

**Postgraduate Certificate**  
Allergy and Asthma in the  
Infant and Young Children





## Postgraduate Certificate Allergy and Asthma in the Infant and Young Children

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

Website: [www.techtute.com/us/medicine/postgraduate-certificate/allergy-asthma-infant-young-children](http://www.techtute.com/us/medicine/postgraduate-certificate/allergy-asthma-infant-young-children)

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# 01

# Introduction

The onset of asthma in infants and young children is different from that found in infantile and juvenile patients. For this reason, the management of this pathology and the treatments to be used differ from one case to another, and require an in-depth study, as well as a broad, specific and up-to-date knowledge of this chronic disease. For this reason, TECH has developed this program, focused on providing the specialist with the most avant-garde and sophisticated academic tools that will allow them to get up to date in the study of this type of clinical pictures. A 100% online qualification, directed by experts in pediatric medicine that will provide you, in only 150 hours, with the latest scientific evidence on asthma in children.





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*TECH gives you the opportunity to get up to date on everything related to asthma in infants and young children in just 150 hours and 100% online"*

In the field of pediatric medicine there is a topic that constantly generates debate, and that is the onset, in infants and young children, of symptoms that are associated with asthma, but which, for many, should not be considered as this chronic disease. It is a pathology that differs in these patients and in children and adolescents, presenting its own phenotypes and requiring a specific approach and treatment for these cases.

For this reason, the pediatric professional must know in detail the latest developments in the management of these clinical pictures in order to be able to use the most appropriate and effective strategies and drugs based on the latest scientific evidence associated with this specialty. You will find everything you need to know in this Postgraduate Certificate in Allergy and Asthma in the Infant and Young Children, a very complete qualification that will provide you with all the educational tools to get up to date in only 150 hours and from the best experts in the sector.

You will learn about the prevalence of the disease around the world and its natural history, as well as the etiopathogenesis and risk factors that trigger mild outbreaks and severe crises. It will also emphasize the latest developments in differential diagnosis and pharmacological and non-pharmacological treatments, and will conclude with an in-depth look at inhaled therapy in children.

It is, therefore, a complete, modern, dynamic and up-to-date approach that will allow you to broaden your knowledge and perfect your medical skills through a 100% online program that includes the best theoretical syllabus, real clinical cases and hours of additional material in different formats so that you can delve into each aspect of the syllabus. A unique opportunity to study a qualification tailored to the needs of the specialist and adapted to their time and work availability.

This **Postgraduate Certificate in Allergy and Asthma in the Infant and Young Children** 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 Pediatrics and Allergology.
- ◆ 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 the self-assessment process can be carried out to improve learning
- ◆ Its special emphasis on innovative methodologies
- ◆ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection work
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



*You will learn about the prevalence of asthma around the world and the different phenotypes that characterize it"*

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*You will have several real clinical cases selected by the team of experts, so that you can put into practice your skills and improve your competencies in the management of infants with asthma"*

The program's teaching staff includes professionals from the sector who contribute their work experience to this 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 throughout the program. For this purpose, students will be assisted by an innovative interactive video system developed by renowned experts.

*You will have access to the most avant-garde syllabus that will allow you to know in detail the latest scientific evidence on pharmacological treatment in patients under 3 years of age with asthma.*

*The syllabus delves into the generic and host-specific, perinatal and environmental risk factors that can trigger asthmatic crises.*



# 02 Objectives

Asthma in preschool and infant patients does not occur frequently, however, its prevalence and the way it can affect the child's health are two reasons why the specialist must know in detail the latest developments in its treatment. For this reason, the objective of this Postgraduate Certificate is to provide the graduate with the best educational tools that will help them update their knowledge in a complete and effective way, allowing them to get the most out of this qualification and to implement the most modern strategies and protocols in the pediatric sector in their professional practice.





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*A comprehensive and innovative qualification that will provide you with the educational tools you need to achieve your highest goals in the management of infant and child patients and infants with asthma”*



## General Objectives

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- ◆ Provide the specialist with all the material they need to know the latest scientific advances in respiratory allergy in pediatrics
- ◆ Know in detail the latest developments in the treatment of asthma and its complications at an early age, from infancy to adolescence



*Take the step to get up to date on the latest developments in Allergy and Asthma in the Infant and Young Children"*





## Specific Objectives

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- ◆ Gain knowledge about what we call asthma in the young child, its pathophysiology and natural history
- ◆ Delve into the different developmental and trigger phenotypes and their implications for the management of asthma in children
- ◆ Get to know the prevalence of asthma in the young child, and the factors that promote it
- ◆ Delve into the differential diagnosis and the tests necessary to rule out certain pathologies.
- ◆ Know the correct use of inhalers

03

# Course Management

The teaching staff of this Postgraduate Certificate in Allergy and Asthma in the Infant and Young Children is composed of a group of professionals in Pediatric Medicine versed in the management of clinical cases associated with Asthma in infants and pre-schoolers. They are a team with an enormous human quality that, in addition, have demonstrated a great commitment to the professional growth of the graduate, so they will be at your disposal whenever you need them to make this program a unique and highly beneficial educational experience for your professional career.





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*The teaching team has actively participated in the development of the syllabus, providing a critical and realistic view of the current situation"*

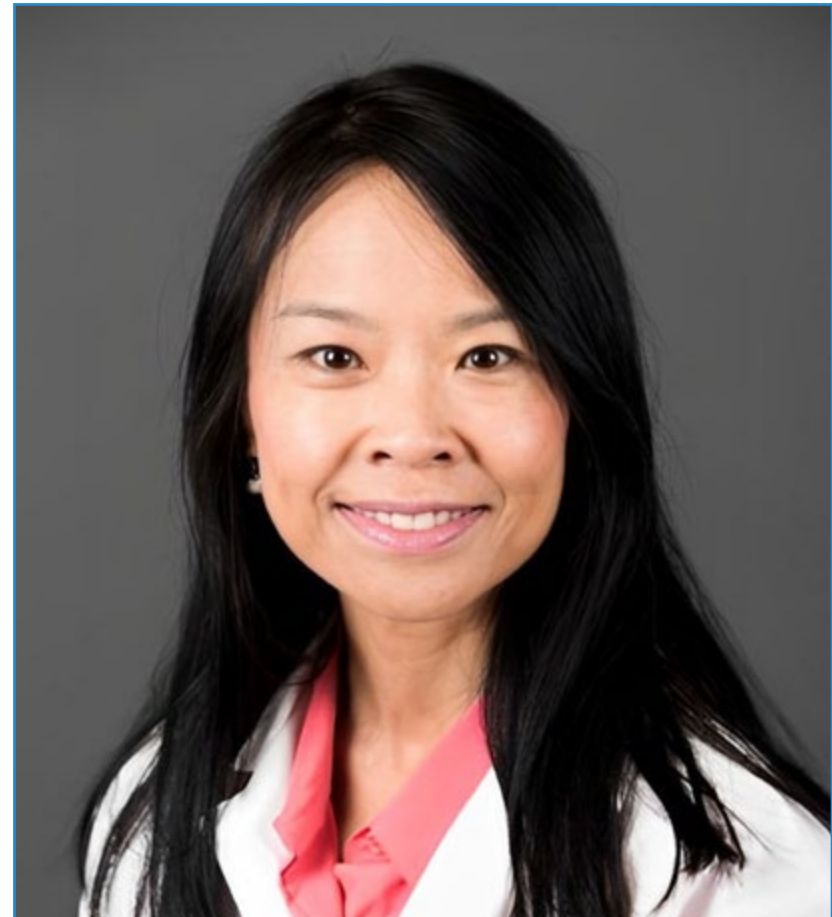
## International Guest Director

With a long and exhaustive specialization in Pediatric Immunology, Dr. Wanda Phipatanakul has dedicated her medical career to the re-education and prevention of Asthma and Allergic Diseases. Her most significant contribution to this field of health has been to promote the construction of a deep network of community relations and to carry out several studies in schools and homes directly.

With this research approach, the expert seeks to reduce the social disparity in access to early diagnosis and treatment. For this reason, her projects have received continuous funding for more than 2 decades from the National Institute of Health of the United States (NIH). Her most important current projects are an Asthma Intervention in Schools study, together with the National Institute of Allergy and Infectious Diseases (NIAID), and an evaluation of the Sleep Environment in Youth, in collaboration with the National Heart, Lung and Blood Institute (NHLBI).

On the other hand, he participates in research on the use of Omalizumab for the prevention of chronic respiratory diseases and atopic progression. She is also leading an analysis on the response to Dupilumab in asthmatic patients with a specific genetic variant. All this while serving as Director of the Immunology Research Center at Boston Children's Hospital and teaching in academic programs at Harvard Medical School.

She is also a prolific author with over 400 scientific publications in top impact journals such as JAMA and the New England Journal of Medicine. She is also an associate editor of the Journal of Allergy Clinical Immunology (JACI). She has received numerous awards from institutions such as the American Academy of Pediatrics and is an honorary member of several academic societies.



## Dra. Wanda Phipatanakul

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- Director of the Immunology Research Center at Boston Children's Hospital, United States
- Academician in the Division of Immunology and Allergy at Harvard University Medical School
- Leader of several joint research projects with the NIH, NIAID and the NHLBI
- Associate Editor of the Journal of Allergy Clinical Immunology
- Author of over 400 publications in top impact scientific journals JAMA and the New England Journal of Medicine
- Medical Degree from Loma Linda University
- Immunology Research Fellow at Johns Hopkins University  
Member of: American Academy of Pediatrics, American Academy of Allergy, Asthma and Immunology, American Society for Clinical Investigation, American Association of Physicians



*Thanks to TECH, you will be able to learn with the best professionals in the world"*

## Management



### **Dr. Troyano Rivas, Carmen**

- ♦ Assistant Physician of the Pediatrics Department in the Pulmonology and Pediatric Allergy Section of the 12 de Octubre University Hospital
- ♦ Collaborating Professor at the Complutense University of Madrid
- ♦ Degree in Medicine from the Complutense University of Madrid
- ♦ MIR Specialist in Pediatrics and its specific areas at the La Fe University Hospital, Valencia





## Professors

### Dr. Muñoz Archidona, Cristina

- ◆ Pediatric Specialist in outpatient Allergology and Pediatric Pulmonology at the Móstoles University Hospital
- ◆ Responsible and coordinator of outpatient consultations in Pediatric Pulmonology at the General Hospital of Villalba
- ◆ Pediatric Specialist at the Ramón y Cajal University Hospital and Henares University Hospital
- ◆ Degree in Medicine from the Autonomous University Madrid
- ◆ Specialty in Pediatrics at the Severo Ochoa University Hospital
- ◆ Master's Degree in Pediatric Emergencies at the CEU Cardenal Herrera University
- ◆ Expert in Pediatric Trauma, Pediatric Critical Patient, Pediatric Emergencies and Pediatric Vital Emergencies at CEU Cardenal Herrera University

# 04

## Structure and Content

For the development of this 100% online program, TECH has based its syllabus on the most up-to-date information in the field of Pediatric Medicine, taking as a reference, as it could not be otherwise, the recommendations and guidelines of the teaching team. In addition, in its commitment to offer the most complete and exhaustive qualification, it will make available to the graduate hours of additional material in audiovisual format, real clinical cases, complementary readings and research articles with which they can contextualize everything developed in the theoretical content, as well as deepen in those aspects of the syllabus that they consider most relevant and important for their professional performance.



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*Delving into the basics of inhaled therapy in the child and the correct use of inhalers according to age will allow you to update your knowledge and offer a treatment adapted to each patient”*

## Module 1. Asthma in the Infant and Young Children

- 1.1. The Debate Between Recurrent Wheezing and Asthma
- 1.2. Prevalence Around the World
- 1.3. Natural History
  - 1.3.1. Tucson Phenotypes
  - 1.3.2. Phenotypes by Triggers
  - 1.3.3. IPA Index
- 1.4. Etiopathogenesis
- 1.5. Risk Factors
  - 1.5.1. From the Guest
  - 1.5.2. Perinatal
  - 1.5.3. Environmental
- 1.6. Diagnosis
  - 1.6.1. Clinical and Anamnesis
  - 1.6.2. Complementary Tests
  - 1.6.3. Evaluation of Severity
  - 1.6.4. Assessment of Control
- 1.7. Differential Diagnosis
- 1.8. Medical treatment
  - 1.8.1. Treatment Steps
  - 1.8.2. Drugs Available for Asthma in Children under 3 Years of Age
- 1.9. Non-Pharmacological Treatment
  - 1.9.1. Environmental Measurements
  - 1.9.2. Immunizations
- 1.10. Inhaled Therapy in Children
  - 1.10.1. Fundamentals of Inhaled Therapy: Particle Characteristics and Pulmonary Deposition
  - 1.10.2. Correct Use of Inhalers According to Age





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*At TECH, you will work with prestigious physicians who will accompany you throughout the learning process”*

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.



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*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"*

## 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:

1. 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.*



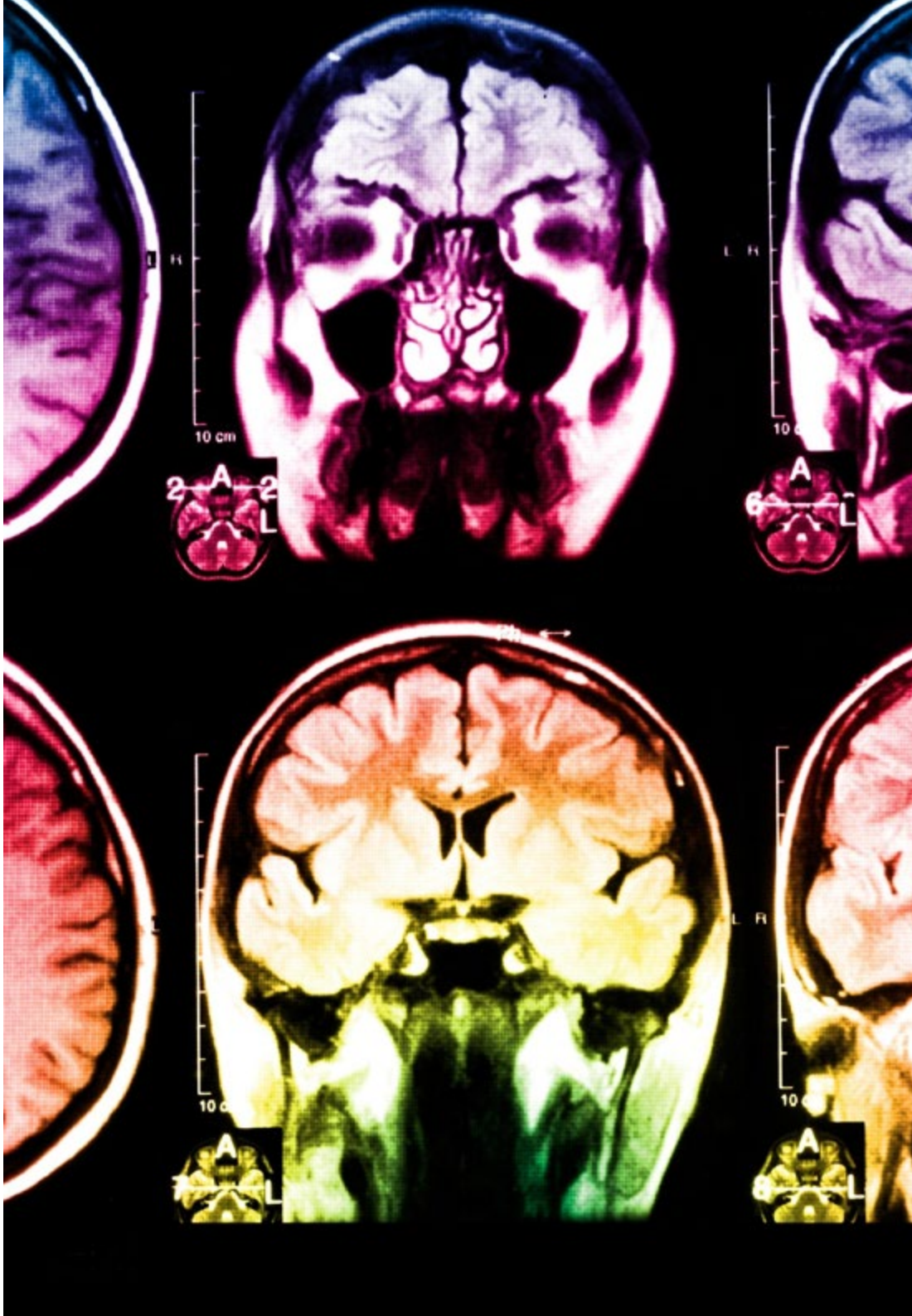
At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

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.



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 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.



#### 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

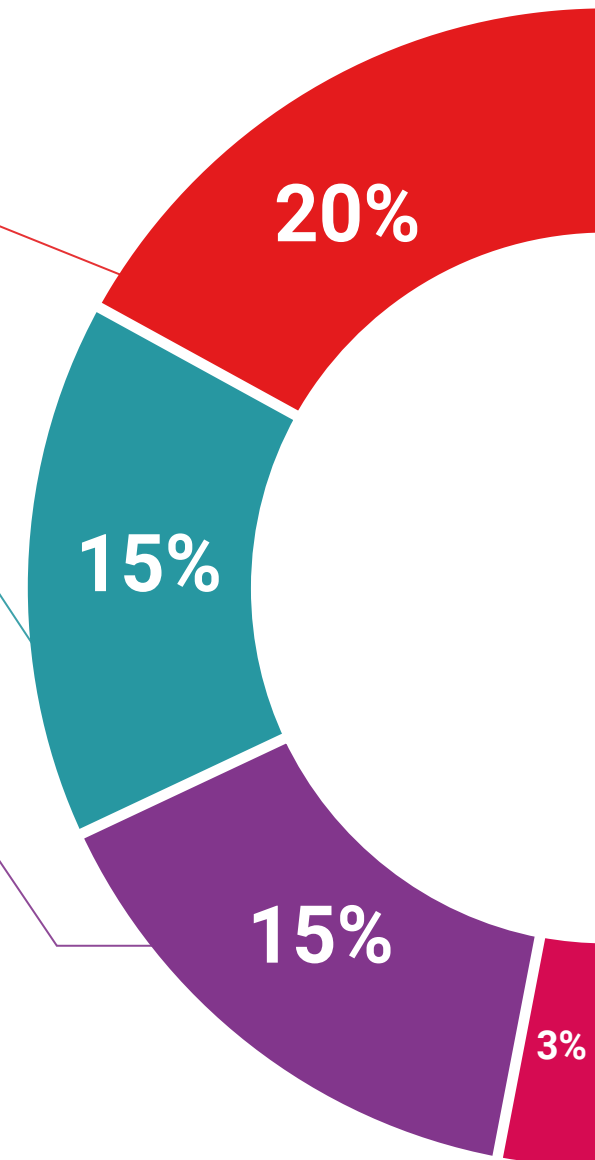
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

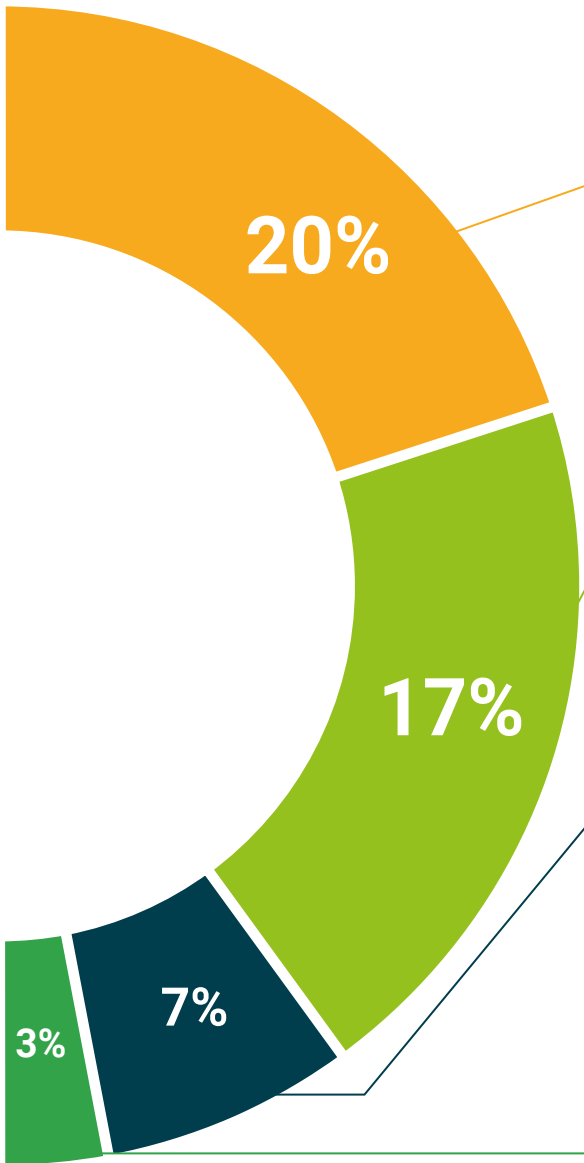
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### 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.



# 06 Certificate

The Postgraduate Certificate in Allergy and Asthma in the Infant and Young Children guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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

This program will allow you to obtain your **Postgraduate Certificate in Allergy and Asthma in the Infant and Young Children** 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 Allergy and Asthma in the Infant and Young Children**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



\*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.



future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present  
online training  
development languages  
virtual classroom



## Postgraduate Certificate Allergy and Asthma in the Infant and Young Children

- › Modality: online
- › Duration: 6 weeks
- › Certificate: TECH Global University
- › Credits: 6 ECTS
- › Schedule: at your own pace
- › Exams: online

# Postgraduate Certificate Allergy and Asthma in the Infant and Young Children

