

Postgraduate Certificate Pediatric Neuro-Ophthalmology



Postgraduate Certificate Pediatric Neuro-Ophthalmology

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

Website: www.techtute.com/us/medicine/postgraduate-certificate/pediatric-neuro-ophthalmology

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01

Introduction

Pediatric Neuro-Ophthalmology is a field that approaches numerous areas of intervention and requires from its professionals a broad and often multidisciplinary vision. Successful intervention is a process that begins with the mastery of the most current approaches to improve prognosis from early intervention. This program compiles for the professional, the most outstanding advances and developments in this field in order to provide them with a competence growth, which will enable them for an early, accurate and efficient detection, achieving a therapeutic intervention of the highest level.



A close-up photograph of a human eye. The eye is looking slightly to the left. The lower eyelid shows a red, irritated area with some yellowish discharge, possibly a stye or conjunctivitis. The background is a dark blue gradient with a white diagonal line separating it from a lighter blue area on the right.

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A Postgraduate Certificate of exceptional quality that perfectly combines scientific demand with flexibility to offer the specialist a real opportunity for development in this field”

In the ophthalmological consultation of children, specialists need a broad vision that allows them to detect the root of a disorder that may reside in the nerve network or in the cells that transmit information to or from the brain and spinal cord or the nervous system.

Symptoms may include vision loss, double vision, eye movement abnormalities, infection, inflammation and others. At this point, comprehensive clinical assessments of visual acuity are necessary, with the performance of clinical tests that provide answers to guide towards an adequate and accurate diagnosis.

In the case of the treatment of ophthalmologic diseases, the clinical judgment often requires the intervention of other specialties, particularly neurologists. But also neurosurgeons, oncologists, geneticists, immunologists, rheumatologists and endocrinologists.

This complete Postgraduate Certificate will cover the different diagnostic and approach aspects that the professional must master, taking the student through the most innovative and up-to-date theoretical and practical developments in the current medical panorama.

All this with the addition of exclusive didactic resources, such as the Masterclass designed by an internationally recognized specialist in Neuroophthalmology. In this way, students will be able to update themselves with the latest scientific postulates in this field, and integrate them into the diagnostic procedures and the treatments in Pediatrics.

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

- ♦ Practical cases presented by experts in medicine
- ♦ 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 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



One of the great complements to this program is the Masterclass, an extra lesson from an internationally recognized expert"

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A learning process created to offer the professional a complete training process through the most efficient form of study”

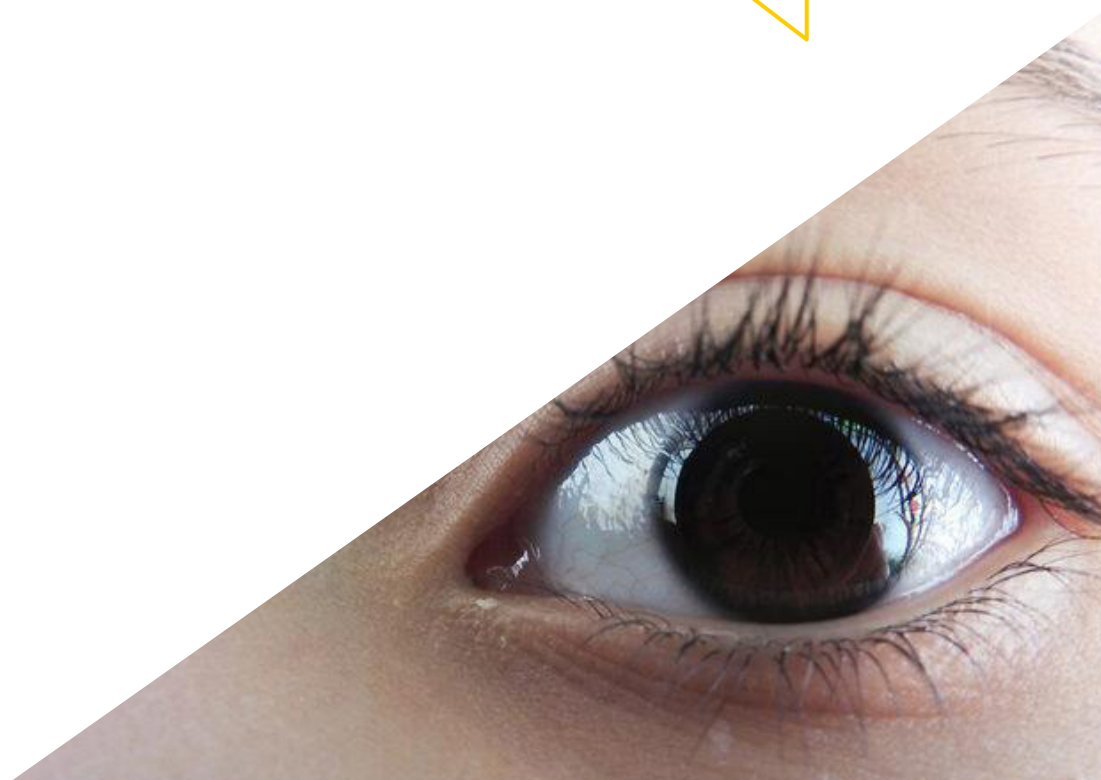
With an innovative approach to work, this Postgraduate Certificate is configured as a way of fast and effective professional growth.

Study comfortably at TECH Global University with the most reputable teaching methodology in the online academic panorama.

The program includes, in its teaching staff, professionals from the sector who bring to this program their work experience, in addition to recognized specialists from prestigious reference societies and 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 professionals must try to solve the different professional practice situations that arise during the academic year. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.



02 Objectives

This Postgraduate Certificate is a high-quality professional development path. It has been developed with the highest level of demand in its theoretical and practical contents in order to achieve the complete development of knowledge by the professional. The students will be able to start practicing their profession in this field with confidence, based on the acquired knowledge, offering the most adequate and innovative support to the ophthalmological pathologies of their patients in this field.



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*A competence development process
based on innovation, with the highest
scientific and medical rigor”*



General Objectives

- Delve into the anatomical and physiological knowledge necessary to understand the pathologies that will be developed in the following modules
- Provide the necessary knowledge for the Neuro-Ophthalmologist on the primary alterations of ocular motility and its therapeutic options
- Make known the Neuro-Ophthalmological pathologies that may occur in pediatric patients, their diagnostic approach and treatment



Specific Objectives

- Delve into normal and abnormal visual development
- Delve into specific Neuro-Ophthalmological examination techniques for pediatric patients
- Specialize to identify the possible anatomical or functional developmental alterations that may be found in pediatric patients
- Develop the optic nerve pathologies that can occur in childhood



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A Postgraduate Certificate of exceptional impact for the specialist who intervenes with children in the care of their eye health”

03

Course Management

The great experience of the group of professionals from teaching and ophthalmology who teach this Postgraduate Certificate is one of the added values of this program. Through their competence and their direct vision of the profession, they will offer students a quality support that will boost their understanding of the contents and their conversion into real competencies.





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*A novel and very efficient vision
of the different pathologies that
affect pediatric patients in the
ophthalmologic area”*

International Guest Director

Dean Cestari, M.D. is widely recognized for his dedication to the treatment of **Neuro-ophthalmologic Disorders, Strabismus and Diplopia**, where he has made a significant difference in the lives of numerous patients. Thus, he is one of the few ophthalmologists worldwide to be board certified in both **Neurology and Ophthalmology**, underscoring his depth of knowledge in both disciplines.

With extensive experience as a **Neuro-ophthalmologist and Strabismus Surgeon**, Cestari has excelled in leading healthcare settings, such as Mass Eye & Ear. Within the same institution, he also serves as Co-Director of the **Center for Thyroid Eye Disease and Orbital Surgery**, where he leads a team of experts committed to medical excellence.

In addition to his outstanding clinical career, he is a pioneer in the research of Optic Nerve diseases and has devoted much of his work to **Ischemic Optic Neuropathy**. In this regard, his tireless search for solutions has led him to the evaluation of innovative **neuroprotective agents** to preserve and restore vision affected by **Vascular Occlusion**. In fact, Dr. Cestari has developed as an outstanding Principal Investigator (PI) and Co-PI in multiple research projects and clinical trials. In addition, he has authored the first Casebook Teaching Strabismus Surgery Using the Adjustable Suture Technique.

Dean Cestari has also played crucial roles on committees of renowned ophthalmology organizations. He also combines his work in care and research by supervising and mentoring future medical professionals as Chair of the **Clinical Fellowship Committee** and Director of the **Neuro-ophthalmology Fellowship Program** at Mass Eye & Ear. In 2012, he was honored with an **Achievement Award**, presented by the **American Academy of Ophthalmology**, a recognition of his outstanding contribution to Ophthalmology and science education.



Dr. Cestari, Dean

- Neuro-ophthalmologist and Strabismus Surgeon at Mass Eye & Ear Hospital, Boston, USA
- Co-Director of the Center for Thyroid Eye Disease and Orbital Surgery at Mass Eye & Ear
- Associate Professor of Ophthalmology at Mass Eye & Ear
- Co-Founder of Total Direct Care
- Chair of the Clinical Fellowship Committee at Mass Eye & Ear
- Director of the Neuro-ophthalmology Fellowship Program at Mass Eye & Ear
- Catalyst Grant from Harvard Medical School
- Achievement Award (2012) from the American Academy of Ophthalmology
- Member of: Digital Media Committee of the American Academy of Ophthalmology and Curriculum Development Committee of the North American Neuro-Ophthalmology Society

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Thanks to TECH you will be able to learn with the best professionals in the world”

Management



Dr. Luque Valentin-Fernández, María Luisa

- ♦ Head of the Ophthalmology Service at El Escorial Hospital
- ♦ Professor of Ophthalmology in the degree of Medicine at the Universidad Francisco de Vitoria.
- ♦ PhD in Medicine and Surgery from the Complutense University of Madrid
- ♦ Specialist via MIR in Ophthalmology at Gregorio Marañón General University Hospital
- ♦ Master's Degree in Health Care Quality from Rey Juan Carlos University
- ♦ Postgraduate Diploma in Design and Statistics in Health Sciences from the Autonomous University of Barcelona
- ♦ President of the Hospital Continuing Education Committee at El Escorial Hospital
- ♦ Responsible for Hospital Continuing Education at El Escorial Hospital
- ♦ Quality Coordinator of El Escorial Hospital

Professors

Dr. Noval Martin, Susana

- ♦ Head of the Pediatric Ophthalmology Service at La Paz Hospital
- ♦ Doctorate Award of the López Sánchez Foundation of the Royal Academy of Medicine.
- ♦ PhD in Medicine from the University of Alcalá de Henares
- ♦ Master's Degree in Neuro-immunology from the Autonomous University of Barcelona
- ♦ Degree in Medicine from the Autonomous University Madrid



04

Structure and Content

Throughout this Postgraduate Certificate you will have access to the most up-to-date theoretical and practical knowledge in the approach to Neuro-Ophthalmological conditions that affect the first age. All contents are accessible in multimedia format, with videos, theoretical lessons and working tools developed to facilitate the physicians learning process and help them achieve maximum competence in this area.





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A completely up-to-date Postgraduate Certificate that will allow you to learn everything you need to intervene with precision in the new ways of working in Pediatric Neuro-Ophthalmology”

Module 1. Pediatric Neuro-Ophthalmology

- 1.1. Neuro-Ophthalmological Examination in Children Examination Techniques in the Pediatric Patient
 - 1.1.2. Electrophysiology
- 1.2. The Child with Low Vision. Delayed Visual Maturation
- 1.3. Cerebral Visual Impairment
- 1.4. Congenital Anomalies of the Anterior Optic Pathway
 - 1.4.1. Hypoplasia
 - 1.4.2. Colobomas and Optic Pits
 - 1.4.3. Optic Nerve Drusen
- 1.5. Papillary Effacement
 - 1.5.1. Intracranial Hypertension (IH) in Children
- 1.6. Optic Neuropathies in Childhood I
 - 1.6.1. Inflammatory
 - 1.6.2. Pathology
- 1.7. Childhood Neuropathies in Childhood II Hereditary
 - 1.7.1. Dominant Optic Atrophy
 - 1.7.2. Leber Optic Neuropathy
- 1.8. Dominant Optic Atrophy
- 1.9. Pediatric Tumor Pathology
 - 1.9.1. Primary Optic Nerve Tumors
 - 1.9.2. Midline Tumors
 - 1.9.3. Posterior Fossa Tumors
- 1.10. Oculomotor Apraxia





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A highly interesting and innovative curriculum created especially for the specialist who is looking for the most innovative scientific news”

05 Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



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TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”

The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

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*At TECH you will NOT have live classes
(which you might not be able to attend)”*



The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

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TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want”

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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.



A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

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 assess 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.

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

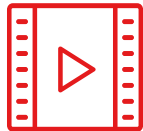
The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.



As such, the best educational materials, thoroughly prepared, will be available in this program:



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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



Interactive Summaries

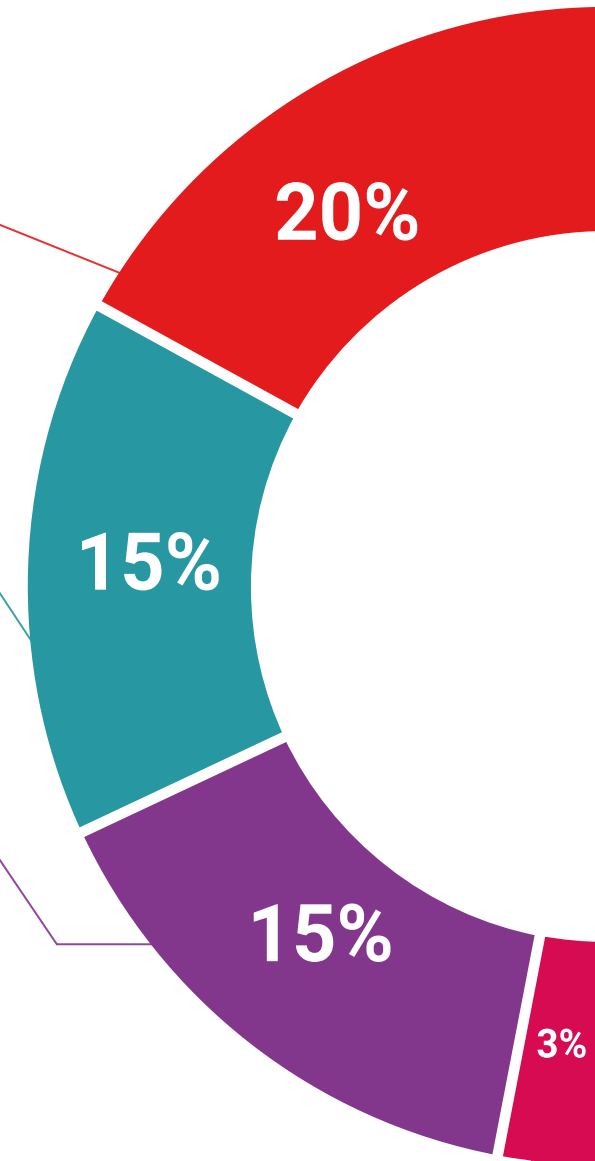
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

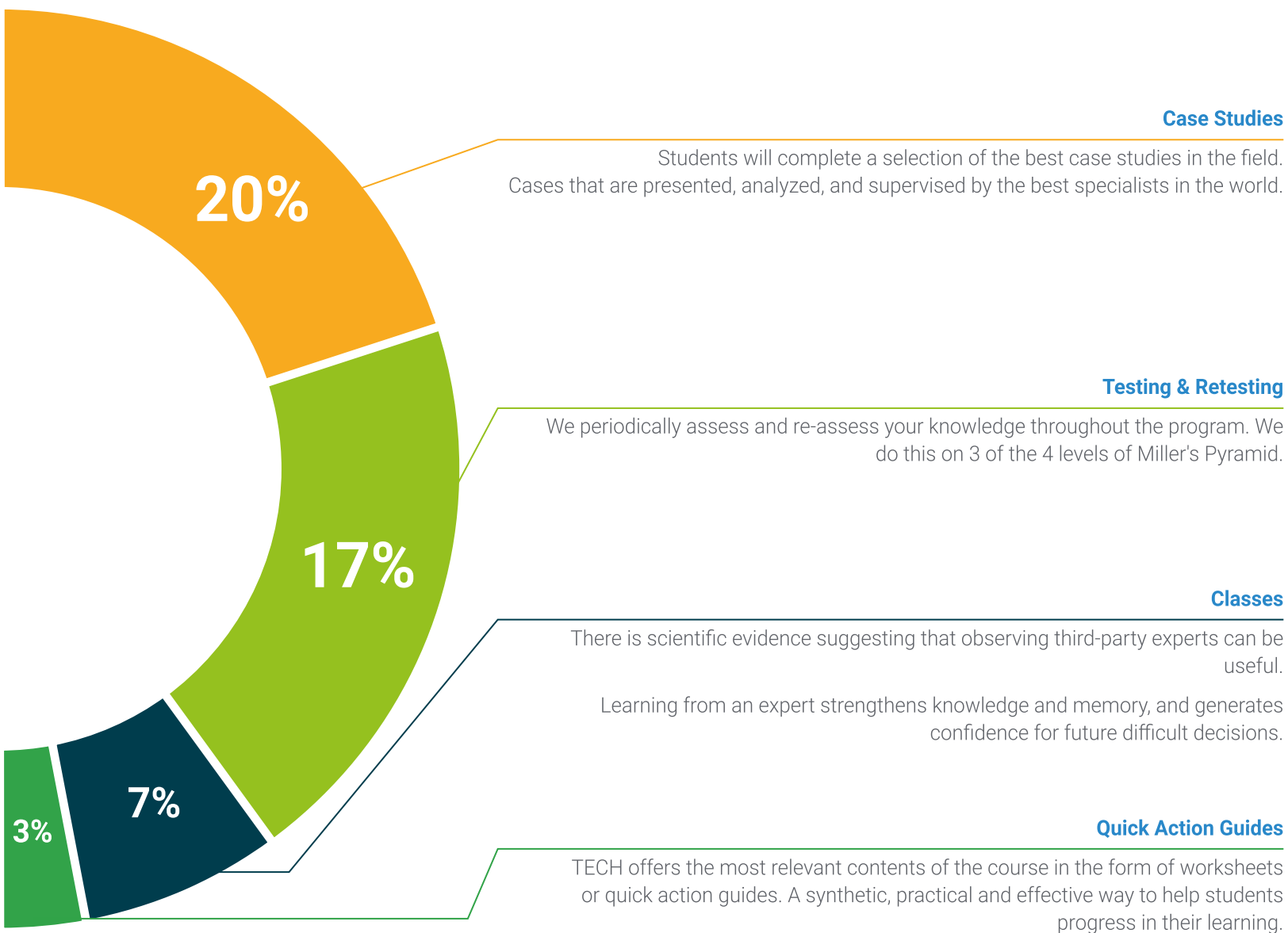
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





06 Certificate

The Postgraduate Certificate in Pediatric Neuro-Ophthalmology guarantees students, in addition to the most rigorous and up-to-date education program, 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 private qualification will allow you to obtain a diploma for the **Postgraduate Certificate in Pediatric Neuro-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.

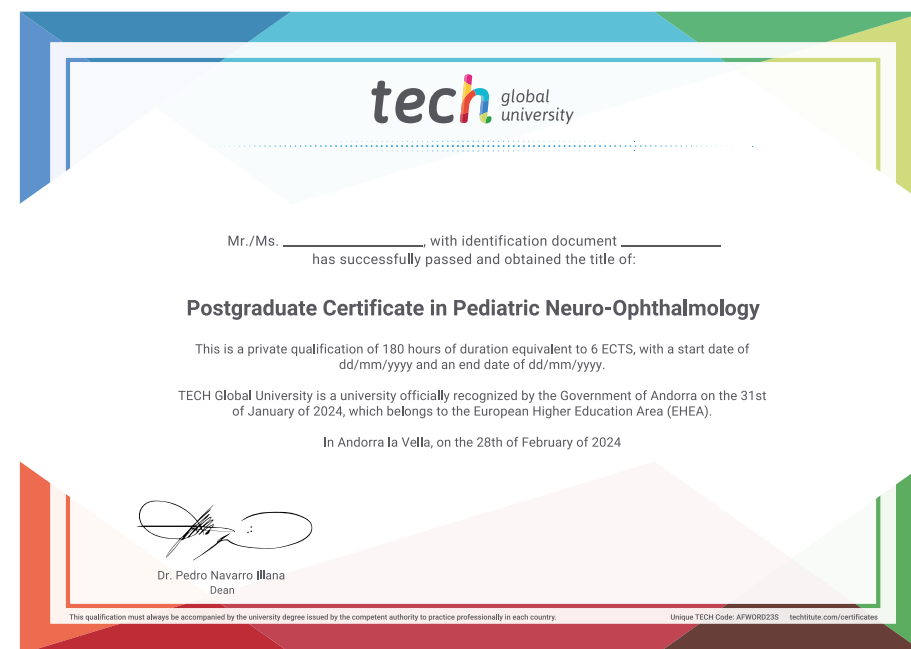
This **TECH Global University** private qualification, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

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Modality: **online**

Duration: **6 weeks**

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Postgraduate Certificate Pediatric Neuro-Ophthalmology

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Postgraduate Certificate

Pediatric Neuro-Ophthalmology