



# Postgraduate Diploma

# Feeding in Pediatric Dysphagia

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 18 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-feeding-pediatric-dysphagia

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Pediatric Dysphagia can have a significant impact on the quality of life of children and their families. However, advances in the creation of food textures, alternative feeding methods, as well as specific therapies have been perfected in recent years. For this reason, when faced with clinical cases of this type of disorder, the medical professional must be aware of advances in this field. In this way, this 100% online program is born, which leads the graduate to achieve a complete update in infant swallowing, evaluation methods and approach over 6 months. For this purpose, you will have a comprehensive syllabus, prepared by a multidisciplinary team of experts and quality multimedia teaching material.



# tech 06 | Introduction

Medical professionals are increasingly specialized in the early detection and early treatment of any type of feeding difficulties in children, due to their future development. For this reason, many experts show a high interest in its etiology and approach from a comprehensive approach and in collaboration with other healthcare professionals.

In this way, important advances have been achieved in the adaptation of food in Dysphagia to liquids or solids, in the existing pharmacology, as well as in the techniques used to avoid malnutrition, dehydration, or mortality. These advances have led TECH to develop this Postgraduate Diploma in Feeding in Pediatric Dysphagia.

A syllabus that leads the graduate to delve into the most recent lines of research on this disorder in neonates, its approach in patients with acquired brain damage, craniofacial anomalies or respiratory pathologies, among others. Furthermore, this program will focus on safety, efficacy and interdisciplinary feeding decisions in patients with dysphagia.

In this context, the students will not only get an update from a firm theoretical basis, but also from a practical perspective. For this purpose, it has clinical case studies provided by the faculty, which will allow you to observe the strategies and procedures used.

Undoubtedly, a unique opportunity to keep abreast of progress in this area through a program that is characterized by its flexibility and convenience. The students only need a digital device with an Internet connection to view, at any time of the day, the content hosted on the virtual platform.

This **Postgraduate Diploma in Feeding in Pediatric Dysphagia** 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



It explores the advances in the approach to esophageal Dysphagia associated with esophageal causes"



Delve whenever you wish into the advances in the strategies used in the feeding of breastfed babies and Dysphagia"

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.

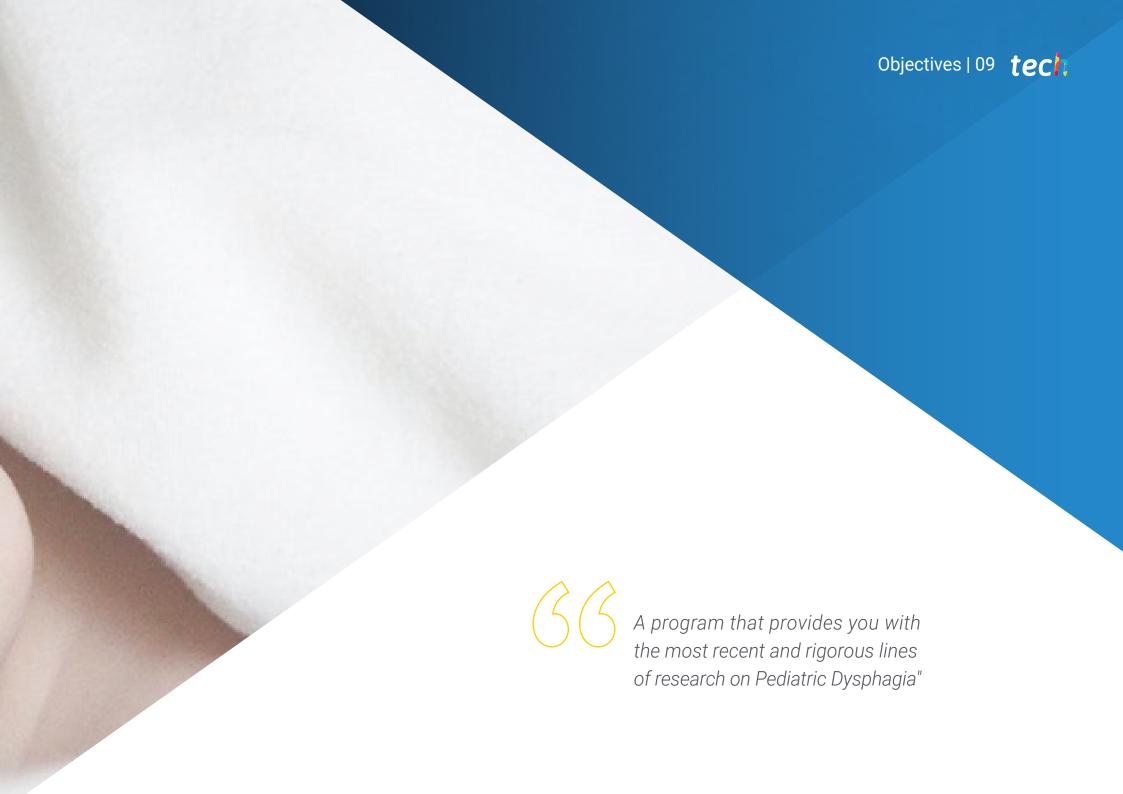
This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the educational year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced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

The clinical cases will allow you to delve into the identification of the signs and symptoms of Dysphagia in newborns.

If you have a digital device with an Internet connection you will be able to access this 100% online program whenever and wherever you want.







# tech 10 | Objectives

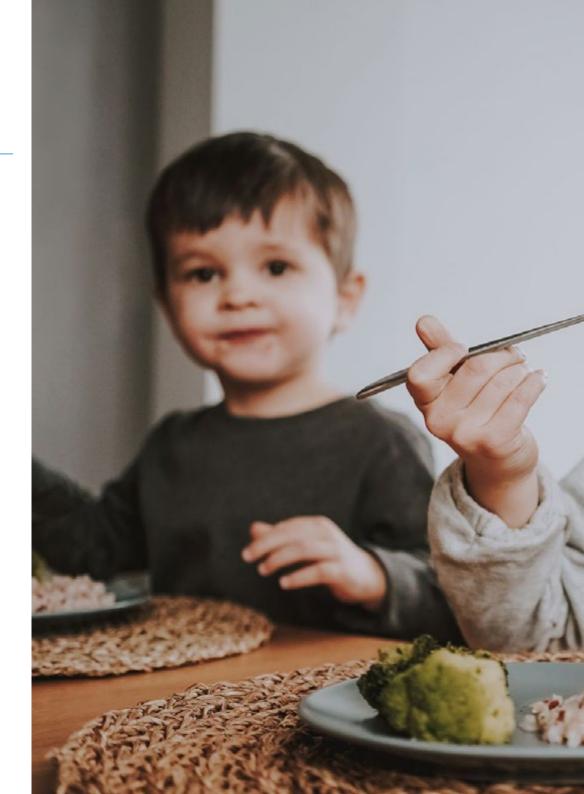


# **General Objectives**

- 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



Thanks to this program you will be up-to-date with the most advanced clinical evaluation techniques in Pediatric Dysphagia"





# **Specific Objectives**

### Module 1. Dysphagia in Neonatology

- Delve into the anatomy and physiology of swallowing in neonates
- Recognize the signs and symptoms of Dysphagia in neonates

### Module 2. Pediatric Dysphagia

- Delve into the anatomical and physiological characteristics of swallowing in children
- Describe the different medical conditions and disorders that can cause dysphagia in children
- Delve into the techniques of clinical evaluation in pediatric dysphagia

#### Module 3. 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







# tech 14 | Course Management

### Management



## 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



### 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

## **Professors**

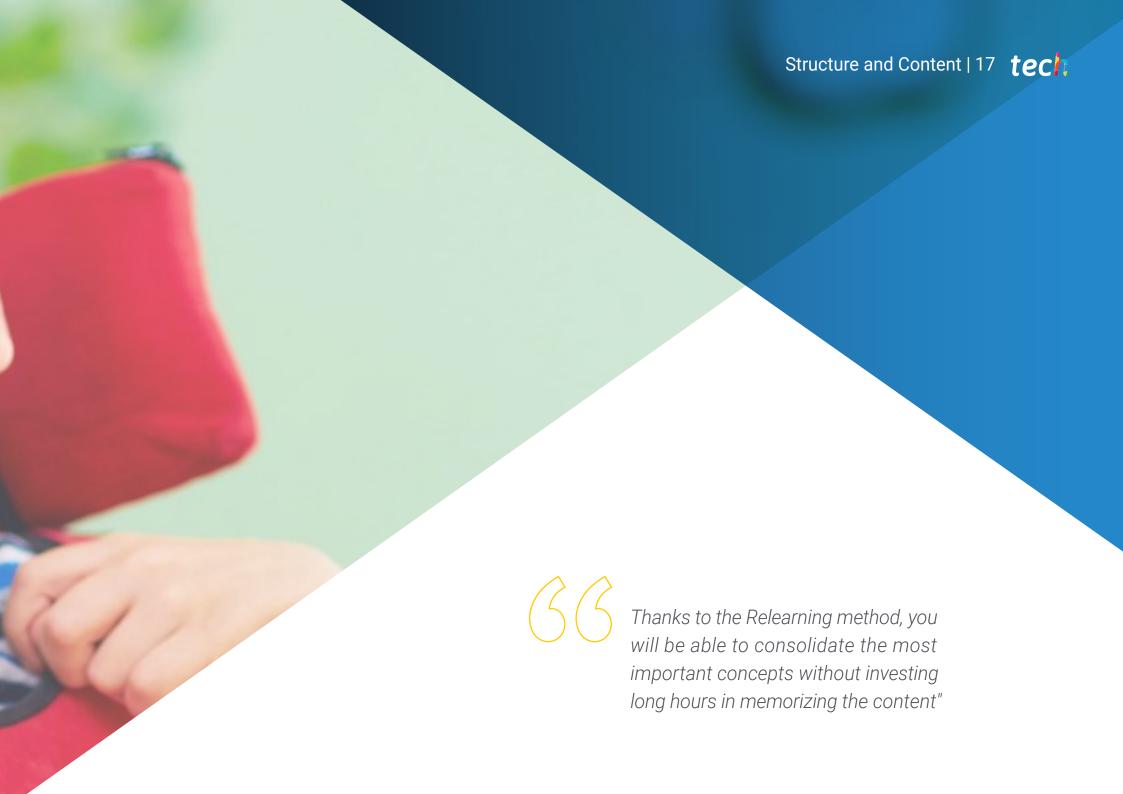
## Ms. Casero Tapiador, Claudia

- Speech therapist at Neuro-Logo Center
- Graduate in Speech Therapy from the University of Castilla-La Mancha
- Expert in Psychomotricity and Neuromotor skills by the International University of La Rioja
- Training in Early Childhood Language Stimulation and Early Childhood Care by the Antonio de Nebrija University
- Member of: Breastfeeding Committee of the General University Hospital of Ciudad Real

## 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





# tech 18 | Structure and Content

### Module 1. Dysphagia in Neonatology

- 1.1. Sucking and Swallowing Reflexes
  - 1.1.1. Nourishing Suction
  - 1.1.2. Search Reflex
  - 1.1.3. Primary Swallowing Reflex
  - 1.1.4. Secondary Swallowing Reflex
- 1.2. Development of Oral Skills in the Neonate
  - 1.2.1. Reflexes Involved in Speaking Skills
  - 1.2.2. Gestational Age at Which the Reflexes and Cranial Nerves Involved Appear
  - 1.2.3. How to Stimulate Oral Reflexes
  - 1.2.4. Conclusions
- 1.3. Oral Skills Necessary for Feeding in the Neonate
  - 1.3.1. Suction-Deglutition-Breathing Coordination
  - 1.3.2. Importance of Regional Stability
  - 1.3.3. Non-Nutritive Suction
  - 1.3.4. Nourishing Suction
- 1.4. Underlying Medical Conditions in Neonates
  - 1.4.1. Congenital malformations
  - 1.4.2. Associated Neurological Disorders
  - 1.4.3. Structural Abnormalities in the Mouth or Tongue
  - 1.4.4. Diseases of the Intestinal Tract
- 1.5. Characteristics of a UCIN
  - 1.5.1. What is a Neonatal Unit
  - 1.5.2. Causes of Hospital Admission
  - 1.5.3. Neonatal Unit Evaluation
  - 1.5.4. Neonatal Unit Intervention
- 1.6. Risk Factors that Condition the Development of Feeding Difficulties
  - 1.6.1. Prematurity
  - 1.6.2. Underweight at birth
  - 1.6.3. Immature Organ Systems
  - 1.6.4. Pathologies

- 1.7. Clinical Manifestations
  - 1.7.1. Signs and Symptoms of Dysphagia in Infants
  - 1.7.2. Impact of Stress on Nutrition
  - 1.7.3. Clinical Cases
- 1.8. Tools for Assessing Oral Skills for Feeding
  - 1.8.1. Assessment of Pre-Feeding Status Prior to Feeding
  - 1.8.2. Assessment of Bottle Feeding and Breast Feeding
  - 1.8.3. Assessment of Stress in Oral Skills
  - 1.8.4. Environment and Family Assessment
- 1.9. Tools to Intervene on Oral Skills for Feeding
  - 1.9.1. Direct Intervention
  - 1.9.2. Indirect Intervention
  - 1.9.3. Adaptive Intervention
  - 1.9.4. Compensatory Intervention
- 1.10. Neonatal Dysphagia and Family
  - 1.10.1. Importance of Family Involvement
  - 1.10.2. Feeding Strategies in Breastfeeding
  - 1.10.3. Bottle Feeding Strategies
  - 1.10.4. Conclusions

#### Module 2. Pediatric Dysphagia

- 2.1. Detection and Assessment of Pediatric Dysphagia
  - 2.1.1. Infant Swallowing Maturation
  - 2.1.2. Warning Signs in Pediatric Dysphagia
  - 2.1.3. Pediatric Dysphagia Assessment Scales
  - 2.1.4. Particularities in the Assessment of Pediatric Dysphagia
- 2.2. Dysphagia Due to Congenital Brain Injury
  - 2.2.1. Pediatric Cerebral Palsy
  - 2.2.2. Hypoxic-Ischemic Encephalopathy
  - 2.2.3. Genetic Syndromes
  - 2.2.4. Conclusions



# Structure and Content | 19 tech

- 2.3. Dysphagia Due to Acquired Brain Damage
  - 2.3.1. Cranioencephalic Trauma
  - 2.3.2. Central Nervous System Infections
  - 2.3.3. Infant Stroke
  - 2.3.4. Tumours
- 2.4. Dysphagia Due to Craniofacial Anomalies
  - 2.4.1. Craniofacial Development
  - 2.4.2. Craniofacial Developmental Anomalies
  - 2.4.3. Congenital Craniofacial Anomalies
  - 2.4.4. Acquired Craniofacial Anomalies
- 2.5. Dysphagia Due to Respiratory Pathologies
  - 2.5.1. Laryngomalacia
  - 2.5.2. Bronchopulmonary Dysplasia
  - 2.5.3. Tracheomalacia
  - 2.5.4. Subglottic Stenosis
- 2.6. Dysphagia Associated with Neurodegenerative Diseases
  - 2.6.1. Diseases with Metabolic Origin
  - 2.6.2. Neuromuscular Diseases
  - 2.6.3. Rett Sydrome
  - 2.6.4. Conclusions
- 2.7. Dysphagia Associated to Esophageal Causes
  - 2.7.1. Gastroesophageal Reflux
  - 2.7.2. Eosinophilic Esophagitis
  - 2.7.3. Crohn's Disease
  - 2.7.4. Esophageal Foreign Body
- 2.8. Dysphagia Due to Infectious Diseases
  - 2.8.1. Epiglottitis
  - 2.8.2. Retropharyngeal Abscess
  - 2.8.3. Tetanus
  - 2.8.4. Diphtheria

# tech 20 | Structure and Content

- 2.9. Other Causes Associated with Pediatric Dysphagia
  - 2.9.1. Oral Pathology
  - 2.9.2. Sialorrhea
  - 2.9.3. Aspirative Syndrome
  - 2.9.4. Medication
- 2.10. Complications of Dysphagia
  - 2.10.1. Malnutrition and Dehydration
  - 2.10.2. Respiratory Problems
  - 2.10.3. Psycho-Affective Alteration
  - 2.10.4. Oral Hygiene

### Module 3. Dysphagia and feeding

- 3.1. Safety, Efficacy and Interdisciplinary Decisions on Feeding in Patients with Dysphagia
  - 3.1.1. How Dysphagia Affects Feeding
  - 3.1.2. Dietary Classification
  - 3.1.3. Classification of Food Administration Routes
  - 3.1.4. Steps to Choose the Right Type of Diet
- 3.2. General Intake Guidelines
  - 3.2.1. Environmental Measurements
  - 3.2.2. Guidelines Before Eating
  - 3.2.3. Mealtime Guidelines
  - 3.2.4. Post-Meal Guidelines
- 3.3. Oral Habits and Oral Hygiene
  - 3.3.1. Importance of Maintaining Good Oral Hygiene
  - 3.3.2. Oral Brushing Procedure
  - 3.3.3. Oral Care Guidelines
  - 3.3.4. Oral Hygiene Materials
- 3.4. Food Properties
  - 3.4.1. Textural Qualities of Food
  - 3.4.2. Fluid Properties
  - 3.4.3. Solids Properties
  - 3.4.4. Organoleptic Properties of Foods





# Structure and Content | 21 tech

3.5.	Volume	Adaptation

- 3.5.1. Volume Definition
- 3.5.2. Volume Classification
- 3.5.3. Relationship between Physiology and Volume During Swallowing
- 3.5.4. Changes in Volume for the Treatment of Dysphagia
- 3.6. Modification of Viscosity of Liquids and Texture of Solids
  - 3.6.1. Liquid Viscosity Levels
  - 3.6.2. Methods for Assessing the Viscosity of Liquids
  - 3.6.3. Solid Viscosity Levels
  - 3.6.4. Methods for Assessing the Viscosity of Solids
- 3.7. Hydration of the Patient with Dysphagia
  - 3.7.1. Definition, Classification and Characteristics of Thickening Agents
  - 3.7.2. Rheological Characteristics of the Thickened Liquid
  - 3.7.3. Sensory Characteristics of Thickened Liquids
  - 3.7.4. Factors Altering the Action of Thickeners
  - 3.7.5. Gelled Waters
- 3.8. Feeding of the Patient with Dysphagia
  - 3.8.1. Food to Avoid
  - 3.8.2. Thickeners
  - 3.8.3. Commercial Preparations
  - 3.8.4. Oral Supplements
- 3.9. Medication Adaptation
  - 3.9.1. Non-Adaptable Drugs
  - 3.9.2. Drugs for Liquid Dysphagia
  - 3.9.3. Drugs for Solid Dysphagia
  - 3.9.4. Drugs for Dysphagia to Solids and Liquids
- 3.10. Dysphagia Feeding Support Products
  - 3.10.1. Dishes
  - 3.10.2. Covered
  - 3.10.3. Vessels
  - 3.10.4. Others





# 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.



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 | 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.

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 32 | Certificate

This program will allow you to obtain your **Postgraduate Diploma in Feeding in Pediatric Dysphagia** 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 Diploma in Feeding in Pediatric Dysphagia

Modality: online

Duration: 6 months

Accreditation: 18 ECTS



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

#### Postgraduate Diploma in Feeding in Pediatric Dysphagia

This is a program of 450 hours of duration equivalent to 18 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.

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



# Postgraduate Diploma

Feeding in Pediatric Dysphagia

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 18 ECTS
- » Schedule: at your own pace
- » Exams: online

