Postgraduate Diploma Swallowing Disorders



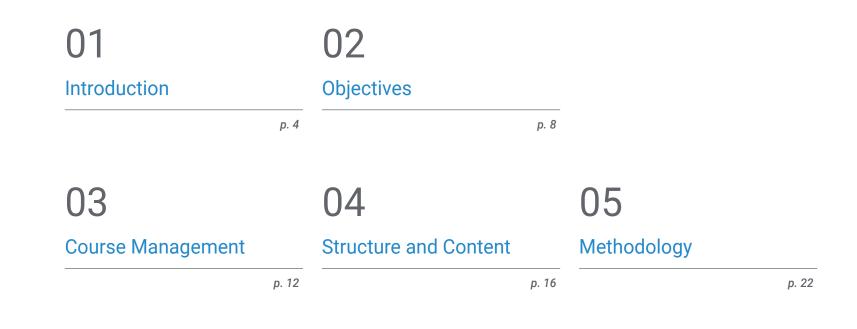


# **Postgraduate Diploma** Swallowing Disorders

- » 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-swallowing-disorders

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Certificate

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# 01 Introduction

Increased understanding of the structures and functions involved in swallowing, coupled with techniques and therapies for the management of patients with dysphagia, have improved treatment outcomes. In this regard, the increase in the number of people with stroke or dementia has led to an intensification of research in this area and the incorporation of new complementary tests. A field of action that leads gastroenterologists and other specialists to continuously update their knowledge. For this reason, this 100% online program was created to provide experts with a complete update on Swallowing Disorders and their approach. In addition, with the best pedagogical material, developed by an excellent multidisciplinary team.



36 You have at your fi of rigorous and c

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You have at your fingertips 450 hours of rigorous and current information on Swallowing Disorders"

# tech 06 | Introduction

The constant advance in the knowledge of Dysphagia has allowed the development of more accurate tools and scales to assess the severity and to carry out the most appropriate intervention. At the same time, interdisciplinary work has been promoted with experts from different areas, obtaining results for patients that are much more beneficial to their health.

In this scenario, there are advances in imaging technology such as videofluoroscopy and high-resolution endoscopy, enhancement of both liquid and solid foods to promote swallowing, as well as therapies to promote the muscles involved in the swallowing action. For this reason, TECH has decided to develop this 6-month Postgraduate Diploma in Swallowing Disorders.

A comprehensive syllabus that leads throughout 450 hours to obtain the most current information in this field and based on the latest scientific evidence. In this way, the professional will delve into the understanding of the anatomy and physiology of normal Swallowing and Dysphagia, the advances in the approach to Dysphagia with new foods or the technical progress in the evaluation of the patient.

All this, through a multitude of pedagogical tools such as video summaries of each topic, videos in detail, specialized readings and clinical case studies. Furthermore, thanks to the Relearning method, based on the repetition of content, the specialist will not have to invest long hours of study and will be able to consolidate the most important concepts in a much more agile way.

In this way, professionals have an excellent opportunity to update their knowledge in this field by means of a flexible and convenient program to study. All you need is a digital device with an Internet connection to view, at any time of the day, the content hosted on the virtual platform. In this way, the physicians are faced with an ideal academic option to make their most demanding daily responsibilities compatible with a quality educational proposal.

This **Postgraduate Diploma in Swallowing Disorders** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical cases presented by experts in Otorhinolaryngology and Speech Therapy
- 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



# Introduction | 07 tech

Thanks to the Relearning method, you will not have to spend long hours studying and memorizing.

Delve into the physiological phases of Swallowing through multimedia pills at your convenience.



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

The 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 immersive education programmed to learn 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 during the educational year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

# 02 **Objectives**

This high-level university proposal has been designed to provide medical professionals with an intensive update on Swallowing Disorders. To this end, the faculty provides a syllabus with a strong theoretical framework, as well as a practical one, thanks to numerous clinical studies that lead to a better understanding of the content. In addition, this program will allow graduates to incorporate into their practice the most effective methods and procedures for patients with various types of swallowing problems.

You have clinical case studies that will enhance your competencies in the management of patients with Swallowing Disorders"

# tech 10 | Objectives



- Update theoretical and practical knowledge about Dysphagia
- Develop clinical assessment skills
- Design and implement treatment plans according to the most current procedures
- Delve into the most up-to-date technologies and techniques
- Encourage interdisciplinary collaboration

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From a theoretical-practical perspective, you will be up-to-date with the scientific studies on the Physiopathology of Dysphagia"

# Objectives | 11 tech



## **Specific Objectives**

#### Module 1. Anatomy and physiology of normal Swallowing and Dysphagia

- Describe the protective mechanisms and function of anatomical structures during Swallowing
- Delve into the neurophysiological basis of Swallowing
- Identify the physiological changes associated with Dysphagia

#### Module 2. Dysphagia and feeding

- Delve into the effects of Dysphagia on feeding
- Delve into changes in the consistency of foods and liquids
- Identify adaptive feeding techniques
- Identify nutritional and hydration challenges

#### Module 3. Assessment of Dysphagia

- Delve into the different evaluation approaches and methods used in the field
- Identify the instrumental tests used in the evaluation of Dysphagia
- Learn how to interpret clinical assessment findings

# 03 Course Management

TECH is firmly committed to the quality of the programs it offers. For this reason, this institution carries out a meticulous selection process for each and every one of its teachers. In addition, on this occasion, the professionals will have at their disposal a Postgraduate Diploma developed by an interdisciplinary team, made up of speech therapists and otolaryngologists with extensive experience in the clinical care of patients with dysphagia.

A program with a multidisciplinary approach given by the experts in Otorhinolaryngology and Speech Therapy who participate in it"

# tech 16 | Course Management

#### Management



## Ms. Marcos Galán, Victoria

- Director of the Crecemos contigo center and Neuro-logist
- Specialist in Voice Pathology and Myofunctional Therapy
- \* Professor, Department of Physiotherapy in Health Sciences, Castilla La Mancha University
- \* Trainer in health specialization courses in Speech Therapy Intervention
- \* Specialist in Voice Pathology from the University of Alcalá de Henares
- Degree in Speech Therapy from the Complutense University of Madrid

## Course Management | 17 tech



#### Mr. Maeso i Riera, Josep

- Director of the Otorhinolaryngology Section of the Otorhinolaryngology Ophthalmology Center of Egara
- Assistant Physician of the Otorhinolaryngology Service in the Head and Neck Section of the Mútua de Terrass
  University Hospital
- Physician in charge of the Dacryology Section (Ophthalmology Service) of the Delfos Medical Center
- Head of the Otorhinolaryngology Department at Sanitas CIMA Hospital
- Collaborating physician in the Otorhinolaryngology office of the Sanitas offices
- Specialist in Otorhinolaryngology
- Doctor in Medicine and Surgery from the Autonomous University of Barcelona
- Degree in Medicine and Surgery from the Autonomous University of Barcelona
- Diploma in Hospital Management from the School of Business Administration and Management
- Member of: Catalan Society of Oto-Rhino-Laryngology, Spanish Society of Otolaryngology and Cervico-Facial Pathology, and American Academy of Otolaryngology-Head and Neck Surgery

#### Professors

#### Ms. Aniceto, Elena

- speech therapist at Neuro-logo Center
- Specialist in infant audiology and auditory-verbal therapy
- \* Speech therapist from the Complutense University of Madrid

# 04 Structure and Content

The plan of studies of this Postgraduate Diploma will lead the medical professional to achieve a complete update of their knowledge in Swallowing Disorders, their diagnosis and approach. In this way, from a theoretical-practical approach, you will be able to integrate in your day-to-day work, the most notorious advances in evaluation procedures as well as in the therapeutics used to improve the nutrition of patients. All of this is complemented by an extensive Virtual Library, accessible 24 hours a day, 7 days a week.

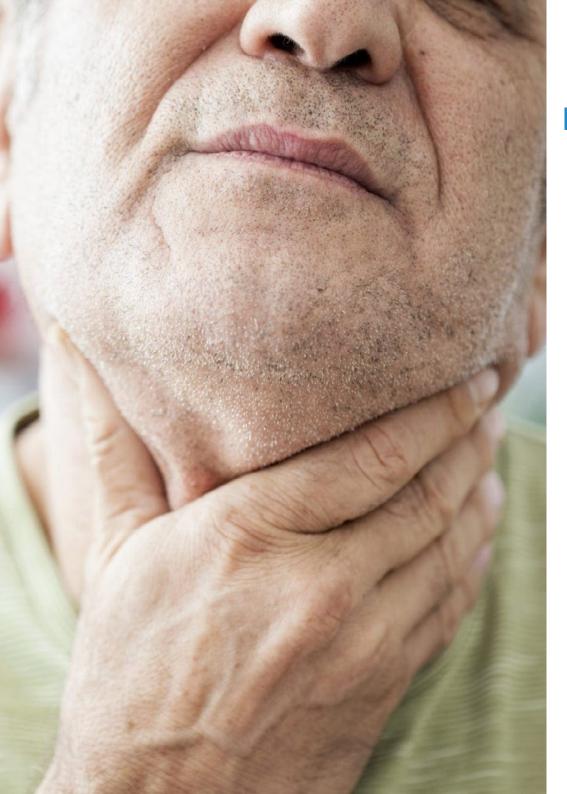
A complete plan of study that will lead you to be aware of the advances in food adaptation for patients with Dysphagia"

# tech 22 | Structure and Content

#### Module 1. Anatomy and physiology of normal Swallowing and Dysphagia

- 1.1. Temporal Sequence of Swallowing
  - 1.1.1. Orofacial Structures Involved in Swallowing
  - 1.1.2. Muscles Involved in Swallowing
  - 1.1.3. Head and Neck
  - 1.1.4. Chest and Abdomen
- 1.2. Physiological Phases of Swallowing
  - 1.2.1. Preparatory Oral Phase
  - 1.2.2. Oral Transport Phase
  - 1.2.3. Pharyngeal Phase
  - 1.2.4. Esophageal Phase
- 1.3. Neurobiological Basis and Swallowing
  - 1.3.1. Central Nervous System
  - 1.3.2. Reflexes Involved in Swallowing
  - 1.3.3. Cranial Nerves
  - 1.3.4. Conclusions
- 1.4. Physiological Mechanisms
  - 1.4.1. Palatoglossal Seal
  - 1.4.2. Swallow Reflex
  - 1.4.3. Upper Esophageal Sphincter
  - 1.4.4. Velopharyngeal Sphincter Closure
  - 1.4.5. Laryngeal Sphincter Occlusion
  - 1.4.6. Lower Esophageal Sphincter Opening
- 1.5. Voluntary Swallowing
  - 1.5.1. Preparatory Oral Phase
  - 1.5.2. Oral phase of Transportation
  - 1.5.3. Initial Oral Phase
  - 1.5.4. Conclusions
- 1.6. Involuntary Swallowing
  - 1.6.1. Pharyngeal Phase
  - 1.6.2. Esophageal Phase
  - 1.6.3. Joint Phase
  - 1.6.4. Conclusions

- 1.7. Pathophysiology of Dysphagia
  - 1.7.1. Physiological Changes
  - 1.7.2. Disorders
  - 1.7.3. Muscle Alteration
  - 1.7.4. Lower Esophageal Sphincter (LES) Dysfunction
- 1.8. Anatomophysiological Alterations and Dysphagia
  - 1.8.1. Atrophy of the Musculature Involved in Swallowing
  - 1.8.2. Neoplasms in Structures Involved in Swallowing
  - 1.8.3. Surgical Interventions and Dysphagia
  - 1.8.4. Obstruction in Structures Involved in Swallowing
  - 1.8.5. Inflammation of Structures Involved in Swallowing
  - 1.8.6. Radiation on Structures Involved in Swallowing
  - 1.8.7. Metabolic Alterations
  - 1.8.8. Trauma
  - 1.8.9. Tumours
- 1.9. Anatomy and Physiology of Swallowing in Neonates
  - 1.9.1. Anatomy of the Newborn
  - 1.9.2. Physiology of the Newborn
  - 1.9.3. Pathophysiology of the Newborn
  - 1.9.4. Embryology and Maturation of the Suction-Deglutition Breathing Process
- 1.10. Physiological Changes Associated with Aging
  - 1.10.1. Alterations of Orofacial Structures
  - 1.10.2. Atrophy of Masticatory Muscles
  - 1.10.3. Decreased Salivation
  - 1.10.4. Decreased Muscle Tone
  - 1.10.5. Existence of Diverticula
  - 1.10.6. Epiglottis Changes
  - 1.10.7. Increased Apnea Time
  - 1.10.8. Changes in Peristaltic Waves



## Structure and Content | 23 tech

#### Module 2. Dysphagia and feeding

- 2.1. Safety, Efficacy and Interdisciplinary Decisions on Feeding in Patients with Dysphagia
  - 2.1.1. How Dysphagia Affects Feeding
  - 2.1.2. Dietary Classification
  - 2.1.3. Classification of Food Administration Routes
  - 2.1.4. Steps to Choose the Right Type of Diet

#### 2.2. General Intake Guidelines

- 2.2.1. Environmental Measurements
- 2.2.2. Guidelines Before Eating
- 2.2.3. Mealtime Guidelines
- 2.2.4. Post-Meal Guidelines
- 2.3. Oral Habits and Oral Hygiene
  - 2.3.1. Importance of Maintaining Good Oral Hygiene
  - 2.3.2. Oral Brushing Procedure
  - 2.3.3. Oral Care Guidelines
  - 2.3.4. Oral Hygiene Materials
- 2.4. Food Properties
  - 2.4.1. Textural Qualities of Food
  - 2.4.2. Fluid Properties
  - 2.4.3. Solids Properties
  - 2.4.4. Organoleptic Properties of Foods
- 2.5. Volume Adaptation
  - 2.5.1. Volume Definition
  - 2.5.2. Volume Classification
  - 2.5.3. Relationship between Physiology and Volume During Swallowing
  - 2.5.4. Changes in Volume for the Treatment of Dysphagia
- 2.6. Modification of Viscosity of Liquids and Texture of Solids
  - 2.6.1. Liquid Viscosity Levels
  - 2.6.2. Methods for Assessing the Viscosity of Liquids
  - 2.6.3. Solid Viscosity Levels
  - 2.6.4. Methods for Assessing the Viscosity of Solids

# tech 24 | Structure and Content

- 2.7. Hydration of the Patient with Dysphagia
  - 2.7.1. Definition, Classification and Characteristics of Thickening Agents
  - 2.7.2. Rheological Characteristics of the Thickened Liquid
  - 2.7.3. Sensory Characteristics of Thickened Liquids
  - 2.7.4. Factors Altering the Action of Thickeners
  - 2.7.5. Gelled Waters
- 2.8. Feeding of the Patient with Dysphagia
  - 2.8.1. Food to Avoid
  - 2.8.2. Thickeners
  - 2.8.3. Commercial Preparations
  - 2.8.4. Oral Supplements
- 2.9. Medication Adaptation
  - 2.9.1. Non-Adaptable Drugs
  - 2.9.2. Drugs for Liquid Dysphagia
  - 2.9.3. Drugs for Solid Dysphagia
  - 2.9.4. Drugs for Dysphagia to Solids and Liquids
- 2.10. Dysphagia Feeding Support Products
  - 2.10.1. Dishes
  - 2.10.2. Covered
  - 2.10.3. Vessels
  - 2.10.4. Others

#### Module 3. Assessment of Dysphagia

- 3.1. Detection of Dysphagia Symptoms
  - 3.1.1. Coughing During or Immediately after Eating
  - 3.1.2. Voice Changes
  - 3.1.3. Drooling and Difficulty in Controlling Salivation
  - 3.1.4. Difficulty in Forming the Alimentary Bolus
  - 3.1.5. Fractionated Swallowing
  - 3.1.6. Post-Deglutition Waste
  - 3.1.7. Increased Eating Time
  - 3.1.8. Fever
  - 3.1.9. Progressive Weight Loss
  - 3.1.10. Malnutrition and Dehydration



## Structure and Content | 25 tech

- 3.2. Initial Assessment of Dysphagia and Associated Symptoms
  - 3.2.1. Location of Symptoms
  - 3.2.2. Types of Food that Produce It
  - 3.3.3. Duration of Symptoms and Evolution
  - 3.3.4. Assessment if Progressive or Stable
  - 3.3.5. Assessment whether Continuous or Intermittent
- 3.3. Clinical Assessment of Dysphagia
  - 3.3.1. Complete Physical Examination
  - 3.3.2. Determine Risks and Swallowing Safety
  - 3.3.3. Accompanying Symptoms
  - 3.3.4. Test of Quality of Life
  - 3.3.5. Clinical Examination Volume-Viscosity (MECV-V)
- 3.4. Complementary Tests
  - 3.4.1. Rule Out Neoplasms
  - 3.4.2. Aspiration Study
  - 3.4.3. Endoscopy
  - 3.4.4. Specific Anatomical Studies
  - 3.4.5. Videofluoroscopy
  - 3.4.6. Videoendoscopy
  - 3.4.5. Magnetic Resonance
  - 3.4.6. Gastroduodenal Esophageal Transit
  - 3.4.7. Esofaogram Baryte
  - 3.4.8. Esophageal Manometry/High Resolution
  - 3.4.9. Transnasal Esophagoscopy
  - 3.4.10. PHmetry
  - 3.4.11. Impedanciometry
- 3.5. Speech Therapy Assessment
  - 3.5.1. Myofunctional Speech Therapy Evaluation: Sucking, Salivation, Chewing, etc
  - 3.5.2. Speech-Language Assessment
  - 3.5.3. Speech Therapy Assessment
  - 3.5.4. Logopedic Assessment of Voice and Breathing
  - 3.5.5. Speech Therapy Assessment of Safe Feeding

- 3.6. Assessment of Anatomical Structures Involved in Swallowing
  - 3.6.1. Anatomophysiological Orofacial Evaluation
  - 3.6.2. Anatomophysiological Assessment of the Head and Neck
  - 3.6.3. Anatomophysiological Assessment of Thorax-Abdomen
  - 3.6.4. Conclusions
- 3.7. Assessment of the Oral Cavity of the Patient with Dysphagia
  - 3.7.1. Lip Assessment
  - 3.7.2. Tooth Assessment
  - 3.7.3. Palate Assessment
  - 3.7.4. Language Assessment
- 3.8. Pharyngolaryngeal Assessment
  - 3.8.1. Epiglottis Assessment
  - 3.8.2. Assessment of Motor Coordination in the Act of Swallowing
  - 3.8.3. General Assessment
  - 3.8.4. Conclusions
- 3.9. Sensitive Assessment
  - 3.9.1. Salivation Assessment
  - 3.9.2. Suction Assessment
  - 3.9.3. Assessment of Silent Aspiration
  - 3.9.4. Assessment of Painful Symptoms
- 3.10. Assessment of the Patient's General: Status
  - 3.10.1. Patient Understanding
  - 3.10.2. Swallowing Efficiency
  - 3.10.3. Swallowing Safety
  - 3.10.4. Motility. Sensitivity. Coordination



A comprehensive update on the clinical evaluation of Dysphagia through a program designed by real specialists"

# 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 24 | 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 26 | 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 | 27 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 28 | 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 | 29 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.

# 06 **Certificate**

The Postgraduate Diploma in Swallowing Disorders guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate 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 36 | Diploma

This **Postgraduate Diploma in Swallowing Disorders** contains the most complete and up-to-date scientific program on 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 Swallowing Disorders** Official N° of Hours: **450 h.** 



# technological university

# **Postgraduate Diploma** Swallowing Disorders

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Postgraduate Diploma Swallowing Disorders

