

# Postgraduate Certificate Ophthalmic Surgery





## Postgraduate Certificate Ophthalmic Surgery

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-certificate/ophthalmic-surgery](http://www.techtute.com/us/medicine/postgraduate-certificate/ophthalmic-surgery)

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# 01

# Introduction

Advances in cataract and refractive surgery, as well as in other ophthalmic procedures, make it essential to continue updating our knowledge of the latest advances made available by science in order to maintain the quality of surgical practice in patients. This program offers the opportunity to achieve it in a practical way through the latest educational technology.





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*Improve your knowledge in Ophthalmic Surgery through this program, where you will find the best teaching material, high-definition images and real clinical cases. Learn about the latest advances in eye surgery techniques to provide quality care"*

Ophthalmic Surgery has undergone a spectacular advance in the last ten years, together with the important technological development in the specialty. The advances achieved in the treating pathologies that until recently were significant causes of blindness, such as cataracts, glaucoma and retinal alterations and degenerations, particularly of the macula, are noteworthy.

These changes in Ophthalmic Surgery in any of its branches have completely changed the approach to the pathologies of the specialty. The introduction of new scanning techniques, both in the anterior segment of the eyeball and in the posterior segment, has improved the diagnosis and monitoring of diseases, and allows the efficacy of treatment to be tracked. Diseases for which there was no treatment a decade ago are now effectively treated, such as age-related macular degeneration.

The Postgraduate Certificate in Ophthalmic Surgery aims, due to its eminently professionalizing nature, to update professionals in new surgical procedures and techniques that, either because of their novelty or because of their high specialization, have not been addressed during their training.

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

- Development of clinical cases presented by experts in ophthalmic surgery. The graphic, schematic, and practical contents with which they are created contain clinical information that is indispensable for professional practise
- New diagnostic and therapeutic developments in the treatment of the main pathologies of the eye
- It contains practical exercises where the self-assessment process can be carried out to improve learning
- Interactive learning system based on algorithms for decision-making in patients with eye pathology in clinical situations
- All of this will be complemented by 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



*Take the opportunity to learn about the latest advances in Ophthalmic Surgery, and improve your patients' care"*

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*This Postgraduate Certificate is the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge in Ophthalmic Surgery you will obtain a qualification endorsed by TECH Technological University”*

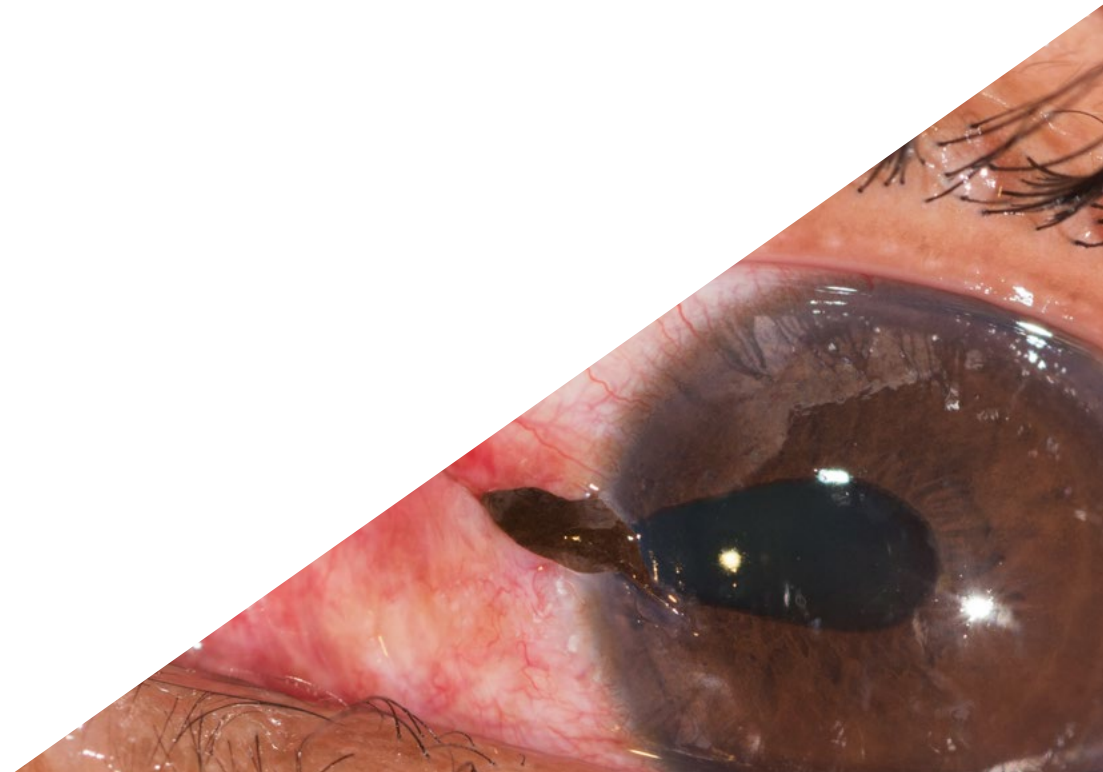
*Update your knowledge through the Postgraduate Certificate in Ophthalmic Surgery.*

*Increase your decision-making confidence by updating your knowledge through this Postgraduate Certificate.*

Its teaching staff includes specialists of recognized prestige in the field of ophthalmology, who bring to this training their work experience in the world's leading medical centers.

Thanks to its multimedia content developed with the latest educational technology, they will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to prepare in real situations.

This program is designed around Problem-Based Learning, whereby the physician must try to solve the different professional practice situations that arise throughout the program. For this purpose, the physician will be assisted by an innovative interactive video system developed by renowned experts in the field of ophthalmology, and with extensive teaching experience.



# 02 Objectives

The main objective of this program is to update the specialist in the latest advances in Ophthalmic Surgery, so that they can perform medical care with the support of scientific evidence and increase the quality of their surgical practice.





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*This refresher program will generate a sense of confidence when practising medicine, which will help you grow both personally and professionally”*



### General objective

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- Keep up to date with diagnostic and therapeutic procedures in the specialty of clinical ophthalmology, incorporating the latest advances into daily medical practice to increase the quality and safety of care and improve patient prognosis



*A path to achieve educational and professional growth that will propel you towards a greater level of competitiveness in the employment market"*

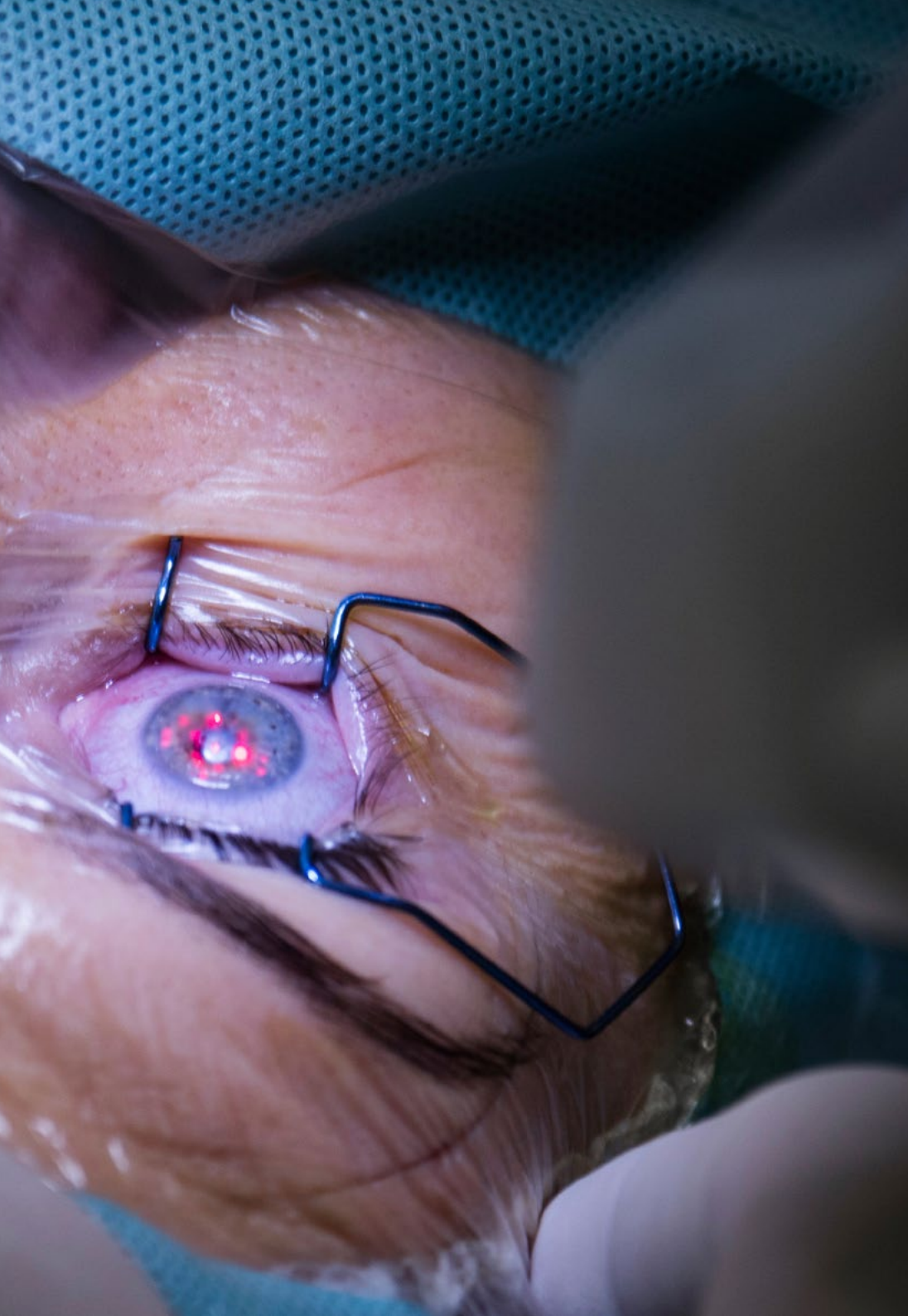




## Specific objectives

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- Update your knowledge in cataract surgery
- Gain knowledge about the most recent techniques used in patients with cataract disease
- Identify the main signs of the disease
- Know the post-surgical procedures necessary for a correct recovery
- Determine the new methods of refractive surgery and its possible complications with ocular lenses
- Determine the new methods of laser refractive surgery and its possible complications with the use of an excimer laser
- Identify the main alterations such as Myopia
- Get to know the conditions and diseases of the person with hyperopia in order to define the medical protocol



# 03

# Course Management

The program's teaching staff includes renowned national and international ophthalmology specialists, who carry out their medical and surgical practice in the main ophthalmology centers, and who bring their work experience to this training program. Additionally, other recognized specialists participate in its design and preparation, which means that the program is developed in an interdisciplinary manner.





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*Learn the latest advances in Ophthalmic Surgical procedures from leading professionals"*

## Management



### Dr. Navea Tejerina, Amparo

- ◆ Medical Director of the Institute of Retina and Ocular Diseases
- ◆ FISABIO-Ophthalmology Medical Director (FOM)
- ◆ Head of the Retina Unit at FOM
- ◆ Specialist in Ophthalmology
- ◆ PhD in Medicine, University of Cadiz
- ◆ Spanish Society of Ophthalmology (SEO)
- ◆ Member of American Academy of Ophthalmology (AAO)
- ◆ Member of Association for Research in Vision and Ophthalmology (ARVO)
- ◆ Member of Sircova
- ◆ Member of Oftared

## Professors

### Dr. González López, Julio José

- ♦ Ophthalmologist in the Retina Unit of the Baviera Clinic in Madrid
- ♦ Retina and Vitreous Surgeon at the Ramón y Cajal University Hospital
- ♦ Head of the Uveitis and Degenerative Diseases Unit at the Ramón y Cajal University Hospital
- ♦ International Doctor in Health Sciences at the University of Alcalá de Henares
- ♦ Trained in Ophthalmology at the Ramón y Cajal University Hospital
- ♦ Surgical Retina Specialist at the Tennet Institute of Ophthalmology, Glasgow
- ♦ Bachelor in Medicine and Surgery from the Autonomous University of Madrid

### Dr. Pastor Pascual, Francisco

- ♦ Ophthalmology Specialist at Oftalvist
- ♦ Degree in Medicine and Surgery from the University of Valencia
- ♦ Specialist in Ophthalmology. La Fe University Hospital
- ♦ Doctor "Cum Laude" from the University of Valencia
- ♦ Master's Degree in Health Services Management. European Institution of Health and Social Well-being
- ♦ Member of: Valencian Society of Ophthalmology, Spanish Society of Ophthalmology, Spanish Society of Implanto-refractive Ocular Surgery

### Dr. Alió del Barrio, Jorge L.

- ♦ Surgeon in the Cornea, Cataract and Refractive Surgery Service at Visum
- ♦ Specialization in Ophthalmology at the Ramón y Cajal University Hospital
- ♦ Associate Professor at the Faculty of Medicine of the Miguel Hernández University
- ♦ Doctor Cum Laude in the Department of Surgery at the University of Alcalá
- ♦ Degree in Medicine from the Autonomous University of Madrid

### Dr. Lanzagorta Aresti, Aitor

- ♦ Ophthalmologist at the University Research Institute Fisabio Medical Ophthalmology
- ♦ Physician in the Glaucoma Unit Fisabio Ophthalmology
- ♦ NeuroOphthalmology Unit Fisabio Ophthalmology
- ♦ Degree in Medicine from the University of the Basque Country
- ♦ PhD, Medicine. University of Valencia
- ♦ Residency in Ophthalmology. La Fe University Hospital

### Dr. Davó Cabrera, Juan María

- ♦ Ophthalmologist in the Vithas Nisa Group
- ♦ Specialist in Ophthalmology at FISABIO Medical Ophthalmology
- ♦ Specialist in Cataract and Tear and Eyelid Surgery at La Fe Hospital in Valencia
- ♦ Training stays at the Maternal-Children's Hospital Sant Joan de Déu (Barcelona), the KPUM (Kyoto, Japan) and the RVI (Newcastle, United Kingdom)
- ♦ Master's Degree in Advanced Aesthetic and Laser Techniques (CEU)

### Dr. Marí Cotino, José

- ♦ Ophthalmology specialist at Quirónsalud Hospital in Valencia
- ♦ Degree in Medicine and Surgery from the Faculty of Medicine of the Literary University of Valencia
- ♦ Degree of Doctor "Cum Laude" in Medicine and Surgery from the University of Valencia
- ♦ Bachelor's Degree from the University of Murcia
- ♦ Specialist in Ophthalmology at La Fe University Hospital Valencia
- ♦ Master's Degree in Health Management from the Catholic University of Valencia

**Dr. Rivera Ruiz, Esther**

- ◆ Specialist in Refractive Surgery at Miranza IOA
- ◆ Ophthalmologist Specialist in Refractive Surgery Unit at Miranza Ophthalteam
- ◆ Specialist at Vissum Clinic Madrid
- ◆ Doctor in the Refractive Surgery Unit at the Baviera Clinic in Alicante
- ◆ Degree in Medicine from the University of Murcia
- ◆ Specialist in Ophthalmology at the Puerta De Hierro Hospital
- ◆ Official Doctorate Program in Biomedical Sciences at the Complutense University of Madrid
- ◆ Training in Refractive Surgery at the Baviera Clinic in Valencia

**Dr. Javaloy Estañ, Jaime**

- ◆ Specialist in Refractive Surgery, Presbyopia, Cataracts and Glaucoma at Baviera Clinic Alicante
- ◆ Medical Director at Baviera Clinic Alicante
- ◆ Resident Doctor in Ophthalmology at the General University Hospital of Alicante
- ◆ Attending physician at the University Hospital of San Juan de Alicante
- ◆ Degree in Medicine and Surgery. University of Alicante
- ◆ Training in Ophthalmology. Alicante University General Hospital
- ◆ Doctor "Cum Laude" in Medicine. Miguel Hernández University of Elche





**Dr. Montalbán Llamusi, Raúl**

- ♦ Medical specialist in the area of Refractive Surgery at Baviera Clinic
- ♦ Attending physician in the Retina Units and the Pediatric Ophthalmology and Strabismus Unit. Baviera Clinic
- ♦ Degree in Optics and Optometry from the University of Alicante
- ♦ Doctor from the University of Alicante
- ♦ Master's Degree in Advanced Optometry and Vision Sciences. University of Alicante
- ♦ Active participation with the NGO for development Visió Sense Fronteres in campaigns to eradicate blindness

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*Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice”*

# 04

# Structure and Content

The content structure has been designed by a team of professionals who understand the implications of training for daily medical practice caring for patients with ocular problems, and are aware of the relevance of current training for professionals. This program ensures that the main issues in the current development of Ophthalmic Surgery are addressed.





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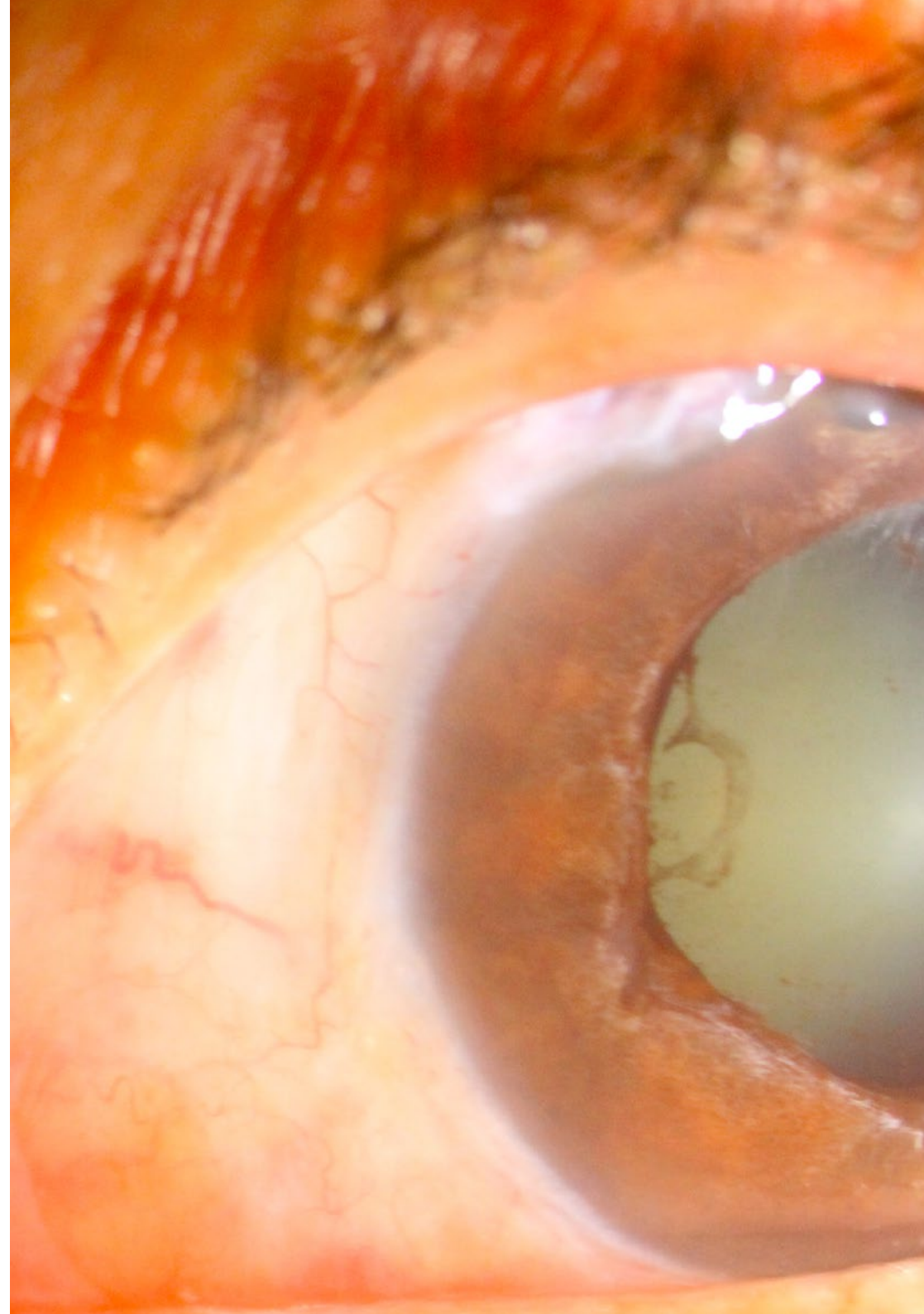
*This Postgraduate Certificate in Ophthalmic Surgery contains the most complete and up-to-date scientific program on the market”*

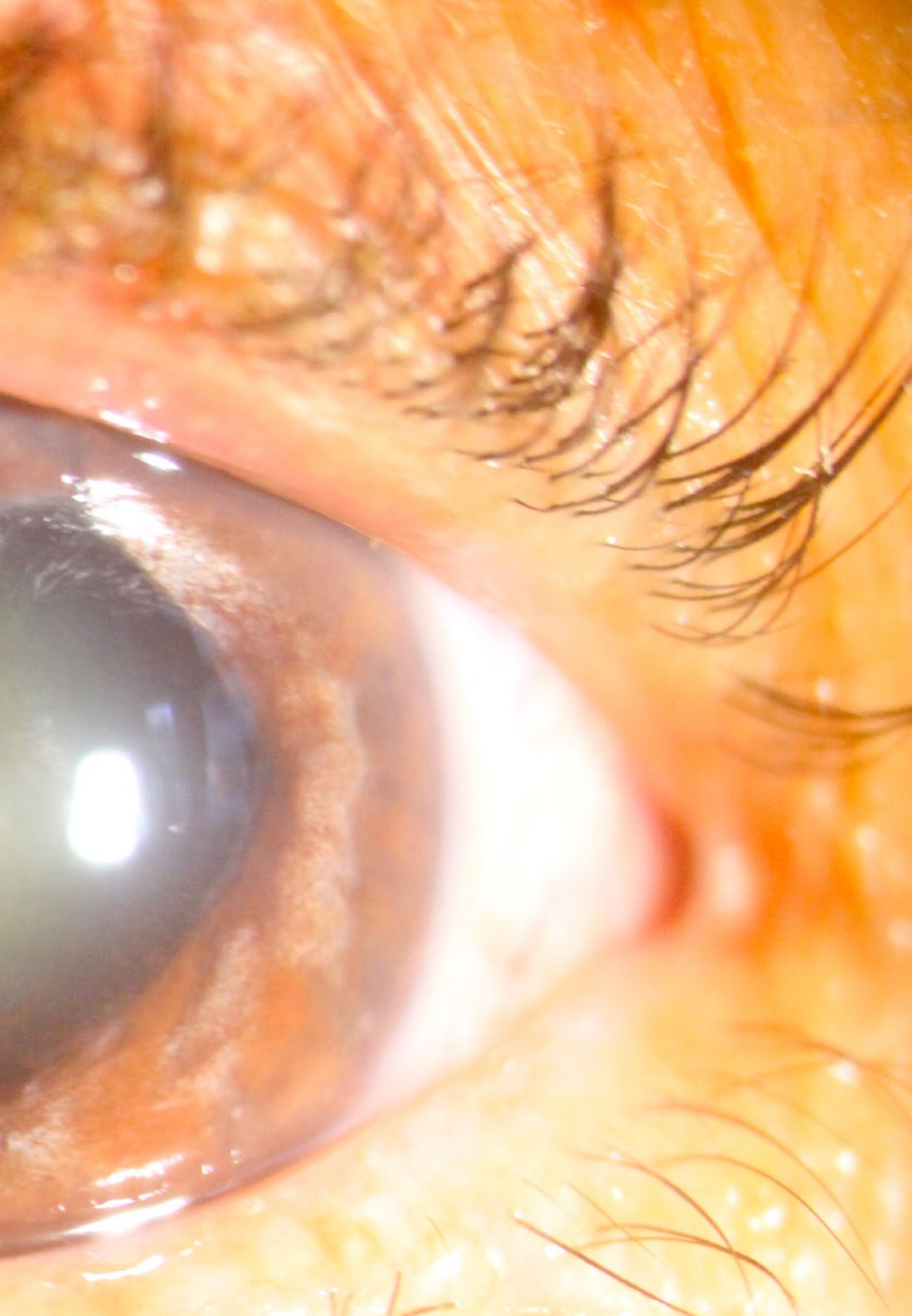
## Module 1. Cataract Surgery Update

- 1.1. Preoperative Evaluation of Candidates for Cataract Surgery
- 1.2. Ophthalmic Viscosurgical Devices
- 1.3. IOL Calculation Formulas
- 1.4. Cataract Surgery: Step by Step
- 1.5. Pseudophakic Intraocular Lens
- 1.6. Technological Update in Cataract Surgery (I): Femtosecond Laser
- 1.7. Technological Update in Cataract Surgery (II): Intraoperative Guiding Systems
- 1.8. Lens Surgery in Special Situations
- 1.9. Complications of Cataract Surgery
- 1.10. Cataracts and Glaucoma. Bilateral and Simultaneous Cataract Surgery

## Module 2. Refractive Surgery Update

- 2.1. Excimer Laser Refractive Surgery. Techniques Used. Indications and Contraindications
- 2.2. Refractive Surgery
- 2.3. Femtosecond Laser: Use in Refractive Surgery
- 2.4. Refractive Surgery with Phakic Intraocular Lenses
- 2.5. Main Complications in Refractive Surgery with Intraocular Lenses
- 2.6. Intraocular Lens Calculation in Refractive Surgery. Biometrics
- 2.7. Surgical Management of Presbyopia
- 2.8. Multifocal Intraocular Lenses: Indications, Contraindications and Keys to Successful Lens Management
- 2.9. Surgical Management of Astigmatism
- 2.10. Pseudophakic Intraocular Lens





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

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 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 Ophthalmic Surgery guarantees students, in addition to the most rigorous and updated education, access to a Postgraduate Certificate issued by TECH Technological University.





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*Successfully complete this specialisation  
and receive your university degree without  
travel or laborious paperwork”*

This **Postgraduate Certificate in Ophthalmic Surgery** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery\*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Certificate in Ophthalmic Surgery**

Official N° of hours: **300 h.**



\*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION 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 quality  
development languages  
virtual classroom



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