



Update on Cataract Surgery

» Modality: Online

» Duration: 6 weeks

» Certificate: TECH Global University

» Accreditation: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-certificate/update-cataract-surgery

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06 Certificate





tech 06 | Introduction

Ophthalmic Surgery has undergone changes that have completely transformed the approach to the pathologies within the field. 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.

Among the great advances that have taken place in ophthalmologic surgery, the advances made in treating pathologies that until recently were significant causes of blindness, such as cataracts, glaucoma and retinal alterations and degenerations, are noteworthy.

This Cataract Surgery Update Postgraduate Certificate aims to update knowledge on ophthalmic exploration techniques and cataract surgery that have not been addressed in specialty specialization, either because they are so recent or because they require such a high degree of expertise. In this way, ophthalmologists will be able to update their knowledge and easily acquire advanced specialization in new cataract surgical techniques.

This **Update on Cataract Surgery Surgery University Course** is the most comprehensive and up-to-date scientific program on the market. The most important features of the University Course 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 practise
- Diagnostic and therapeutic innovations in the approach to cataracts
- It contains practical exercises where the self-evaluation process can be carried out to improve learning
- Interactive learning system based on algorithms for decision-making in clinical situations regarding cataract patients
- 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





This Postgraduate Certificate may be the best investment you can make in selecting an update program for two reasons: in addition to updating your knowledge in Cataract Surgery, you will obtain a Postgraduate Certificate issued by TECH Technological University"

The teaching staff includes healthcare professionals from the field of ophthalmology, who bring their work experience to this specialization 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 University Course. 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 as close as possible to the reality of medical practice.







tech 10 | Objectives



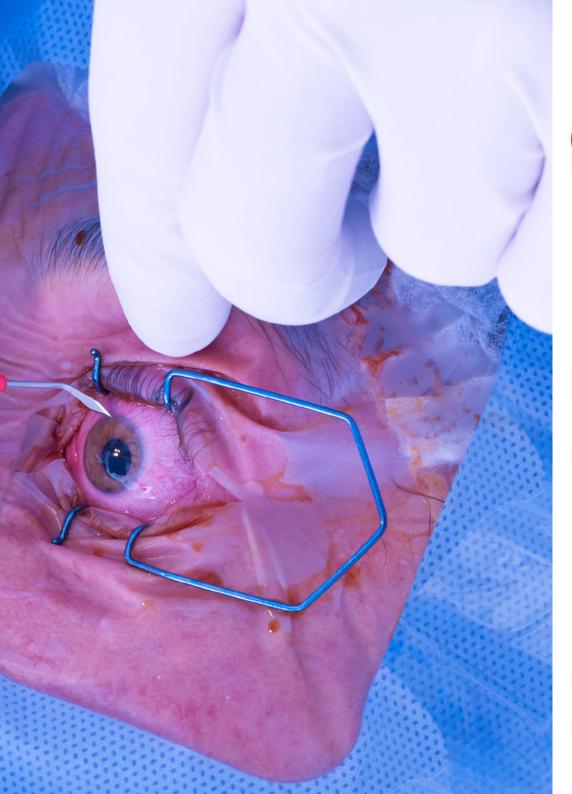
General Objective

 Update ophthalmic specialists' knowledge on exploration and cataract eye surgery techniques, so that patients receive safe, quality treatment based on the latest scientific evidence



Take the opportunity and get up-to-date on the latest developments in cataract surgery"





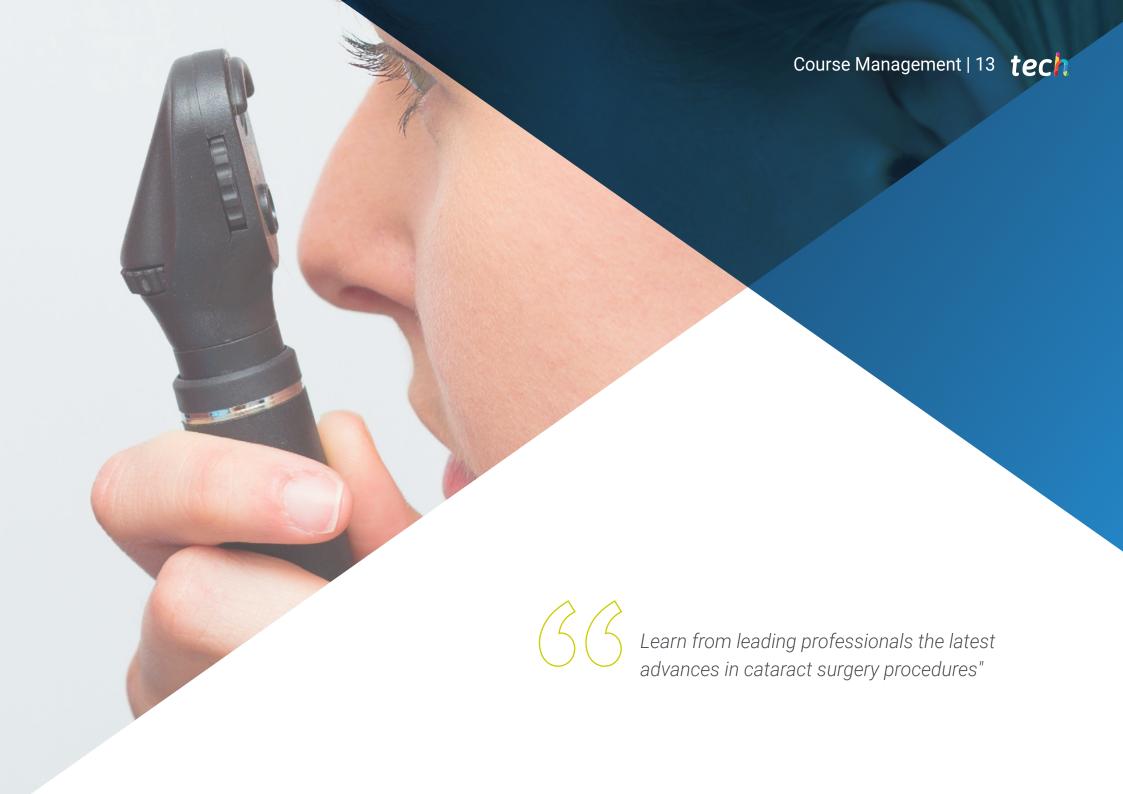
Objectives | 11 tech



Specific Objectives

- Define the different techniques of eye exploration in a candidate for cataract surgery
- Update handling procedures and instructions for biometric calculation devices
- Point out special circumstances in the use of computing devices
- Updates the guidelines for the use and management of intraocular lenses for pseudophakia
- Provide knowledge about the latest ophthalmic cataract surgical techniques:
 Femtosecond laser-assistance, rotational control systems adapted to the surgical microscope and state-of-the-art phacoemulsification platforms
- Establish methods of relevant complication prevention in cataract surgery





tech 14 | Course Management

Management



Dr. Navea Tejerina, Amparo

- FISABIO-Ophthalmology Medical Director (FOM)
- Doctor of Medicine. Specialist in Ophthalmology.
- President of the FOM Teaching Commission. Head of the Retina Unit of the FOM, Head of the Ophthalmology Collection, FISABIO Biobank.
- Associate Professor in charge of Ophthalmology at UCH-CEU Medicine in Castellón and Valencia.
- 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 Opthalmology (ARVO). Sircova. IP OftaRed

Academic Coordination



Dr. Ruiz Moreno, José María

- Professor of Ophthalmology at the Faculty of Medicine at the UCLM (University of Castilla La Mancha).
- Head of Service of the Puerta de Hierro Hospital Majadahonda
- Medical Director of the Vissum Ophthalmologic Corporation
- Coordinator and Professor of the Doctorate Program in "Health Sciences" at UCLM.
- President of the Spanish Society of Retina and Vitreous (SERV
- 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).
- Member of the Spanish Society of Ophthalmology (SEO), the American Academy of Ophthalmology (AAO) and the European Society of Retina Specialists (EURETINA). IP OftaRed

Professors

Dr. Alió del Barrio, Jorge L.

- Degree in Medicine and Surgery
- · Medical Specialist in Ophthalmology.
- Specialist in Cornea, Cataract, and Refractive Surgery Service.
- Vissum Corporación

Dr. Davó Cabrera, Juan María

- Degree in Medicine and Surgery
- Medical Specialist in Ophthalmology.
- FISABIO Medical Ophthalmology. Valencia, Spain

Dr. González López, Julio

- Degree in Medicine and Surgery
- Medical Specialist in Ophthalmology.
- Glaucoma and Neuro-ophthalmology Unit
- Ramón y Cajal University Hospital Madrid, Spain

Dr. Lanzagorta Aresti, Aitor

- Degree in Medicine and Surgery
- Medical Specialist in Ophthalmology.
- Glaucoma Specialist
- FISABIO Medical Ophthalmology, Valencia, Spain.
- Member of the Teaching Commission. Oftared Researcher

Dr. Pastor Pascual, Francisco

- Degree in Medicine and Surgery
- Medical Specialist in Ophthalmology.
- Cornea Specialist
- FISABIO Medical Ophthalmology. Valencia, Spain





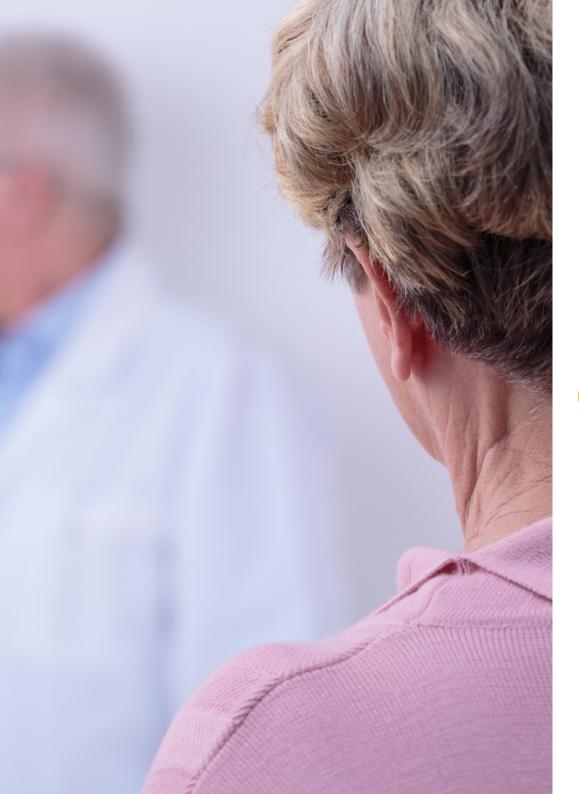


tech 18 | Structure and Content

Module 1. Update on Cataract Surgery

- 1.1. Viscoelastics. Composition and Biomechanical Properties. Instructions for Correct Use
- 1.2. Bilateral and Simultaneous Cataract Surgery
- 1.3. Scanning Techniques in Cataract Surgery Candidates: Biometric Calculation Devices
- 1.4. Biometric Calculation Formulae. Special Situations: Long Sight. Short Sight. Calculation in Eyes Undergoing Refractive Surgery
- 1.5. Intraocular Lenses for Pseudophakia (I): Aspheric and Aberration-Correcting Lenses. Toric Lenses. Adjustable Strength Lens
- 1.6. Technological Update in Cataract Surgery (I): Femtosecond Laser
- 1.7. Technological Update in Cataract Surgery (II): Interoperative Guidance Systems
- 1.8. Lens Surgery in Special Situations: Subluxated Crystalline Lens
- 1.9. Prevention of Major Complications in Cataract Surgery. Posterior Capsular Opacity. Prevention of CME. Prevention of Acute Post-Operative Endophthalmitis

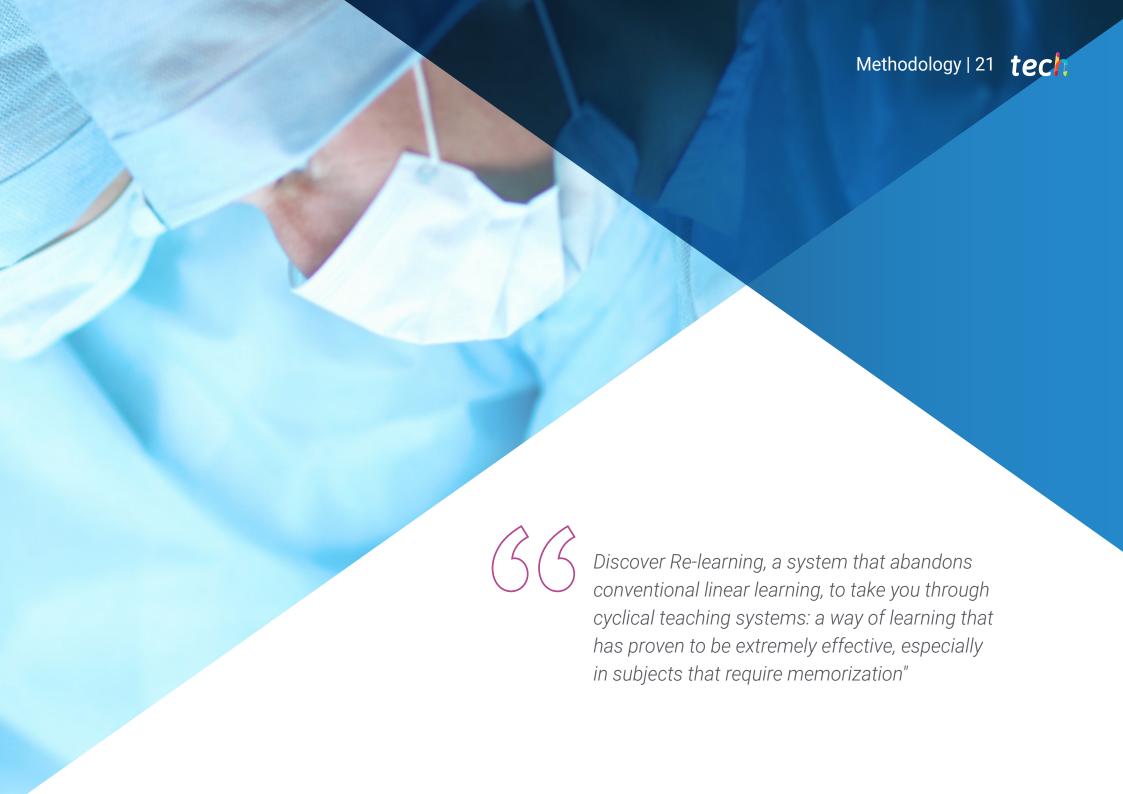






A unique, key, and decisive Postgraduate Certificate experience to boost your professional development"





tech 22 | Methodology

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.



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:

- 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.
- 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.





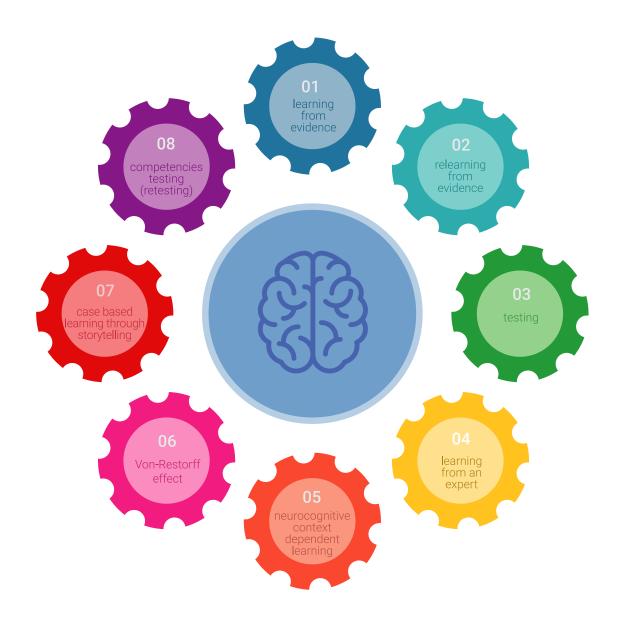
Re-Learning Methodology

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.



Methodology | 25 tech

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 socioeconomic 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.

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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

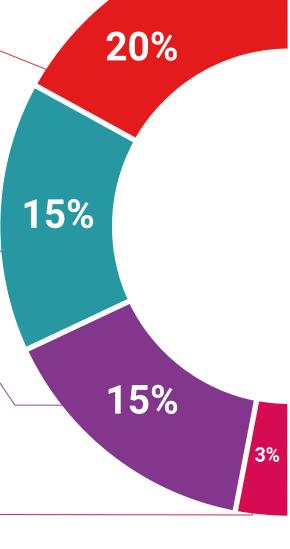
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



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.

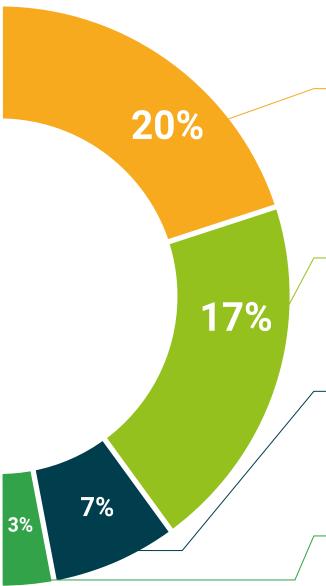
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





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.





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.









This program will allow you to obtain a **Postgraduate Certificate in Update on Cataract Surgery** 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 Update on Cataract Surgery

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



Mr./Ms. _____, with identification document _____ has successfully passed and obtained the title of:

Postgraduate Certificate in Update on Cataract Surgery

This is a private qualification of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



^{*}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.

tech global university



Postgraduate Certificate Update on **Cataract Surgery**

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