Postgraduate Certificate Childhood Strabismus





Postgraduate Certificate Childhood Strabismus

- » 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/childhood-strabismus

Index



06 Certificate

01 Introduction

In the process of vision, the eye captures information about the size, shape, color and texture of objects, as well as the distance at which they are located or the speed at which they are moving and transmits it at high speed to the brain. Therefore, if there is an ocular lesion it will produce a visual alteration, impairing the correct functioning of the eye, presenting common diseases such as strabismus. Due to the relevance that this discipline has taken nowadays, TECH has designed this qualification with the purpose of offering the specialist in Pediatric Ophthalmology a prestigious material related to congenital cranial conervative disorders. All of this is supported by a 100% online pedagogical format that provides 150 teaching hours of great flexibility.



TECH is innovation and exclusivity, that is why it provides the graduate with the most revolutionary pedagogical material in the area of Pediatric Ophthalmology"

tech 06 | Introduction

Strabismus is one of the ocular diseases that, together with refraction, myopia, hyperopia, the most frequent pathology related to vision that occurs in childhood. For this reason, specialists have taken on the task of carrying out different scientific studies to minimize this growing condition and to practice the best treatment methods. Likewise, technology has been key in the advances in this area of medicine, facilitating the processes with patients at an early age.

In this sense, research in this area of knowledge has progressed, incorporating different techniques for treatment and diagnosis in children, making it clear that professionals in Childhood Strabismus must be at the forefront in the medical sector. Therefore, this Postgraduate Certificate will provide the specialist with numerous novelties related to the importance of early detection of strabismus in the pediatric population.

Accordingly, the graduate will enhance their skills especially in assessing non-surgical and surgical treatment options for pediatric endotropia. Therefore, this is a program that integrates a specialized teaching team supported by high quality audio-visual content that provides dynamism and comfort with the online modality.

TECH emphasizes the teaching methodology from excellence and efficiency, therefore, this academic proposal offers the best up to date in a qualification that provides time flexibility. The graduate only needs a device with an Internet connection to easily access the virtual platform from the comfort of the place where they are.

This **Postgraduate Certificate in Childhood Strabismus** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Practical case studies presented by experts 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



At TECH you will be able to acquire the necessary skills to apply the new physical preparation techniques based on Pilates"

Introduction | 07 tech



Childhood Strabismus is a discipline that has evolved over the years and TECH will provide you with the best updates in this field of study"

Delve into non-surgical treatment options, such as vision therapy, for Childhood Strabismus from the comfort of your home.

You will only need an electronic device with Internet connection availability to access the virtual platform from the comfort of your home.

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.

02 **Objectives**

The purpose of this university program is for the graduate to strengthen their knowledge through totally up-to-date and innovative material related to pre-surgical planning in strabismus surgery. In this way, TECH provides different technological resources, ensuring that the development of this academic program is a success. At the end of this course, the professional will have updated his knowledge in the fourth cranial nerve palsy: diagnosis and therapeutic approach.

Objectives | 09 tech

With this program you will guarantee the success of the development and completion of the course, ensuring your career advancement"

tech 10 | Objectives



General Objectives

- 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



Objectives | 11 tech



Specific Objectives

- Understand the basic concepts behind computer systems
- Recognize the importance of early detection of strabismus in the pediatric population
- Identify and differentiate endotropias in children
- Evaluate Non-Surgical Treatment Options and surgical
- Recognize and classify exotropia in children
- Study vertical strabismus in childhood and its clinical implications
- Identify alphabetic patterns of strabismus in children and their diagnosis
- Understand congenital cranial disinervative disorders and their relationship to strabismus
- Recognize oculomotor palsies in the pediatric population and their causes
- Study non-surgical treatment options, such as vision therapy, for Childhood Strabismus
- Evaluate postoperative outcomes and make adjustments when necessary
- Recognize and address potential complications following strabismus surgery in children

A unique, key, and decisive educational experience to boost your professional development"

03 Course Management

TECH has a philosophy based on academic excellence in each of its programs. In this way, the graduate will have access to exclusive content developed by an expert teaching staff in Ophthalmology and Vision Sciences, Clinical Management, medical and healthcare management and Neurophthalmology and Ocular Motility. Their extensive experience and solid knowledge bases in the medical sector will allow the professional to obtain a first class up to date training and to be prepared for the challenges of the working environment.

TECH thinks in academic excellence and this is achieved with a team specialized in prevention strategies in strabismus surgery complications"

tech 14 | Course Management

Management



Dr. Sánchez Monroy, Jorge

- Corresponsible 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. Narváez Palazón, Carlos

- Attending Physician in Pediatric Ophthalmology
- Specialist in Ophthalmology in San Carlos Clinical Hospital
- Doctor in Ophthalmology
- Master's Degree in Integration and Clinical Cases Solving from the University of Alcalá, Spain
- Master's Degree in Clinical Management, Medical and Healthcare Management from the CEU San Pablo University

Dr. Pinilla, Juan

- Attending Physician of Pediatric Ophthalmology Unit, Miguel Servet University Hospital
- Specialist in the Pediatric Ophthalmology Miguel Servet University Hospital in Zaragoza
- Doctorate in Medicine and Surgery, University of Zaragoza
- Professional Master's in Initiation to Research in Medicine
- Degree in Medicine from the University of Zaragoza

Course Management | 15 tech

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. Munuera Rufas, Inés

- Ophthalmology Assistant Physician in
- Researcher in the FIS Project of the Instituto de Investigación Sanitaria de Aragón (ISSA)
- Doctor in Ophthalmology
- Master's Degree in Clinical Medicine from the Camilo José Cela University
- PROFESSIONAL MASTER'S DEGREE in Ophthalmology Medicine from Cardenal Herrera University
- Graduate in Medicine
- University Expert in Ophthalmic Surgery, Glaucoma and Pediatric Ocular Pathology, Ocular Pathologies and Treatment and Uveitis and Retina, by Cardenal Herrera University
- Member of the Miguel Servet Ophthalmology Research and Innovation Group (GIMSO)

04 Structure and Content

This course has been developed and oriented according to the latest studies and research in the field of Pediatric Ophthalmology, incorporating a syllabus that provides a broad content on the types and classification of vertical strabismus. Also, this program is focused on offering advanced material regarding the follow-up and results in patients with disinervative disorders. All this, through a wide variety of multimedia tools that offer dynamism to this academic degree.

Structure and Content | 17 tech

One of the purposes of this qualification is to provide the expert with exclusive content on congenital cranial congenital disinervative disorders"

tech 18 | Structure and Content

Module 1. Childhood Strabismus

1.1. Introduction to strabismus

- 1.1.1. Definition and basic concepts in strabismus
- 1.1.2. Importance of strabismus in childhood
- 1.1.3. Initial evaluation in patients with strabismus
- 1.1.4. Multidisciplinary approach in Childhood Strabismus

1.2. Endotropias

- 1.2.1. Classification and types of endotropias
- 1.2.2. Etiology and Risk Factors
- 1.2.3. Diagnosis and examination in endotropias
- 1.2.4. Medical and surgical treatments in endotropias

1.3. Exotropia

- 1.3.1. Characteristics and classification of exotropia
- 1.3.2. Diagnosis and evaluation in exotropias
- 1.3.3. Therapeutic management in exotropia
- 1.3.4. Visual and functional results in exotropia

1.4. Vertical strabismus

- 1.4.1. Types and classification of vertical strabismus
- 1.4.2. Evaluation and diagnosis in vertical strabismus
- 1.4.3. Treatments in vertical strabismus
- 1.4.4. Approach in complex strabismus
- 1.5. Alphabetic patterns
 - 1.5.1. Alphabetic strabismus patterns: A, V, X, Y, among others
 - 1.5.2. Interpretation and diagnosis of alphabetic patterns
 - 1.5.3. Specific treatments in alphabetic patterns
 - 1.5.4. Clinical cases and examples of alphabetic patterns
- 1.6. Congenital cranial congenital disinervative disorders
 - 1.6.1. Oculomotor paresis and oculomotor palsies in infancy
 - 1.6.2. Differential diagnosis in disinervative disorders
 - 1.6.3. Therapeutic management and rehabilitation in disinervative disorders
 - 1.6.4. Follow-up and outcomes in patients with desinervational disorders



Structure and Content | 19 tech

- 1.7. Oculomotor palsies
 - 1.7.1. Third cranial nerve palsies: assessment and treatment
 - 1.7.2. Fourth cranial nerve palsy: diagnosis and therapeutic approach
 - 1.7.3. Sixth cranial nerve palsy: management and outcome
 - 1.7.4. Complications and sequelae in oculomotor palsies
- 1.8. Non-surgical treatment of strabismus
 - 1.8.1. Occlusion therapy in strabismus
 - 1.8.2. Prism therapy and visual exercises
 - 1.8.3. Orthoptic therapy and visual stimulation
 - 1.8.4. Indications and results in non-surgical treatment
- 1.9. Surgical Management
 - 1.9.1. Strabismus surgery: techniques and procedures
 - 1.9.2. Preoperative planning in strabismus surgery
 - 1.9.3. Intraoperative and postoperative complications
 - 1.9.4. Results and follow-up in strabismus surgery
- 1.10. Strabismus surgery complications
 - 1.10.1. Common complications in strabismus surgery
 - 1.10.2. Management of Care Complications
 - 1.10.3. Long-term complications and their management
 - 1.10.4. Prevention strategies in strabismus surgery complications



The case studies will provide you with a much closer look at the interpretation and diagnosis of alphabetic patterns"

05 **Methodology**

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.



Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

tech 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 kno in 1912, at H case metho

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.



tech 24 | Methodology

Relearning Methodology

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

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

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



Methodology | 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.

20%

15%

3%

15%

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



Surgical Techniques and Procedures on Video

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



Interactive Summaries

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

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



Additional Reading

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

Methodology | 27 tech



Expert-Led Case Studies and Case Analysis

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

20%

7%

3%

17%



Testing & Retesting

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



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 Childhood Strabismus 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"

tech 30 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Childhood Strabismus**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 Childhood Strabismus 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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