

# Postgraduate Certificate

## Practical Management of Special Situations in Pediatric Ophthalmology





## Postgraduate Certificate Practical Management of Special Situations in Pediatric Ophthalmology

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

Website: [www.techtitute.com/us/medicine/postgraduate-certificate/practical-management-special-situations-pediatric-ophthalmology](http://www.techtitute.com/us/medicine/postgraduate-certificate/practical-management-special-situations-pediatric-ophthalmology)

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# 01

# Introduction

Ophthalmological conditions in childhood are a cause for constant check-ups in Primary Care, but they go unnoticed. For this reason, efforts are oriented to achieve their detection in advance, allowing to improve the visual capacity and development and even progress in their school performance. Given the advances in this area, TECH has developed this academic program that will provide the professional with content of the highest standards regarding cases of papillary effacement in children and its relationship with medical conditions. This will be possible, under a 100% online pedagogical format, elaborated by an experienced teaching team which has demonstrated its deep experience and trajectory in this sector of knowledge. A unique opportunity for updating through a flexible academic proposal.





A close-up, artistic photograph of a human eye, showing the iris and pupil in detail. The eye is positioned on the left side of the page, partially overlapping a dark blue background. The overall layout is divided into geometric sections: a dark blue triangle at the top left, a white triangle at the bottom right, and a solid blue triangle at the top right.

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*Get a complete update in just 6 weeks  
on treatments and therapies in cases of  
ocular JIA”*

Although the human being has all his ocular structures complete, at birth the visual system is not fully developed, as it has its maturity and growth process. Therefore, the sense of sight will be acquired and perfected as the cerebral cortex receives the appropriate stimuli. In this sense, eye inspections or revisions are of great importance to detect in advance any anomaly or pathology, so as not to let these affections that damage the sight advance.

In this way, research in this academic sector has advanced, achieving the optimal incorporation of practical ways of intervention in Pediatric Ophthalmology. A development that has achieved the anticipation of visual anomalies that can generate pathologies at ocular level. In this sense, this Postgraduate Certificate will provide the graduate with the best updates related to identifying cases of juvenile idiopathic arthritis (JIA) with ophthalmologic manifestations, all this in only 150 hours.

In this way, the professional will delve into concepts related to communication strategies and support in children with visual impairment. All this, in addition, with multimedia teaching tools of the highest quality, specialized readings and case studies that you can access, comfortably, whenever and wherever you want, from an electronic device with Internet connection.

In addition, TECH provides students with a program with the highest standards of academic excellence and the greatest convenience to study online. A unique opportunity to keep abreast of progress in this field, integrating it into their daily performance, through a unique academic proposal in only 6 weeks of duration.

This **Postgraduate Certificate in Practical Management of Special Situations in Pediatric Ophthalmology** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Practical case studies presented by experts in Pediatric Ophthalmology
- ♦ 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 assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*In this course you will be able to deepen in the results and follow-up in children with cases of papillary effacement"*

“*TECH offers this Postgraduate Certificate with the most complete up to date in Practical Management of Special Situations in Pediatric Ophthalmology, in addition to providing great flexibility with the online modality*”

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 academic year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*The theoretical and practical approach of this program will allow you to identify cases of juvenile idiopathic arthritis (JIA) with ophthalmological manifestations.*

*Delve into alternative treatments for persistent epiphora when and where you wish.*



# 02 Objectives

This Postgraduate Certificate in Practical Management of Special Situations in Pediatric Ophthalmology aims to enable the graduate to enhance their knowledge from the updates offered by the program in the area of Pediatric Ophthalmology. Therefore, TECH provides the most innovative academic tools for the successful development of this degree program. Upon completion of this program, the graduate will have broadened their competencies in relation to the identification and differentiation of the types of abnormal eye movements in the pediatric population.







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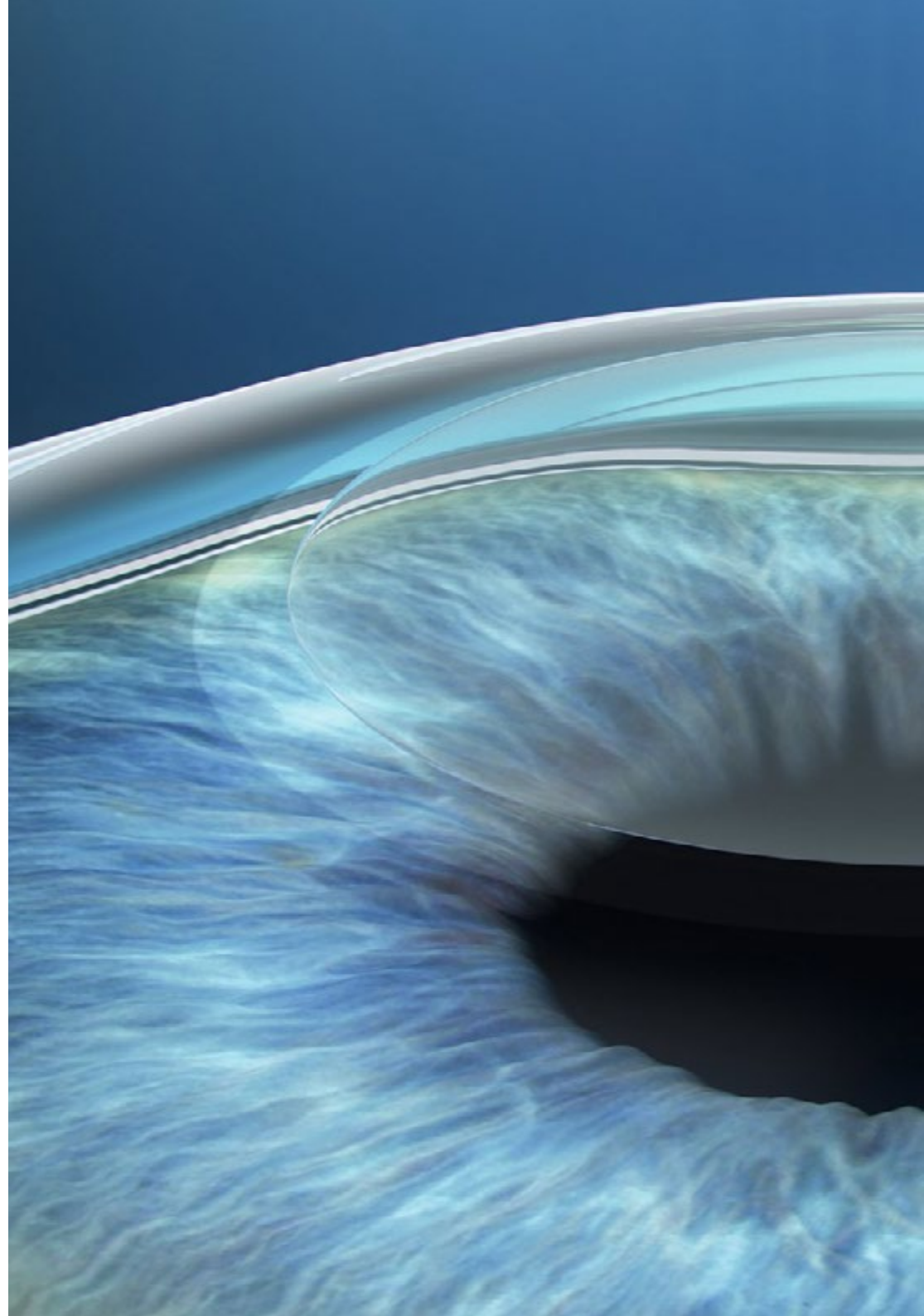
*With TECH you will have innovative teaching tools at your fingertips, with which you will enhance your knowledge of nasolacrimal probing in pediatric epiphora”*



## General Objectives

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- ◆ Acquire a thorough and up-to-date knowledge of the diagnosis and treatment of ophthalmologic conditions in children, including neonates and infants
- ◆ Develop a solid understanding of the basics of childhood vision development, covering ocular embryology, related genetics, and the anatomy and physiology of the growing visual system
- ◆ Understand and address ocular anterior segment pathologies, including palpebral, orbital, conjunctival pathology, developmental alterations of the anterior segment, and corneal and ectatic diseases in the pediatric age group
- ◆ Become familiar with the diagnosis and management of pediatric glaucoma, pediatric uveitis, aniridia and other conditions related to the anterior segment
- ◆ Acquire specific knowledge of retinopathy of prematurity, retinoblastoma, hereditary retinal disorders, retinal vascular anomalies, pediatric retinal detachment, and other pediatric retinal conditions
- ◆ Delve into the field of pediatric neuro-ophthalmology, covering topics such as nystagmus, supranuclear motility disorders, congenital optic nerve anomalies and hereditary optic neuropathies





## Specific Objectives

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- Identify cases of juvenile idiopathic arthritis (JIA) with ophthalmologic manifestations
- Evaluate cases of persistent epiphora in children after lacrimal duct probing
- Establish criteria for treatment and follow-up in patients with ROP
- Evaluate cases of papillary effacement in children and its relationship to medical conditions
- Identify causes of anisocoria in children and perform accurate evaluations
- Recognize papillary pallor in children and its clinical relevance
- Identify and differentiate types of abnormal eye movements in pediatric population

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*This qualification will enable graduates to strengthen their skills related to pediatric ophthalmology”*



# 03

## Course Management

With the purpose of integrating a teaching of the highest level for all students, TECH has selected a highly experienced and renowned teaching staff in the field of Ophthalmology. In this way, the present Postgraduate Certificate has a highly qualified team, which will offer the most solid pedagogical tools that facilitate this update on Ophthalmology and Vision Sciences, Strabology, Pathologies and Ocular Treatment. In this way, the student will have the guarantee of obtaining a complete up-to-date education from the hand of real experts.







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*TECH has for you a highly specialized team guaranteeing the success of your updating process during the 6 weeks of this program"*

## Management



### Dr. Sánchez Monroy, Jorge

- ♦ Corresponsable for Pediatric Ophthalmology at Quirónsalud Hospital in Zaragoza
- ♦ Specialist in the Ophthalmology Miguel Servet University Hospital in Zaragoza
- ♦ Master'in in Clinical Ophthalmology from UCJC
- ♦ Degree in Medicine from the University of Zaragoza
- ♦ Expert in Pediatric Neurophthalmology and Strabismus
- ♦ Postgraduate Diploma in Ophthalmology and Vision Sciences

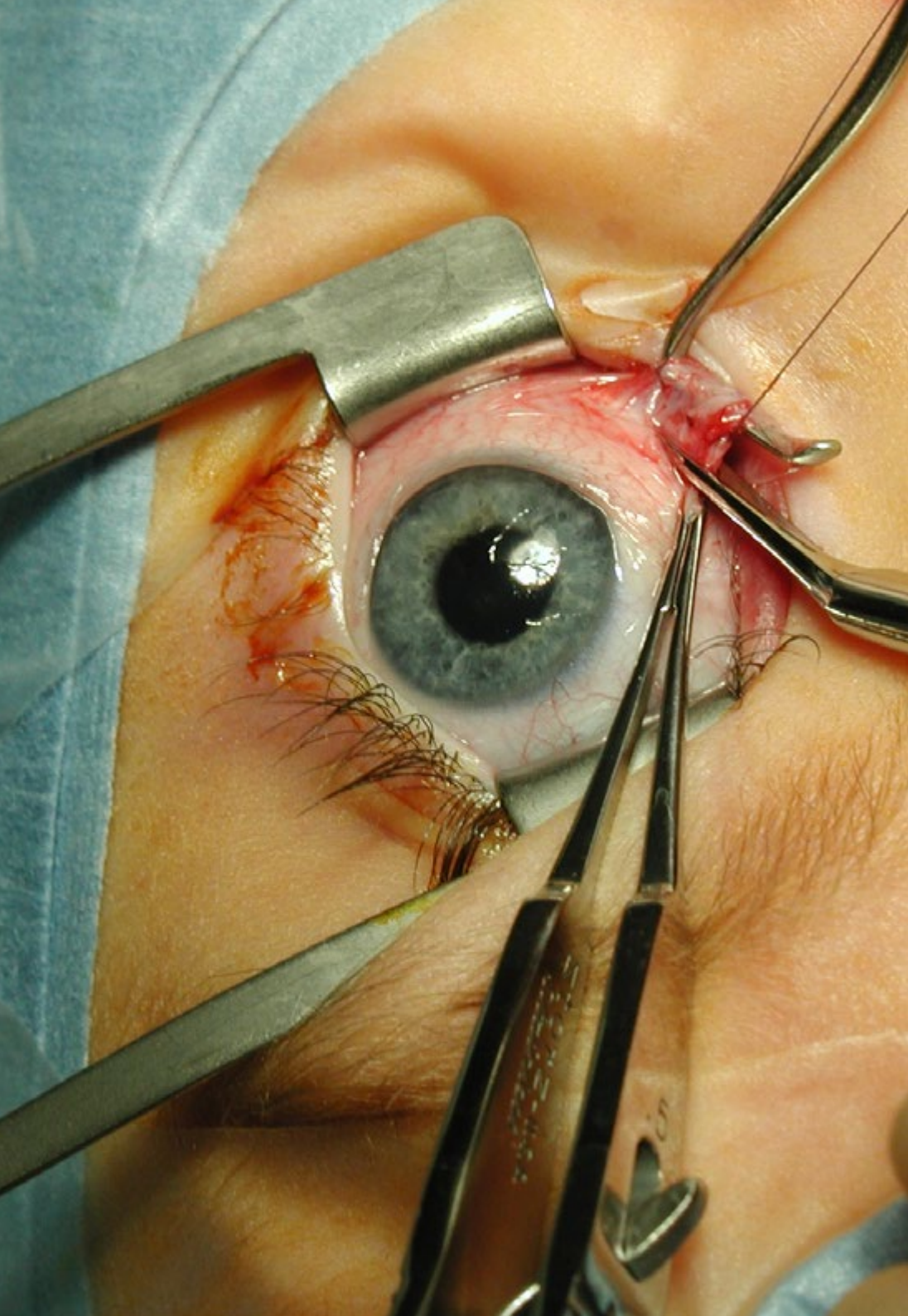
## Professors

### Dr. González, Inmaculada

- ♦ Specialist in the Pediatric Ophthalmology Miguel Servet University Hospital in Zaragoza
- ♦ Area Specialist in Psychiatry
- ♦ Member of the Spanish Society of Ophthalmology
- ♦ Member of the Spanish Society of Strabology
- ♦ Professor for the Ophthalmology Degree in Orthodontics, CEU Cardinal Herrera University
- ♦ Bachelor in Medicine and Surgery from the University of Zaragoza

### Dr. Prieto Calvo, Esther

- ♦ Specialist in the Pediatric Ophthalmology Miguel Servet University Hospital in Zaragoza
- ♦ Researcher in the Teaching Innovation Incentive Project of the UZ
- ♦ Researcher of the Thematic Network of Cooperative Research in Health
- ♦ Specialist in Ophthalmology
- ♦ Doctor from the University of Zaragoza
- ♦ Degree in Medicine
- ♦ Member of the Spanish Society of Pediatric Ophthalmology



**Dr. Pueyo Royo, Victoria**

- ◆ Specialist in the Pediatric Ophthalmology Miguel Servet University Hospital in Zaragoza
- ◆ Member of the Maternal, Child and Developmental Health Network
- ◆ Professor, Grade of Optics and Optometry, University of Zaragoza
- ◆ Grade in Pediatric Ophthalmology

**Dr. Romero Sanz, María**

- ◆ Corresponsible for Children's Ophthalmology at Hospital Quirónsalud Zaragoza
- ◆ Specialist in the Ophthalmology Miguel Servet University Hospital in Zaragoza
- ◆ Master' in in Clinical Ophthalmology at CEU Cardenal Herrera University
- ◆ Master's Degree in Clinical Medicine at the Camilo José Cela University
- ◆ Grade in Medicine and Surgery from the Faculty of Medicine of the Zaragoza University
- ◆ Expert in Ophthalmic Surgery at the University CEU Cardenal Herrera
- ◆ Expert in Pathologies and Eye Treatment CEU Cardenal Herrera University
- ◆ Expert in Uveitis and the Retina CEU Cardenal shoeing University

**Dr. Noval Martin, Susana**

- ◆ Head of the Pediatric Ophthalmology Department at Hospital La Paz
- ◆ Doctorate Award of the Lopez Sanchez Foundation of the Royal Academy of Medicine
- ◆ PhD in Medicine from the University of Alcalá de Henares
- ◆ Master's Degree in Neuro-immunology from Autonomous University Madrid
- ◆ Degree in Medicine from the Autonomous University Madrid

# 04

## Structure and Content

This academic qualification provides a syllabus with a highly prestigious theoretical and practical content on the Practical Management of Special Situations in Pediatric Ophthalmology, which has been developed according to the most recent studies and their influence in the area of Ophthalmology. This course is focused on providing advanced information on the approach and practical management of anisocoria in children and the characteristics of strange eye movements in childhood. On the other hand, the multiple audiovisual resources will be the complement that will provide the professional with dynamism in the solution of problems throughout this university proposal.





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*This Postgraduate Certificate offers you the best and most complete syllabus in Acute Strabismus designed according to the great impact of visual pathologies in infants"*

## Module 1. Practical Management of Special Situations in Pediatric Ophthalmology

- 1.1. Children Who Does Not See
  - 1.1.1. Causes of visual impairment in children
  - 1.1.2. Clinical history and evaluation in the child who does not see
  - 1.1.3. Diagnosis and approach in cases of visual impairment in childhood
  - 1.1.4. Communication and support strategies in children with visual impairment
- 1.2. Neonate with conjunctivitis
  - 1.2.1. Neonatal conjunctivitis: causes and diagnosis
  - 1.2.2. Therapeutic approach in neonates with conjunctivitis
  - 1.2.3. Complications and prognosis in neonatal conjunctivitis
  - 1.2.4. Clinical cases and examples of conjunctivitis in neonates
- 1.3. JIA: how to deal with it
  - 1.3.1. Juvenile idiopathic arthritis (JIA): classification and subtypes
  - 1.3.2. Ocular manifestations in JIA
  - 1.3.3. Diagnosis and evaluation of ocular JIA
  - 1.3.4. Treatments and therapies in cases of ocular JIA
- 1.4. Epiphora despite probing
  - 1.4.1. Epiphora in children: causes and evaluation
  - 1.4.2. Nasolacrimal probing in pediatric epiphora
  - 1.4.3. Alternative treatments in persistent epiphora
  - 1.4.4. Results and follow-up in epiphora in spite of probing
- 1.5. Acute strabismus in the child
  - 1.5.1. Acute strabismus in children: causes and diagnosis
  - 1.5.2. Evaluation and early approach in acute strabismus
  - 1.5.3. Treatments and surgery in cases of acute strabismus
  - 1.5.4. Outcome and prognosis in acute strabismus in childhood
- 1.6. ROP: what I see and how I treat it
  - 1.6.1. Retinopathy of prematurity (ROP): stages and classification
  - 1.6.2. Diagnosis and evaluation in ROP
  - 1.6.3. Treatments and follow-up in ROP
  - 1.6.4. Clinical cases and examples of ROP in premature infants





- 1.7. Papillary effacement
  - 1.7.1. Papillary effacement in children: causes and diagnosis
  - 1.7.2. Ophthalmologic evaluation in cases of papillary effacement
  - 1.7.3. Treatments and management in papillary effacement
  - 1.7.4. Outcomes and follow-up in children with papillary effacement
- 1.8. Practical approach to pediatric anisocoria
  - 1.8.1. Anisocoria in childhood: causes and classification
  - 1.8.2. Evaluation and diagnosis of pediatric anisocoria
  - 1.8.3. Approach and practical management of anisocoria in children
  - 1.8.4. Clinical cases and examples of pediatric anisocoria
- 1.9. Papillary pallor: practical approach
  - 1.9.1. Papillary pallor in children: causes and diagnosis
  - 1.9.2. Evaluation and studies in cases of papillary pallor
  - 1.9.3. Treatment and follow-up in children with papillary pallor
  - 1.9.4. Clinical cases and examples of papillary pallor
- 1.10. Strange ocular movements in the child
  - 1.10.1. Types and characteristics of ocular twitching in infancy
  - 1.10.2. Diagnosis and evaluation in cases of atypical eye movements
  - 1.10.3. Therapeutic approach and management in unusual eye movements
  - 1.10.4. Outcome and prognosis in children with atypical eye movements

“*TECH provides you with a series of first class multimedia content, which you will use as support in the development of this university program*”



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# 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 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.





# 06 Certificate

The Postgraduate Certificate in Practical Management of Special Situations in Pediatric Ophthalmology 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 Practical Management of Special Situations in Pediatric Ophthalmology** 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.

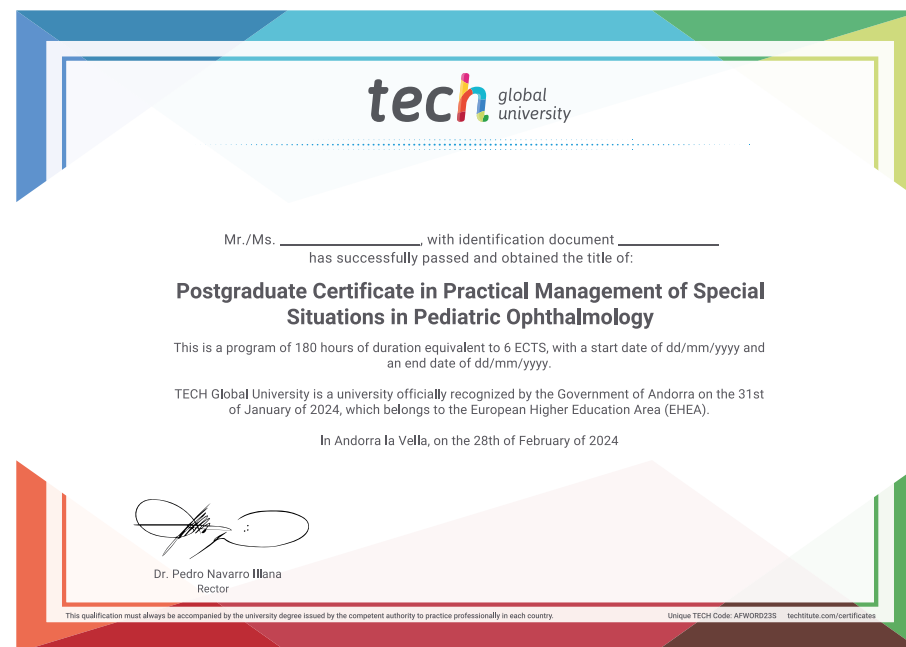
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program

Title: **Postgraduate Certificate in Practical Management of Special Situations in Pediatric Ophthalmology**

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.



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