

# Postgraduate Certificate

## Update on Refractive Surgery





## Postgraduate Certificate Update on Refractive Surgery

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtitute.com/in/medicine/postgraduate-certificate/update-refractive-surgery](http://www.techtitute.com/in/medicine/postgraduate-certificate/update-refractive-surgery)

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# 01

# Introduction

Advances in surgical procedures for refractive surgery make it essential for specialists to continually update their knowledge. This Postgraduate Certificate offers you the opportunity to get up to date on the latest surgical procedures for mild and moderate ametropia, and for high-degree ametropia, in a practical way and adapted to medical ophthalmologists, 100% online, so that they can combine their development with professional practice.





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*Increase your knowledge of the procedure for addressing refractive disorders 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 so as to provide quality care"*

Several procedures have been used throughout history to achieve emmetropia in patients with refractive errors. Initially, surgical incision techniques were used to correct myopia, but in order to perfect these techniques with the least possible trauma, surgical lasers were developed. Surgery to correct myopia, hyperopia and astigmatism has achieved excellent results in terms of efficacy, stability and safety. The most commonly used techniques are keratorefractive with excimer laser for the surgical treatment of mild and moderate ametropia, while in high-degree ametropia and in patients with corneas of insufficient thickness for laser treatment, the use of intraocular techniques is increasing.

The correct approach to refractive surgery involves careful and detailed study of the patient's eye characteristics, as well as his/her general and psychological characteristics, and selection of the appropriate technique by the physician.

That is why we have created this Refractive Surgery Update Postgraduate Certificate, which aims to update ophthalmologists' knowledge of refractive surgical techniques in a practical way; techniques that, either because they are so recent or because they require such a high degree of expertise, have not been addressed in specialty training.

This **Postgraduate Certificate in Update on Refractive Surgery** is the most comprehensive and up-to-date scientific program on the market. The most important features of the Postgraduate Certificate are:

- Development of clinical cases presented by experts in eye surgery. The graphic, schematic, and eminently practical contents with which they are created contain clinical information that is indispensable for professional practice.
- Therapeutic innovations in the approach to refractive surgery with laser and intraocular lenses.
- Comparison between laser and IOL surgical techniques.
- It uses practical exercises where learning can be improved through the self-evaluation process.
- An interactive learning system based on algorithms for decision making in corneal pathology procedures in the clinical situations presented.
- 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.



*Refresh your knowledge through  
the Update on Refractive Surgery  
Postgraduate Certificate"*



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*This Progression Certificate may be the best investment you can make in the selecting a refresher program for two reasons: in addition to updating your knowledge in refractive Surgery, you will obtain an Specialist Postgraduate Certificate from TECH Technological University"*

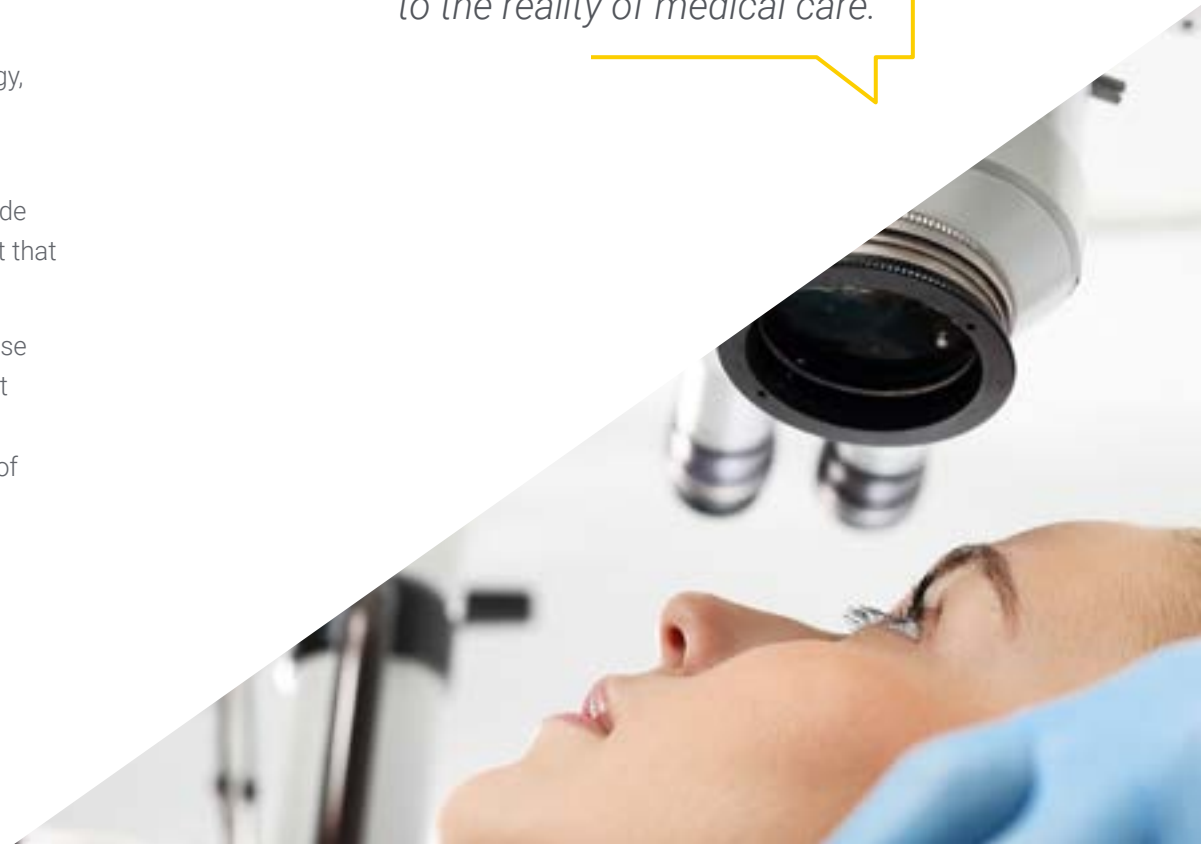
The teaching staff includes healthcare professionals from the field of ophthalmology, who bring their work experience to this training program, as well as renowned professionals from other specialties.

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 training program to train in real situations.

Problem-Based Learning underpins the design of this program, and doctors must use it to try and solve the different professional practice situations that arise throughout the Postgraduate Certificate. To this end, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of ophthalmology who have extensive teaching experience.

*This program offers training in simulated environments, which provides an immersive learning experience designed to prepare you for real-life situations.*

*It includes clinical cases to bring the program's degree as close as possible to the reality of medical care.*



# 02

# Objectives

The main objective of the program is to develop theoretical and practical learning, so that the physician can rigorously and practically master the care of patients with refractive disorders.







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



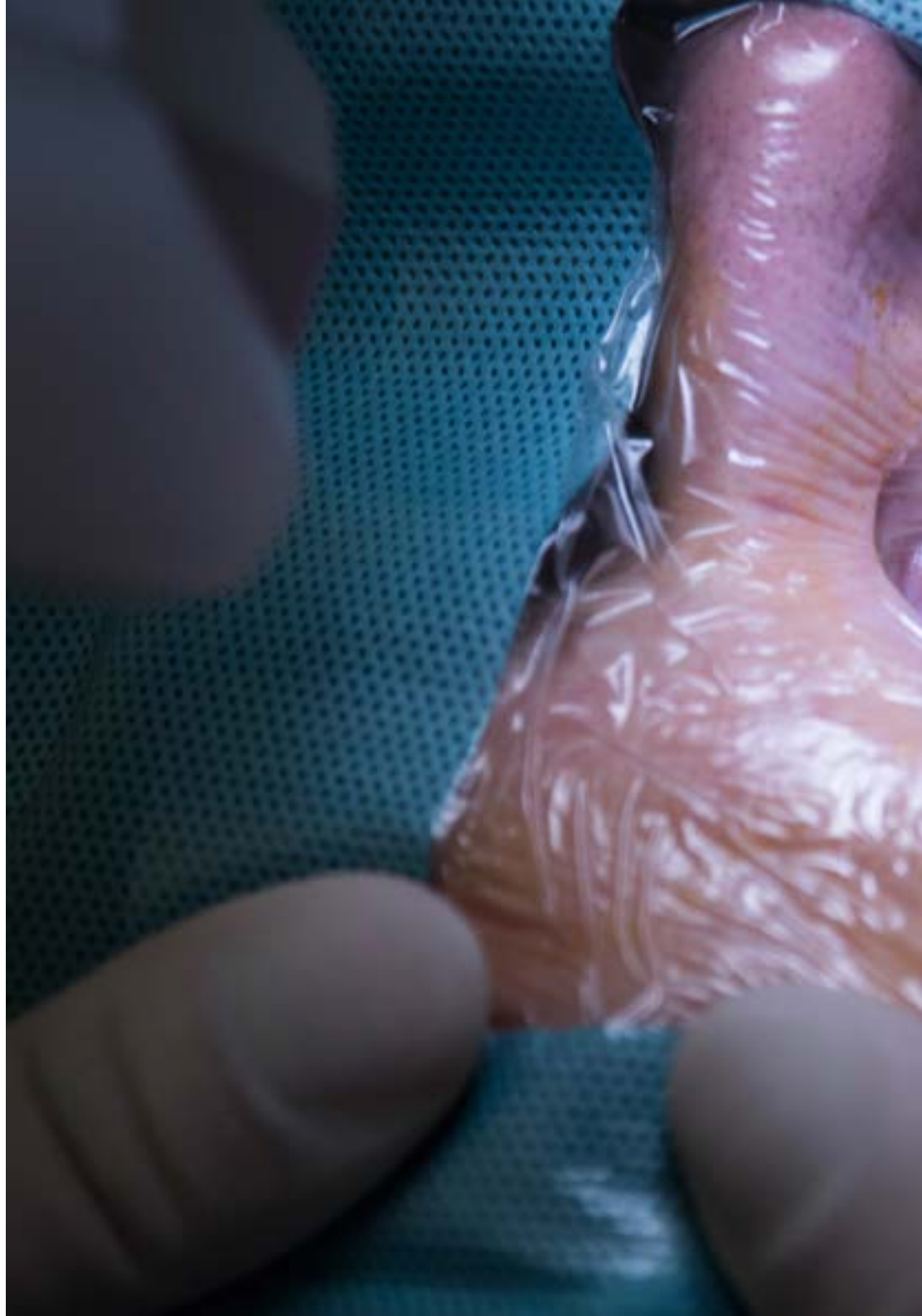
## General Objective

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- Update ophthalmic specialists' knowledge of advanced specialized training in refractive surgery techniques, so that patients can receive safe, quality treatment based on the latest scientific evidence.

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*Make the most of the opportunity and get up to date on the latest developments in managing ocular surface and corneal disorder patients”*





## Specific Objectives

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- Describe the technique of corneal crosslinking and its value in correcting visual refractive defects.
- Describe the technique of corneal crosslinking and its value in treating keratoconus.
- Describe how to use and handle intraocular lenses for pseudophakia.
- Provide knowledge about the latest advances in refractive surgery.
- Reflect on the advantages and disadvantages of presbyopia correction with laser and intraocular lenses.
- Establish the application, uses and abuses of mitomycin-C in the treatment of severe opacity.
- Explain when refractive surgery is an option for managing astigmatism.
- Cover the new existing technologies for diagnosing corneal pathology.



03

# Course Management

On its teaching staff, this program includes highly regarded health professionals in the field of ophthalmology, who bring their work experience to this training program. In addition, renowned specialists, members of prestigious national and international scientific communities, are involved designing and preparing the program.





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*Learn from leading professionals the latest advances in surgical procedures for refractive pathology”*

## Management



### Dr. Navea Tejerina, Amparo

- ◆ Degree in Medicine and Surgery
- ◆ Doctor of Medicine
- ◆ Medical Specialist in Ophthalmology
- ◆ Medical Director of FISABIO-Ophthalmology (FOM) (formerly Mediterranean Ophthalmologic Foundation).
- ◆ President of the FOM Teaching Unit
- ◆ Head of FOM's Mental Health Unit
- ◆ Associate Professor in charge of Ophthalmology at UCH-CEU Medicine in Castellón
- ◆ Extensive experience in scientific publications, communications and presentations at conferences
- ◆ Extensive experience in research work, projects, and thesis direction.
- ◆ Member of the Spanish Society of Ophthalmology (SEO), the American Academy of Ophthalmology (AAO) and the Association for Research in Vision and Ophthalmology (ARVO)

## Academic Coordination



### Dr. Ruiz Moreno, José María

- ◆ Degree in Medicine and Surgery
- ◆ Medical Specialist in Ophthalmology
- ◆ Clinical Chief of the Clinical Retina Unit of the Albacete University Hospital Complex (CHUA).
- ◆ Professor of Ophthalmology at the Faculty of Medicine at the UCLM (University of Castilla La Mancha).
- ◆ Coordinator and Professor of the Doctorate Program in "Health Sciences" at UCLM
- ◆ Extensive experience in scientific publications, communications, and presentations at national and international conferences.
- ◆ Development of lines of research in: Age-Related Macular Degeneration (AMD) and Pathological Myopia (PM)
- ◆ President of the Spanish Society of Retina and Vitreous (SERV)
- ◆ Member of the Spanish Society of Ophthalmology (SEO), the American Academy of Ophthalmology (AAO) and the European Society of Retina Specialists (EURETINA)



## Professors

### **Dr. Javaloy Estañ, Jaime**

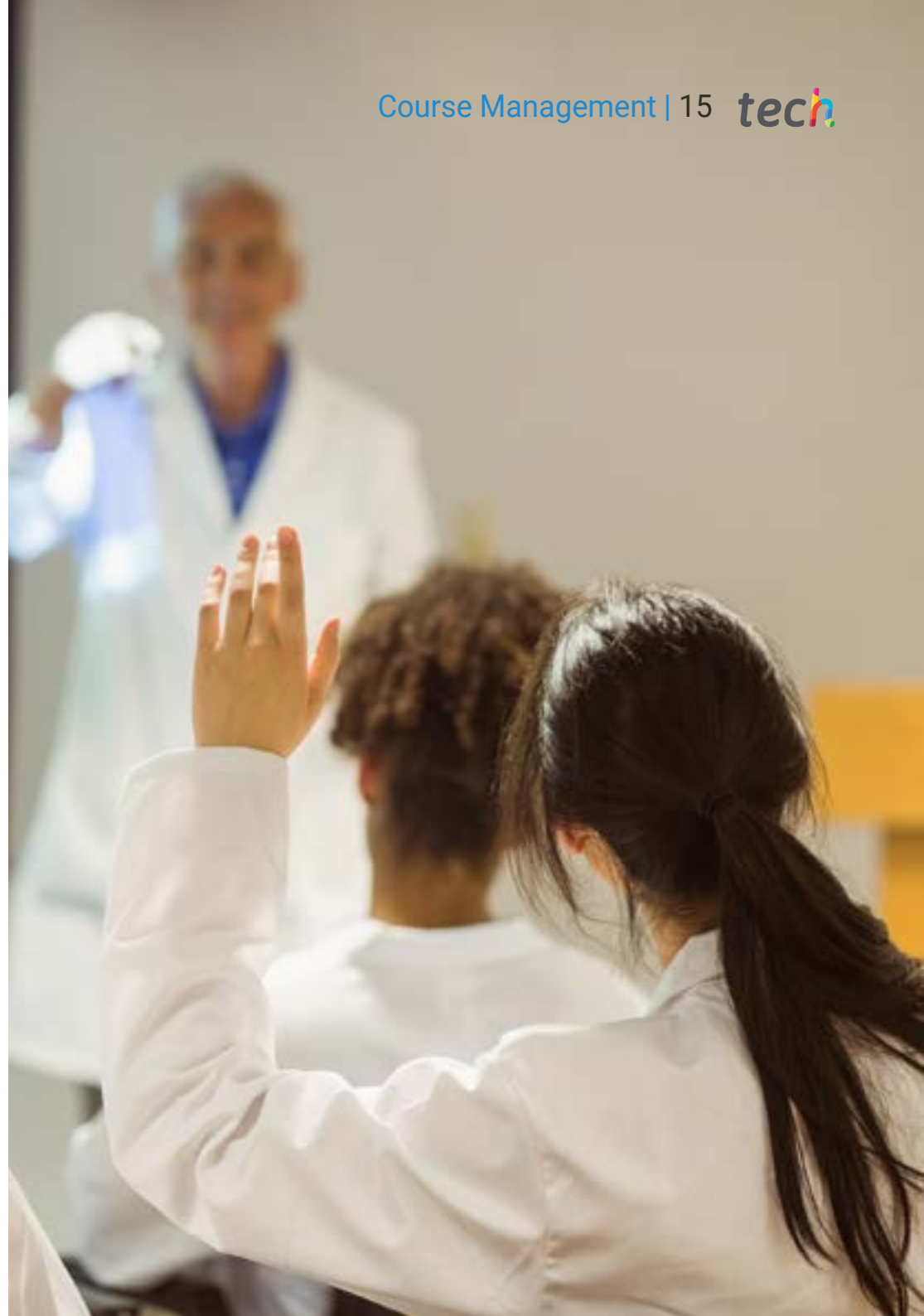
- ◆ Degree in Medicine and Surgery
- ◆ Specialist in Ophthalmology.
- ◆ Refractive surgery clinic, refractive laser surgery, Ophthalmology Clinic and Baviera Clinic

### **Dr. Montalbán Llamusi, Raúl**

- ◆ Graduate in Optics and Optometry.
- ◆ Doctor by the University of Alicante. Spain

### **Dr. Rivera Ruiz, Ester**

- ◆ Degree in Medicine and Surgery
- ◆ Specialist in Ophthalmology in Alicante



04

# Structure and Content

The structure of the contents has been designed by a team of professionals who recognise the implications of medical training in Ophthalmology, are aware of the relevance of current training to treat patients with vision problems, and are committed to quality teaching using new educational technologies.



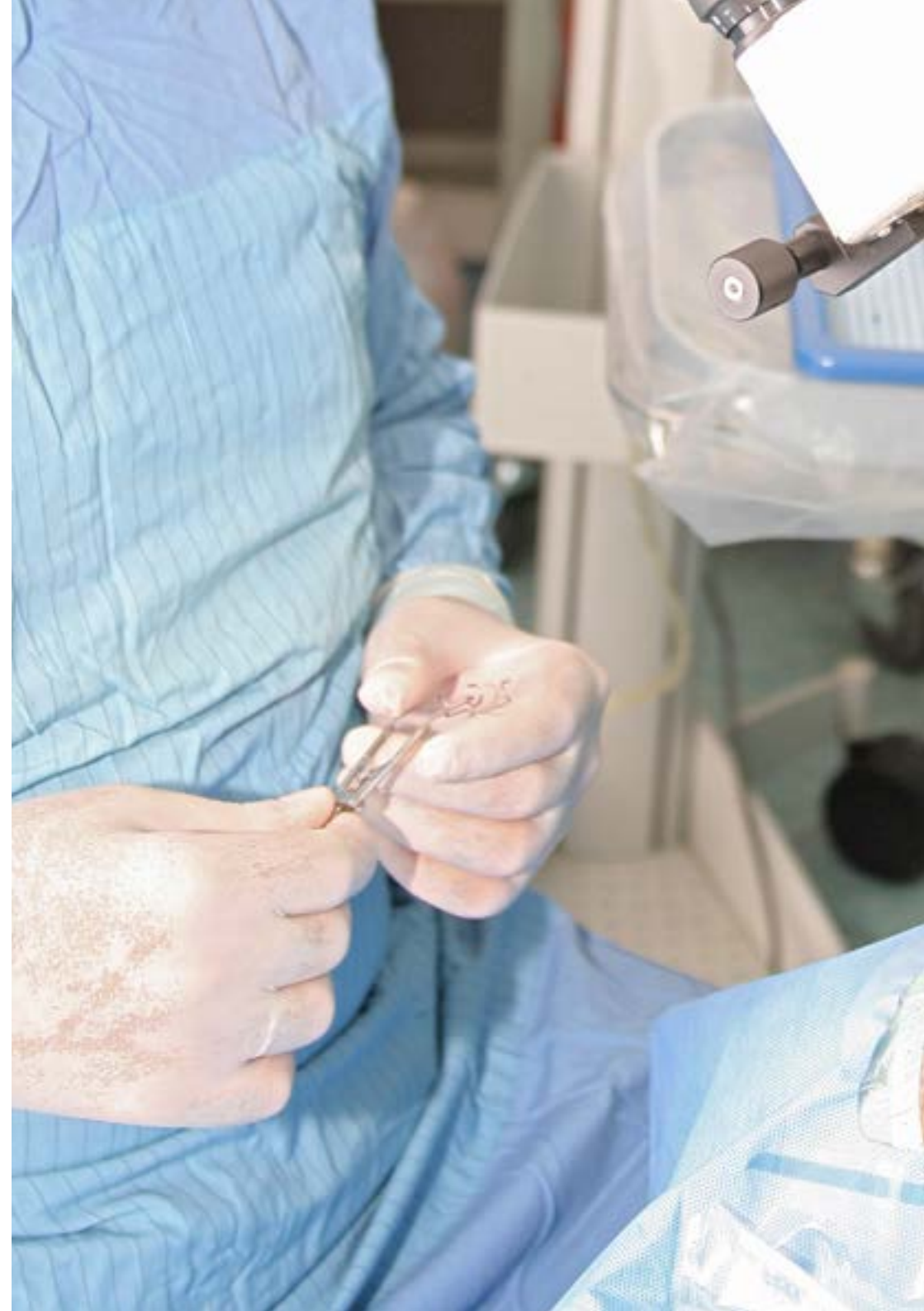
A woman with long dark hair is looking through a microscope. The image is split diagonally: the top right is dark blue with a blurred background of microscope lenses, and the bottom left is white. The woman's face is partially visible on the left side.

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*This Postgraduate Certificate in Update on Refractive Surgery comprises the most comprehensive and up-to-date scientific program on the market”*

## Module 1. Refractive Surgery Update

- 1.1. Refractive Surgery with Phakic Intraocular Lenses. Types of Lenses. Advantages and Disadvantages.
- 1.2. Presbyopia Correction (I): Available Techniques.
- 1.3. Presbyopia Correction (II): Multifocal Intraocular Lenses. Keys to Success with its Management.
- 1.4. Surgical Management of Astigmatism. (I): Available Techniques.
- 1.5. Surgical Management of Astigmatism. (II): Toric Intraocular Lenses for Pseudophakia.
- 1.6. IOL Calculation in Refractive Surgery. Biometrics.
- 1.7. Excimer Laser Refractive Surgery. Techniques Used. Indications and Contraindications.
- 1.8. Main Complications in Refractive Surgery with Intraocular Lenses.
- 1.9. Main Complications in Excimer Laser Refractive Surgery.
- 1.10. Femtosecond Laser: Use in Refractive Surgery.







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

05

# Methodology

This training program provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning***.

This teaching system is used 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 Re-learning, 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

In a given situation, what would you do? Throughout the program, you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

*With TECH you can 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 potential 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 professional medical 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 grasp concepts, but also develop their mental capacity by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on 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.



## Re-Learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our 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, which represent a real revolution with respect to simply studying and analyzing cases.

*The physician will learn through real cases and by solving 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 Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

With this methodology we have trained more than 250,000 physicians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

*Re-learning 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 (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by our learning system is 8.01, according to the highest international standards.



In this program you will have access to the best educational material, prepared with you 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.

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.



#### Latest Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### 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 unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story"

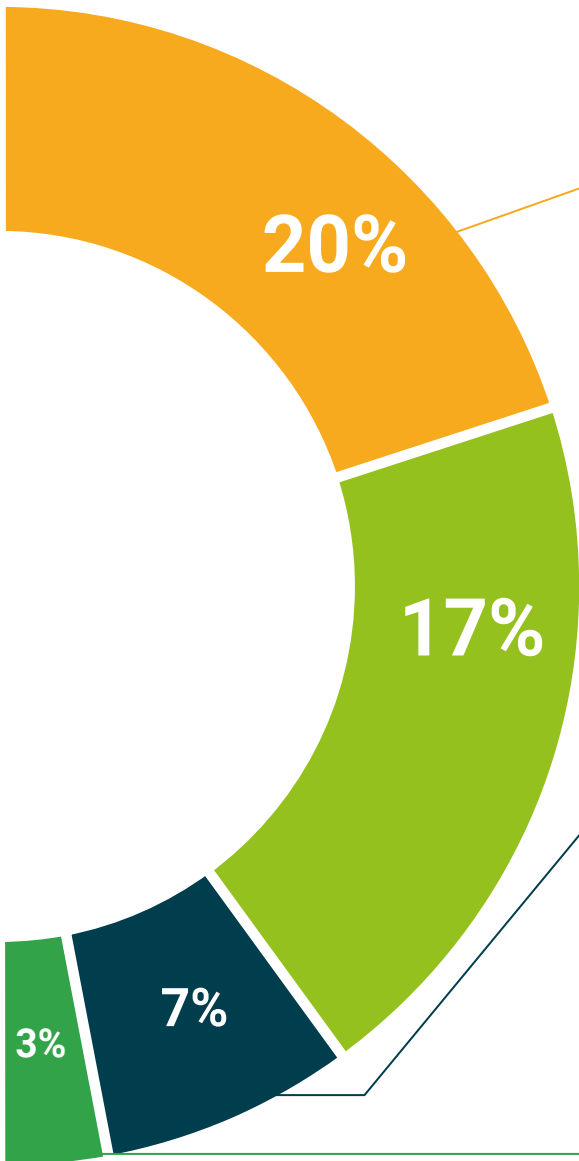


#### Additional Reading

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







#### Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### Testing & Re-testing

We periodically evaluate and re-evaluate your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.



#### Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an expert strengthens knowledge and memory, and generates confidence in our future difficult decisions.



#### Quick Action Guides

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.



# 06 Certificate

The **Postgraduate Certificate in Update on Refractive Surgery** guarantees you, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate issued by **TECH Technological University**.



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*Successfully complete this training and receive your university degree without travel or laborious paperwork"*

This **Postgraduate Certificate in Update on Refractive Surgery** is the most comprehensive and up-to-date scientific program on the market.

After students have passed the assessments, they will receive by certified mail their **Postgraduate Certificate** issued by **TECH Technological University**.

The certificate issued by **TECH Technological University** will reflect the qualification obtained through the Postgraduate Certificate program, and will meet the requirements commonly demanded by labor exchanges, competitive examinations and professionals from career evaluation committees.

Title: **Postgraduate Certificate in Update on Refractive Surgery**

Official Number of Hours: **200**



\*Apostille Convention. In the event that the student wishes to have their paper certificate 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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- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
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