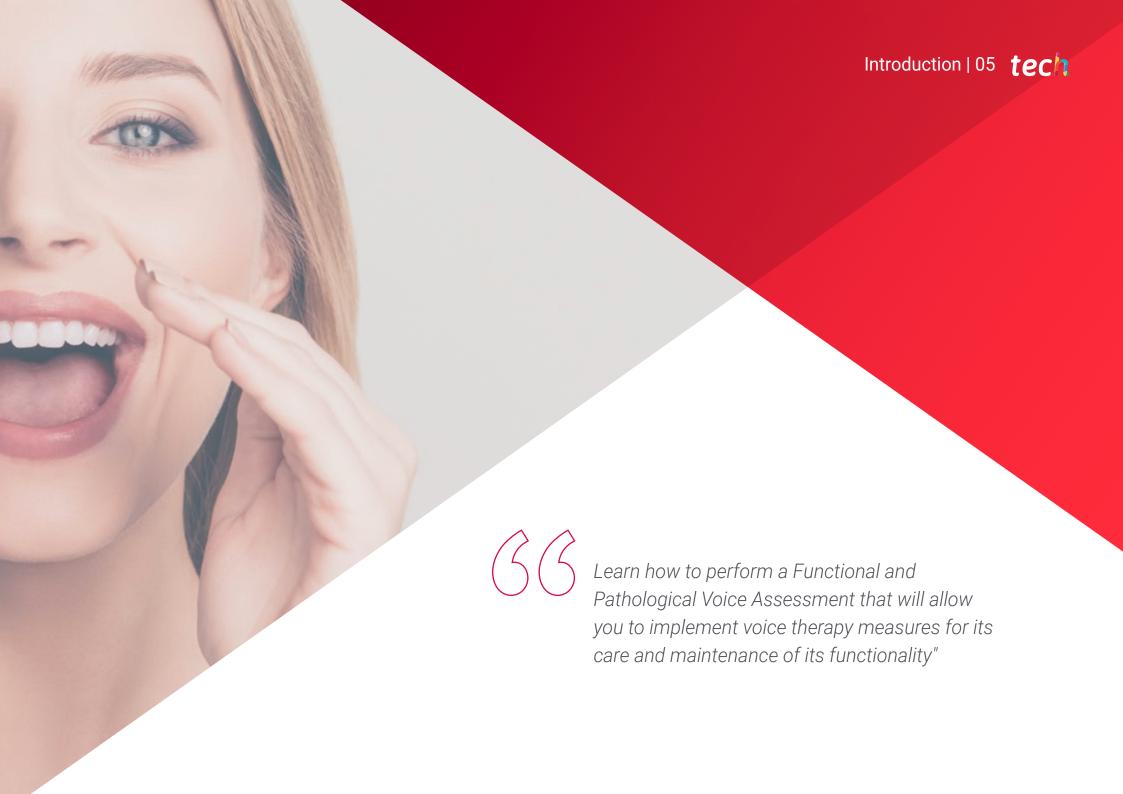
Website: www.techtitute.com/us/education/postgraduate-certificate/functional-pathological-voice-assessment

## Index

> 06 Certificate

> > p. 28





## tech 06 | Introduction

Professionals such as broadcasters, journalists, commercials, actors, singers, etc., require knowledge and management of their vocal apparatus, since it is essential for their work. In this sense, it is also important to be aware of the multifactorial nature of the voice and its alterations. The changes that occur in the human voice over time are related, among other factors, to the maturation and development of the phonorespiratory system, as well as to its deterioration.

Another type of change is due to sex-related differences. There are also changes in the voice that are due to professional use and structural and functional alterations that may or may not be associated with other pathologies. And all of this is evident in both the normal voice and the pathological voice.

This type of academic education increases professionals' ability to succeed, which results in better practice and performance that will have a direct impact on their professional work, both in the teaching field and in the field of professional communication.

This program offers a very broad view of voice disorders and physiology, with examples of successful cases. It includes all the necessary and basic techniques for the preparation and re-education of the voice, taking into account the professions that use it as their main working tool, providing tools, experiences and advances in this field, which have also been guaranteed by the teaching staff of the Postgraduate Certificate, as they all work in this field. Professionals will learn based on professional experience, as well as evidence-based pedagogy, which makes student training more effective and accurate.

This **Postgraduate Certificate in Functional and Pathological Voice Assessment** contains the most complete and up-to-date educational program on the market. The most important features include:

- Development of more than 75 practical cases presented by experts in Functional and Pathological Voice Assessment
- 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
- New developments in the use of Functional and Pathological Voice Assessment
- It contains practical exercises where the self-assessment process can be carried out to improve learning
- Algorithm-based interactive learning system for decision-making in the situations that are presented to the student
- With special emphasis on evidence-based methodologies in Functional and Pathological Voice Assessment
- All this will be complemented with theoretical lessons, questions to the expert, discussion forums on controversial issues and individual reflection assignments.
- Content that is accessible from any fixed or portable device with an Internet connection



The approach to functional pathologies, from their assessment, are the core of study of this Postgraduate Certificate focused on clinical practice"



Disorder prevention programs and Voice Therapy applied to use in different contexts are crucial elements for the health, well-being and development of any speaker"

It includes in its teaching staff professionals belonging to the field of Functional and Pathological Voice Assessment who bring to this program the experience of their work, as well as recognized specialists belonging to reference societies and prestigious universities.

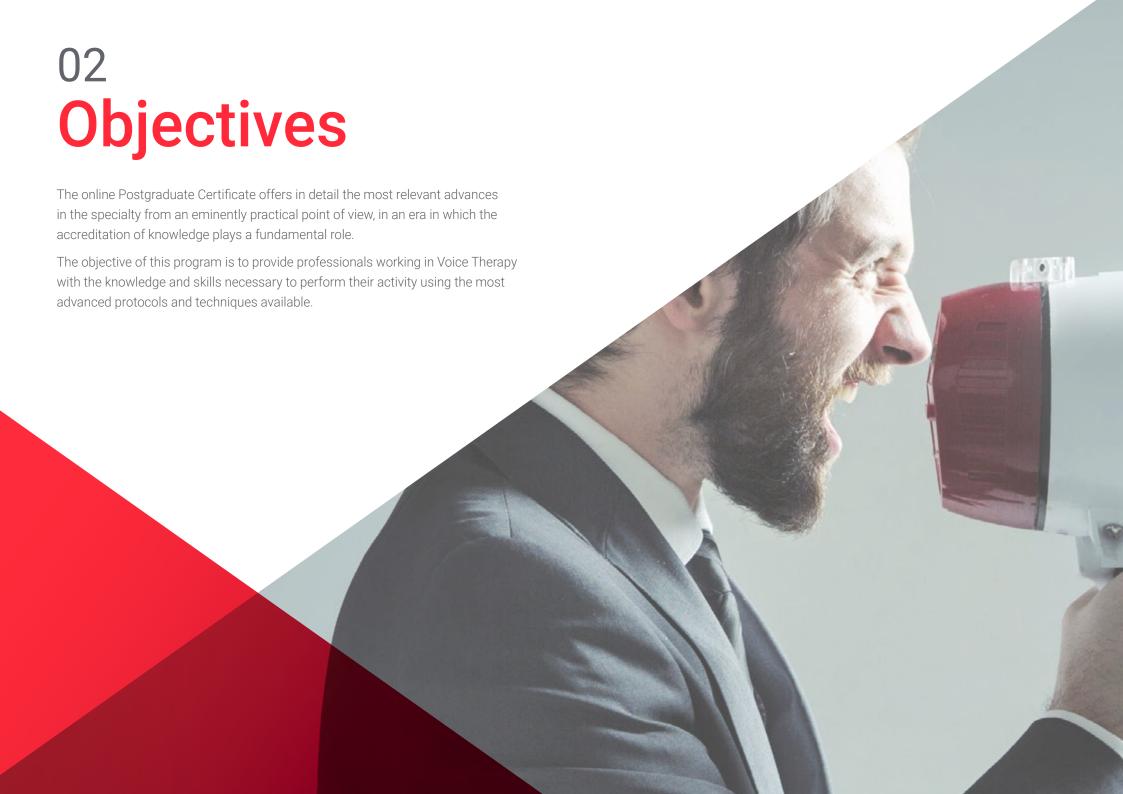
Thanks to its multimedia content developed with the latest educational technology, they will allow the professionals a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to train in real situations.

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 arise throughout the Postgraduate Certificate. For this purpose, professionals will be assisted by an innovative, interactive video system created by renowned and experienced professionals in the field of speech therapy with extensive teaching experience.

A program created and directed by active professionals who are experts in this field of work, which makes this Postgraduate Certificate a unique opportunity for professional growth.

Our innovative telepractice concept will give you the opportunity to learn through an immersive experience, with a high educational impact.







## tech 10 | Objectives



## **General Objectives**

- Learn the specific anatomical and functional aspects of the phonatory system as a basis for the rehabilitation of voice disorders and for voice work with voice professionals
- Gain in-depth knowledge of the most current diagnostic and treatment techniques
- Delve into the knowledge and analysis of the results obtained in objective voice assessments
- Learn how to implement a correct and complete assessment of vocal function in daily clinical practice
- Gain knowledge about the most important features of the voice and learn to listen to different types of voices in order to know which aspects are altered to guide clinical practice
- Analyze the different possible voice disorders and achieve scientific rigor in treatments
- Learn about different approaches to the treatment of vocal pathologies
- Raise awareness of the need for vocal care
- Teach voice therapy work focused on different voice professionals
- Learn the importance of multidisciplinary work in some voice pathologies
- View the voice as a global ability of the person and not as an exclusive act of the phonatory system
- Solve real practical case studies with current therapeutic approaches based on scientific evidence







# **O**

## **Specific Objectives**

- Learn to listen to different types of voices with objective criteria
- Apply different audio-perceptual scales in daily practice
- Learn about the different existing vocal function assessment tests
- Know the concept of fundamental frequency and learn how to obtain it from a speech sample
- Know the phonetogram and learn to use it in daily practice
- Calculate vocal functionality indexes
- Take a complete anamnesis based on patients' characteristics
- Learn about additional tests that can guide us in our treatment
- Differentiating normal voice from pathological voice
- Differentiate between the concepts of euphonia and dysphonia
- Learn to detect early symptoms/traits of dysphonia through listening
- Know the different types of voices and their characteristics
- Analyze the different types of functional dysphonia
- Analyze the different types of congenital organic dysphonia
- Analyze the different types of acquired organic dysphonia
- Analyze the different types of organic-functional dysphonia
- Be able to identify the observed vocal pathology in an image
- Learn how to analyze and classify a voice according to its audible acoustic features





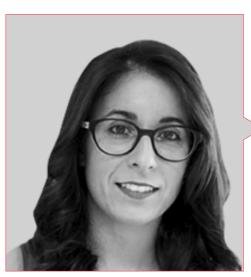
## **Guest Director**



## Mr. Gavilán, Javier

- Head of Service and Professor of Otorhinolaryngology at the La Paz university hospital, Madrid
- 350 articles in international scientific journals
- Recipient of the Honor Award from the American Academy of Otolaryngology-HNS
- Member of more than 25 Scientific Societies

## **Co-Direction**



## Ms. Martín Bielsa, Laura

- · Speech therapist and teacher
- Expert in voice pathology
- Director of Multidisciplinary Center Dime Más
- CFP Estill Voice Training
- Extensively trained in different methods of vocal rehabilitation
- Dean of the Professional Association of Speech-Language Pathologists of Aragon

#### **Professors**

#### Ms. Ogén Morado, Carolina

- ENT Service at the La Paz university hospital of Madrid
- Postgraduate course in rehabilitation and improvement of the professional speaking and singing voice Institute of Human Sciences-University of Alcalá de Henares Madrid
- Postgraduate course in voice pathology Institute of Human Sciences-University of Alcalá de Henares Madrid
- Graduate in Teaching, specializing in Hearing and Language, University of La Coruña
- Postgraduate course in Hearing and Language Disorders at the University of La Coruña
- Diploma in Speech Therapy from the University of La Coruña

#### Dr. García-López, Isabel

- PhD in Medicine and Surgery from the Autonomous University of Madrid.
- Medical Specialist in Otorhinolaryngology with specific training and dedication to Voice Pathology
- General Vice-Secretary of the Spanish Society of Otorhinolaryngology and Head and Neck Surgery
- Lecturer in the postgraduate course on Voice Disorders at the Ramon Llul University of Barcelona
- Professor of the Master's Degree in Voice Disorders at the Catholic University of Murcia
- Member of the main scientific societies in the world related to voice: Voice Foundation,
   Collegium Medicorum Theatri, European Society of Laryngology, International Association of Phonosurgery and Spanish Society of Otorhinolaryngology and Head and Neck Surgery
- Otorhinolaryngology Department, La Paz hospital, Madrid

#### Dr. Bernáldez Millán, Ricardo

- ENT Assistant in the specialty of Otorhinolaryngology at La Paz university hospital, La Paz
- PhD in Medicine and Surgery from the Autonomous University of Madrid
- Teaching collaborator for the subject of Otorhinolaryngology at the Faculty of Medicine of the UAM
- More than 30 ENT-related publications in scientific journals
- Author of 15 book chapters on Otolaryngology
- Specialized in Head and Neck Surgery

#### Dr. Rivera Schmitz, Teresa

- Head and Neck Section of the La Paz university hospital, Madrid
- Specialized in Laryngology
- Degree in Medicine and Surgery
- She studied at the Autonomous University of Madrid and completed her residency at the Unviersiy Hospital Complex of Vigo
- Fellowship at the Bradford Royal Infirmary Hospital in the United Kingdom, in the field of Otology
- She has published several articles as author or co-author and has participated in some book
  chapters and papers in recent years In addition, she has participated in lectures and courses as
  a speaker in the field of voice and dysphagia

#### Ms. Corvo, Sandra

- Speech therapist
- Director of Clínica Córtex-Ciudad Rodrigo
- Master's Degree in Advances in Neurorehabilitation of Communicative and Motor Functions of the Gimbernat Cantabria School
- Currently working on her doctoral thesis on the improvement of voice and speech in patients with Parkinson's disease by means of motor co-programming through dance





## tech 18 | Structure and Content

## Module 1. Functional Voice Assessment

- 1.1. Perceptual Assessment
  - 1.1.1. GRBAS
  - 1.1.2. RASAT
  - 1.1.3. GBR Score
  - 1.1.4. CAPE-V
  - 1.1.5. VPAS
- 1.2. Vocal Function Assessment
  - 1.2.1. Fundamental Frequency
  - 1.2.2. Phonetogram
  - 1.2.3. Maximum Phonatory Times
  - 1.2.4. Velo-Palatine Efficiency
  - 1.2.5. VHI
- 1.3. Medical History
  - 1.3.1. The Importance of the Medical History
  - 1.3.2. Characteristics of the Initial Interview
  - 1.3.3. Medical History Sections and Voice Implications
  - 1.3.4. Proposal of a Model of Anamnesis for Vocal Pathology
- 1.4. Body Assessment
  - 1.4.1. Introduction
  - 142 Posture
    - 1.4.2.1. Ideal or Correct Posture
  - 1.4.3. Voice-Posture Relationship
  - 1.4.4. Posture Assessment
- 1.5. Respiratory Assessment
  - 1.5.1. Respiratory Function
  - 1.5.2. Breathing-Voice Relationship
  - 1.5.3. Aspects to Assess
- 1.6. Stomatognathic System Assessment
  - 1.6.1. Stomatognathic System
  - 1.6.2. Relationships between the Stomatognathic System and Voice Production
  - 1.6.3. Evaluation

- 1.7. Assessing Vocal Function
  - 1.7.1. Vocal Quality
  - 1.7.2. High Quality Voice vs. Low Quality Voice
  - 1.7.3. Vocal Quality Assessment in Voice Professionals
- 1.8. Software for Assessing Vocal Function
  - 1.8.1. Introduction
  - 1.8.2. Free Software
  - 1.8.3. Payment Software
- 1.9. Materials to Collect Information and Assess Vocal Function
  - 1.9.1. Medical History
  - 1.9.2. Reading Text for Speech Sample Collection in Spanish
  - 1.9.3. Perceptual Assessment (After Medical History and Anamnesis)
  - 1.9.4. Self-Assessment
  - 1.9.5. Assessing Vocal Function
  - 1.9.6. Respiratory Assessment
  - 1.9.7. Stomatognathic Assessment
  - 1.9.8. Posture Assessment
  - 1.9.9. Acoustic Analysis of Vocal Quality

## Module 2. Normal Voice vs. Pathological Voice

- 2.1. Normal Voices and Pathological Voices
  - 2.1.1. Euphonia vs. Dysphonia
  - 2.1.2. Types of Voices
- 2.2. Vocal Fatigue
  - 2.2.1. Introduction
    - 2.2.1.1. Advice to Prevent Vocal Fatigue
  - 2.2.2. Synthesis
- 2.3. Acoustic Signs of Dysphonia
  - 2.3.1. First Manifestations
  - 2.3.2. Acoustic Features
  - 2.3.3. Severity Grades
- 2.4. Functional Dysphonias
  - 2.4.1. Type I: Isometric Laryngeal Disorder
  - 2.4.2. Type II: Glottic and Supraglottic Lateral Contraction

## Structure and Content | 19 tech

- 2.4.3. Type III: Anteroposterior Supraglottic Contraction
- 2.4.4. Type IV: Conversion Aphonia/Dysphonia
- 2.4.5. Transitional Adolescent Dysphonia
- 2.5. Psychogenic Dysphonia
  - 2.5.1. Definition
  - 2.5.2. Patient Characteristics
  - 2.5.3. Signs of Psychogenic Dysphonia and Voice Characteristics
  - 2.5.4. Clinical Forms
  - 2.5.5. Diagnosis and Treatment of Psychogenic Dysphonia
  - 2.5.6. Synthesis
- 2.6. Transitional Adolescent Dysphonia
  - 2.6.1. Vocal Changes
  - 2.6.2. Concept of Adolescent Transitional Dysphonia
  - 2.6.3. Treatment
  - 2.6.4. Synthesis
- 2.7. Dysphonia due to Congenital Organic Lesions
  - 2.7.1. Introduction
  - 2.7.2. Intrachordal Epidermal Cyst
  - 2.7.3. Sulcus Vocalis
  - 2.7.4. Mucosal Bridge
  - 2.7.5. Vergeture
  - 2.7.6. Microsinequias
  - 2.7.7. Laryngomalacia
  - 2.7.8. Synthesis
- 2.8. Acquired Organic Dysphonias
  - 2.8.1. Introduction
  - 2.8.2. Neurological Dysphonias
    - 2.8.2.1. Peripheral Laryngeal Paralysis
    - 2.8.2.2. Upper Motor Neuron Disorders
    - 2.8.2.3. Extrapyramidal Alterations
    - 2.8.2.4. Cerebellar Disorders
    - 2.8.2.5. Lower Motor Neuron Disorders
    - 2.8.2.6. Other Disorders

- 2.8.3. Organic Dysphonias of Acquired Origin
  - 2.8.3.1. Of Traumatic Origin
  - 2.8.3.2. Inflammatory
  - 2.8.3.3. Neoplastic Dysphonias
- 2.8.4. Synthesis
- 2.9. Mixed Dysphonias
  - 2.9.1. Introduction
  - 2.9.2. Vocal Nodes
  - 2.9.3. Laryngeal Polyps
  - 2.9.4. Reinke's Edema
  - 2.9.5. Vocal Cord Hemorrhage
  - 2.9.6. Contact Ulcer or Granuloma
  - 2.9.7. Mucous Retention Cyst
  - 2.9.8. Synthesis



A comprehensive teaching program, structured in well-developed teaching units, oriented towards learning that is compatible with your personal and professional life"





## tech 22 | Methodology

#### At TECH Education School we use the Case Method

In a given situation, what should a professional do? Throughout the program students will be presented with multiple simulated cases based on real situations, where they will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method.

With TECH, educators can experience a learning methodology that is shaking the foundations of traditional universities around the world.



It is a technique that develops critical skills and prepares educators to make decisions, defend their arguments, and contrast opinions.



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:

- Educators who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
- 2. The learning process is solidly focused on practical skills that allow educators to better integrate the knowledge into daily practice.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life teaching.
- 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.



## tech 24 | Methodology

## Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

Our University is the first in the world to combine case studies with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analyzing cases.

Educators will learn through real cases and by solving 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 we have trained more than 85,000 educators with unprecedented success in all specialties. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

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 our 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 specialist educators who teach the course, specifically for the course, so that the teaching content is really specific and precise.

These contents are then adapted in audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



#### **Educational Techniques and Procedures on Video**

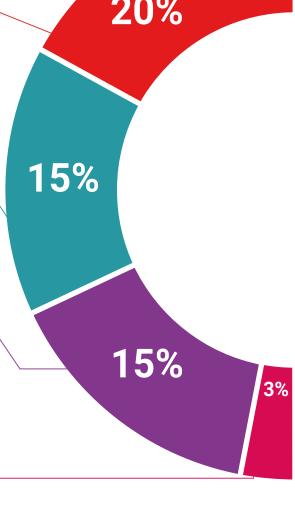
TECH introduces students to the latest techniques, with the latest educational advances, and to the forefront of Education. All this, first-hand, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, students can watch them as many times as they want.



#### **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.





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 suggesting that observing third-party experts can be useful.



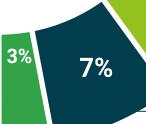
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

### **Quick Action Guides**

**Testing & Retesting** 

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 30 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Functional and Pathological Voice Assessment** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

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

Title: Postgraduate Certificate in Functional and Pathological Voice Assessment

Modality: online

Duration: 12 weeks

Accreditation: 12 ECTS



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

## Postgraduate Certificate in Functional and Pathological Voice Assessment

This is a program of 360 hours of duration equivalent to 12 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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

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



<sup>\*</sup>Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

tech global university

# Postgraduate Certificate Functional and Pathological Voice Assessment

- » Modality: online
- » Duration: 12 weeks
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- » Credits: 12 ECTS
- » Schedule: at your own pace
- » Exams: online

## Postgraduate Certificate

Functional and Pathological Voice Assessment

