



# Postgraduate Certificate Dysphagia Approach

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-certificate/dysphagia-approach

# Index

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

06 Certificate

p. 28

# 01 Introduction

Physiological changes associated with aging, decreased muscle tone due to certain pathologies or increased apnea time influence therapeutic procedures in patients with Dysphagia. In this sense, a better understanding of the anatomy and physiology involved in swallowing has favored the evaluation, diagnosis and approach to this disorder. These advances, combined with multidisciplinary work between specialists from different areas, lead to optimal results for those affected. Faced with this reality, this 100% online program is born, which allows the graduate to get a complete update on the management of Dysphagia, from a theoretical-practical approach and with the best multimedia teaching material of the current educational landscape.



# tech 06 | Introduction

Thanks to scientific research and efforts from different areas to understand the etiology of Dysphagia and its correct identification, relevant advances have been made in therapeutic treatments. In this sense, morphological and functional studies facilitate the evaluation of this disorder and its differential diagnosis.

In addition, the collaborative work with other experts such as otolaryngologists, speech therapists, gastroenterologists or physiotherapists has allowed their participation to influence the patient's recovery. For this reason, TECH has designed this program from an interdisciplinary and comprehensive perspective that leads the graduate to make a complete update in the Approach to Dysphagia.

This is a 6-week Postgraduate Certificate, which presents high quality pedagogical tools based on video summaries, videos in detail, clinical case studies and complementary readings. In this way, the graduates will have at their disposal an extensive content focused on the most notorious advances in the study of the Anatomy and physiology of normal swallowing and Dysphagia.

In addition, thanks to the Relearning method, focused on the continuous repetition of key content throughout the educational itinerary, the specialist will be able to reduce the long hours of study and memorization that are so frequent in other teaching systems.

The professionals are, in this way, faced with a unique opportunity to be up to date in this field through a university program that they can take whenever and wherever they wish. All you need is a cell phone, tablet or computer with an Internet connection to view, at any time of the day, the content hosted on the virtual platform. In this way, the students have an educational option that is compatible with their more demanding responsibilities.

This **Postgraduate Certificate in Dysphagia Approach** 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



An educational option that responds to your real needs of updating your knowledge in Dysphagia in a short period"



You are looking at a university program that is compatible with your most demanding daily professional responsibilities"

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.

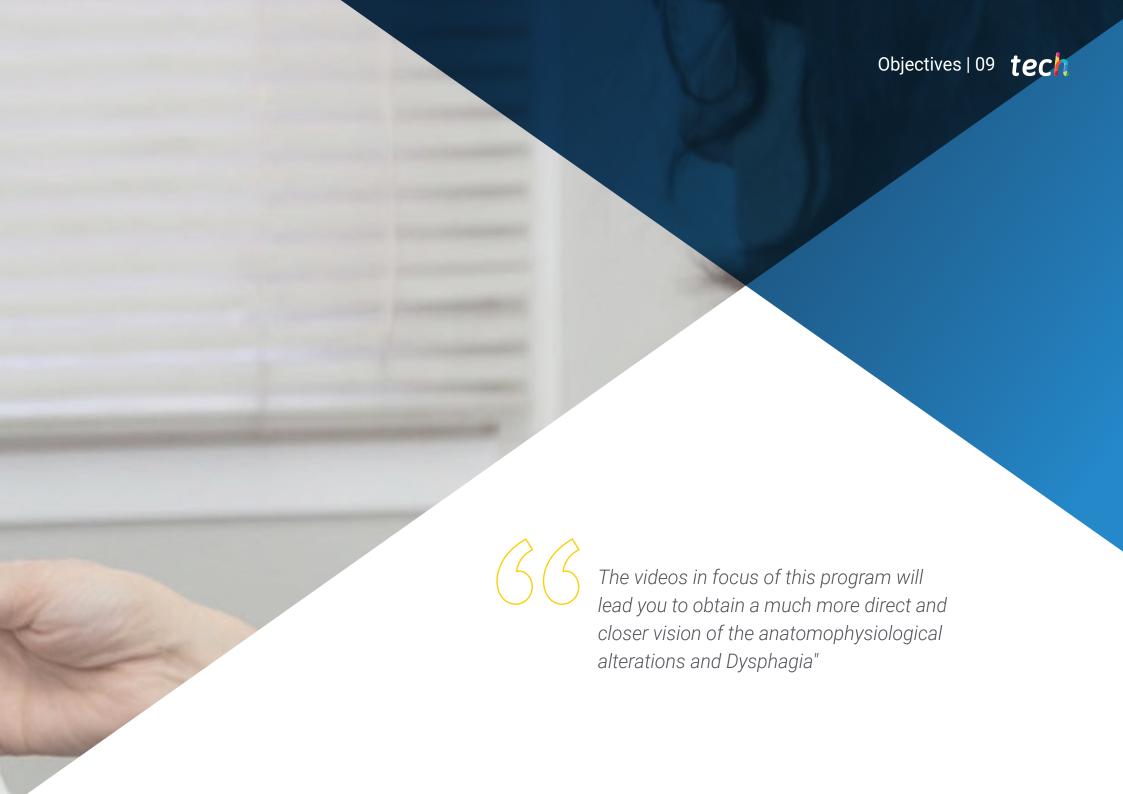
This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the educational year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Delve into the neurobiological basis of swallowing and the most relevant scientific studies in this field.

Rigorous medical literature on voluntary and involuntary swallowing is available.





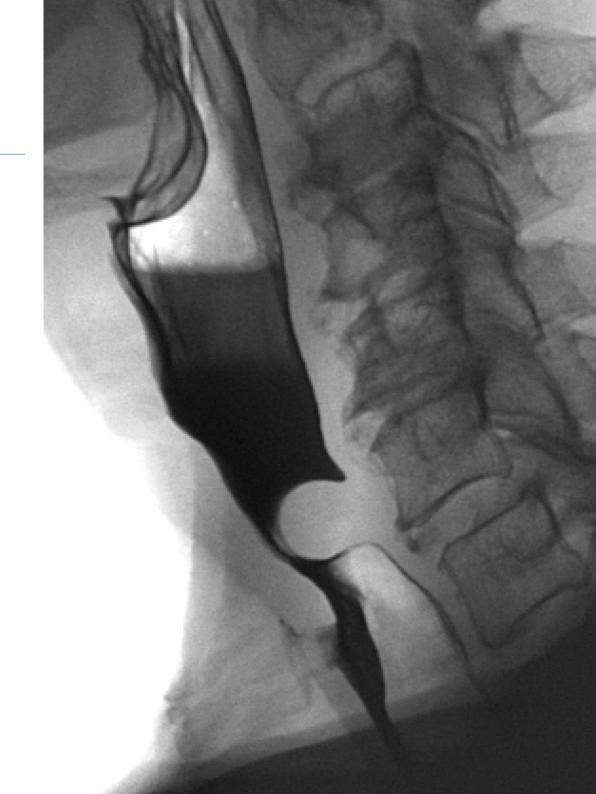


# tech 10 | Objectives



# **General 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







# **Specific Objectives**

- 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



If you have a digital device with Internet connection you can delve, comfortably, from anywhere in the world in the Pathophysiology of Dysphagia"





# tech 14 | Course Management

#### Management



#### Dr. 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



#### 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 Universit
- 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



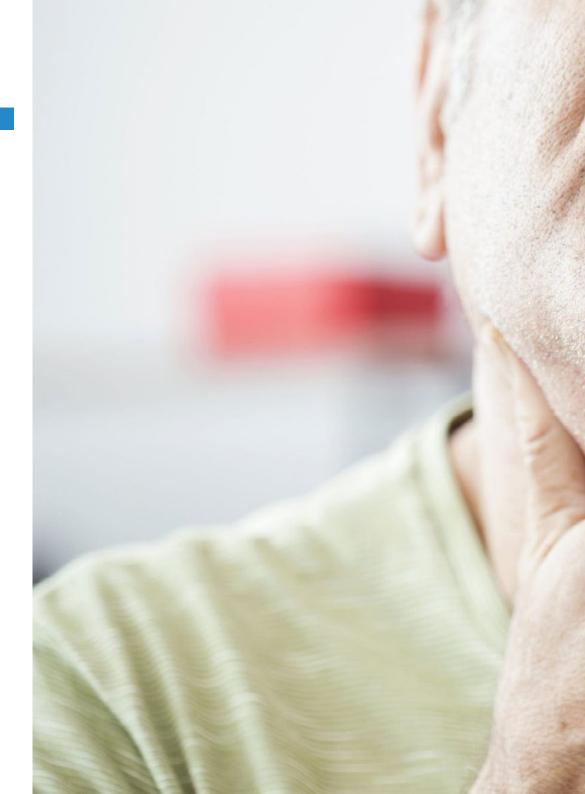


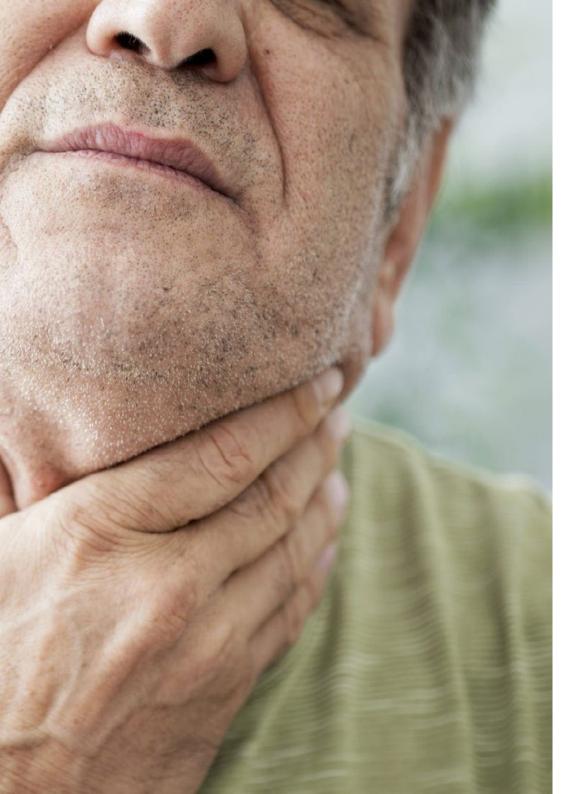


# tech 18 | Structure and Content

#### 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

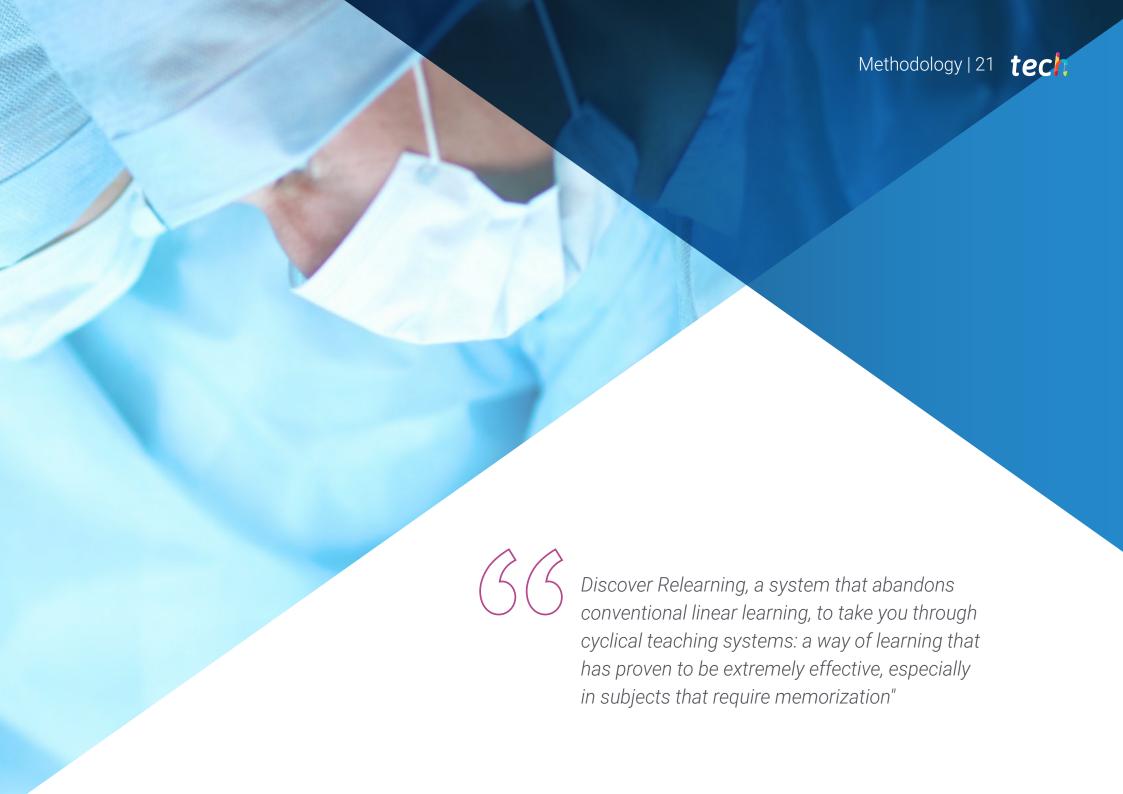




# Structure and Content | 19 tech

- 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 the Swallowing Process
  - 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. Newborn Anatomy
  - 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





# tech 22 | Methodology

#### At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician's professional practice.



Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

#### The effectiveness of the method is justified by four fundamental achievements:

- Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
- 2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- 4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.





### Relearning Methodology

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

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



## Methodology | 25 tech

At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

# tech 26 | Methodology

This program offers the best educational material, prepared with professionals in mind:



#### **Study Material**

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

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



#### **Surgical Techniques and Procedures on Video**

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



#### **Interactive Summaries**

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".





#### **Additional Reading**

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.

### **Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### **Testing & Retesting**

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



#### Classes

There is scientific evidence on the usefulness of learning by observing experts.

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



#### **Quick Action Guides**

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.









# tech 30 | Certificate

This **Postgraduate Certificate in Dysphagia Approach** 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 Certificate** issued by **TECH Technological University** via tracked delivery\*.

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

Title: Postgraduate Certificate in Dysphagia Approach
Official N° of Hours: 150 h.



<sup>\*</sup>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.

health confidence people
leducation information tutors
guarantee accreditation teaching
institutions technology learning
community commitment



# Postgraduate Certificate Dysphagia Approach

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

