



Postgraduate Certificate

Preoperative Evaluation in Refractive Surgery

» 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/preoperative-evaluation-refractive-surgery

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tech 06 | Introduction

Refractive surgery has become an increasingly popular option for those who wish to correct their vision problems. However, before undergoing this procedure, it is important to perform a thorough preoperative evaluation to ensure that the patient is a suitable candidate and to minimize the risks associated with the surgery. In order to improve this quality of assessment, TECH has developed a Postgraduate Certificate that goes into all areas relevant to patient selection.

This program is essential for health professionals working in the field of Refractive Surgery. As more people opt for this procedure, it is critical that health care professionals are trained to perform accurate and thorough preoperative evaluations. In addition, it is necessary to keep up to date with the latest technologies and techniques in order to offer the best service to patients.

Therefore, the Postgraduate Certificate in Preoperative Evaluation in Refractive Surgery is a comprehensive program that covers all relevant aspects of patient selection, including medical history, ophthalmologic history, physical evaluation and preoperative studies. It also provides detailed information on the special considerations for each type of surgery. Participants will have access to the most up-to-date and rigorous scientific information on techniques and technological equipment used in this field.

the program a 100% online modality, which allows students to access lessons, moving from anywhere and at any time. The program has a 100% online modality, which allows participants to access the lessons from anywhere and at any time. Study materials include digital readings and case studies. At the end of the program, participants will be able to perform complete and accurate preoperative evaluations in Refractive Surgery.

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

- The development of case studies presented by medical experts focused on Preoperative Evaluation in Refractive Surgery
- 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 self-assessment 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



Learn everything you need to select the perfect patient for Refractive Surgery In this degree in Preoperative Evaluation in Refractive Surgery. Enroll now!"



Get ready to perform a complete physical evaluation in the Preoperative Evaluation for Refractive Surgery thanks to this Postgraduate Certificate, where you will learn about visual acuity, keratometry and fundus"

The program's teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its 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 an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

With this program you will learn all about age, refractive defects, refractive stability and contraindications to make a proper Preoperative Evaluation in Refractive Surgery.

Enroll now and acquire the necessary knowledge to perform accurate and effective Preoperative Evaluations in Refractive Surgery.





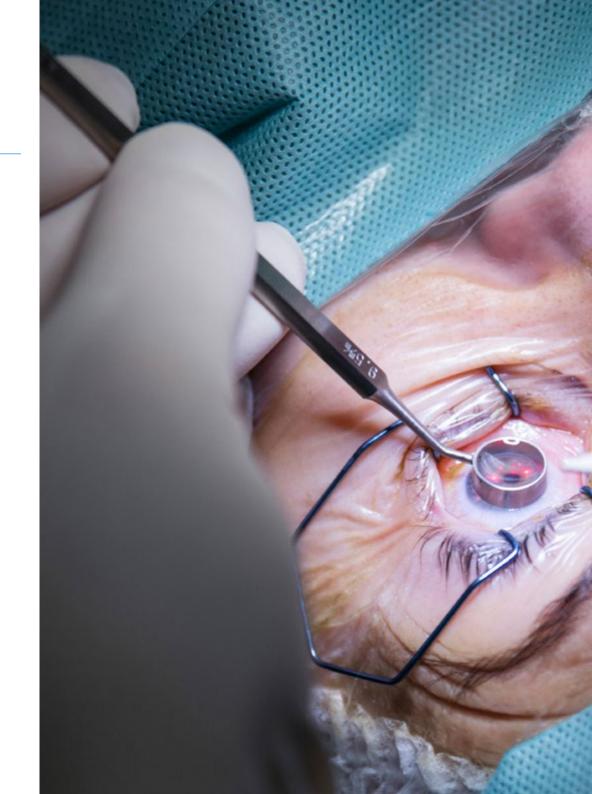


tech 10 | Objectives



General Objectives

- To delve into the basic principles of optics, as well as refractive defects and their treatment possibilities
- Describe the corneal morphology and function on which much of Refractive Surgery is applied
- To investigate the indications and contraindications of Refractive Surgery, as well as the algorithms used for the surgery
- Obtain an update on the studies to be performed on patients in order to correctly assess the indication for surgery
- Describe the processes of preparation for Refractive Surgery
- To deepen in the different techniques applied on the cornea for the correction of refractive errors
- Identify the surgeries that can be performed on the crystalline lens to eliminate the patients' graduation defects
- Be aware of the different lenses that are used for this surgery without acting on the cornea or lens
- To deepen the relationship between Glaucoma and Refractive Surgery





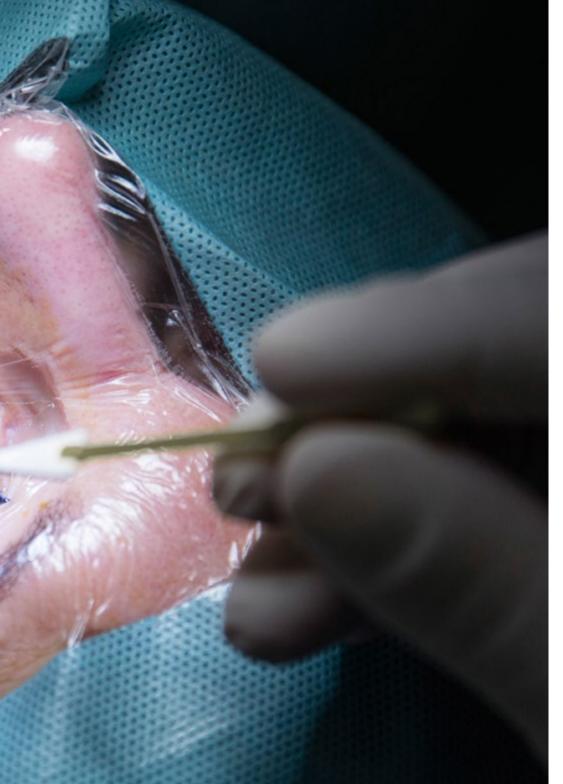


Specific Objectives

- Delve into in the indications and contraindications for surgery, both ocular, systemic and familial
- Describe the pre-surgery tests that are performed to obtain the suitability of a patient prior to surgery



Increase your knowledge in preoperative evaluation in Refractive Surgery and become a highly trained specialist in the field of ophthalmology"







International Guest Director

Dr. Beeran Meghpara is an internationally renowned ophthalmologist specializing in Cornea, Cataract and Laser Refractive Surgery.

He has served as Director of Refractive Surgery and member of the Cornea Service at Wills Eye Hospital in Philadelphia, a world leading center in the treatment of eye diseases. Here, this expert has performed all forms of Corneal Transplantation, including Partial Thickness DMEK and DALK. In addition, he has extensive experience with the latest technology in Cataract Surgery, including Femtosecond Laser and Intraocular Lens Implants, which correct Astigmatism and Presbyopia. He also specializes in the use of Bladeless Custom LASIK, Advanced Surface Ablation and Phakic Intraocular Lens Surgery to help patients reduce their dependence on glasses and contact lenses.

In addition, Dr. Beeran Meghpara has excelled as a scholar by publishing numerous articles and presenting his research at local, national and international conferences, contributing to the field of Ophthalmology. Likewise, he has been honored with the prestigious Golden Apple Resident Teaching Award (2019), in recognition of his dedication to teaching residents in Ophthalmology. In addition, he has been selected by his peers as one of Philadelphia magazine's Best Doctors (2021-2024) and Best Doctor by Castle Connolly (2021), a leading research and information resource for patients seeking the best medical care.

In addition to his clinical and academic work, he has served as an ophthalmologist for the Philadelphia Phillies baseball team, underscoring his ability to handle highly complex cases. In this sense, his commitment to technological innovation, as well as his excellence in medical care, continues to raise the standards in ophthalmic practice worldwide.



Dr. Beeran Meghpara

- Director of the Department of Refractive Surgery at Wills Eye Hospital, Pennsylvania, United States
- Ophthalmic Surgeon at the Center for Advanced Ophthalmic Care, Delaware
- Fellow in Cornea, Refractive Surgery and External Disease at the University of Colorado
- Resident Ophthalmology Physician at Cullen Eye Institute, Texas
- Intern at St. Joseph's Hospital, New Hampshire
- Doctor of Medicine from the University of Illinois, Chicago
- Graduate of the University of Illinois, Chicago
- Selected for the Alpha Omega Alpha Medical Honor Society
- Awards: Golden Apple Resident Teaching Award (2019), Best Doctor from,
 Philadelphia Magazine (2021-2024), Best Doctor from Castle Connolly (2021)



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

Management



Dr. Román Guindo, José Miguel

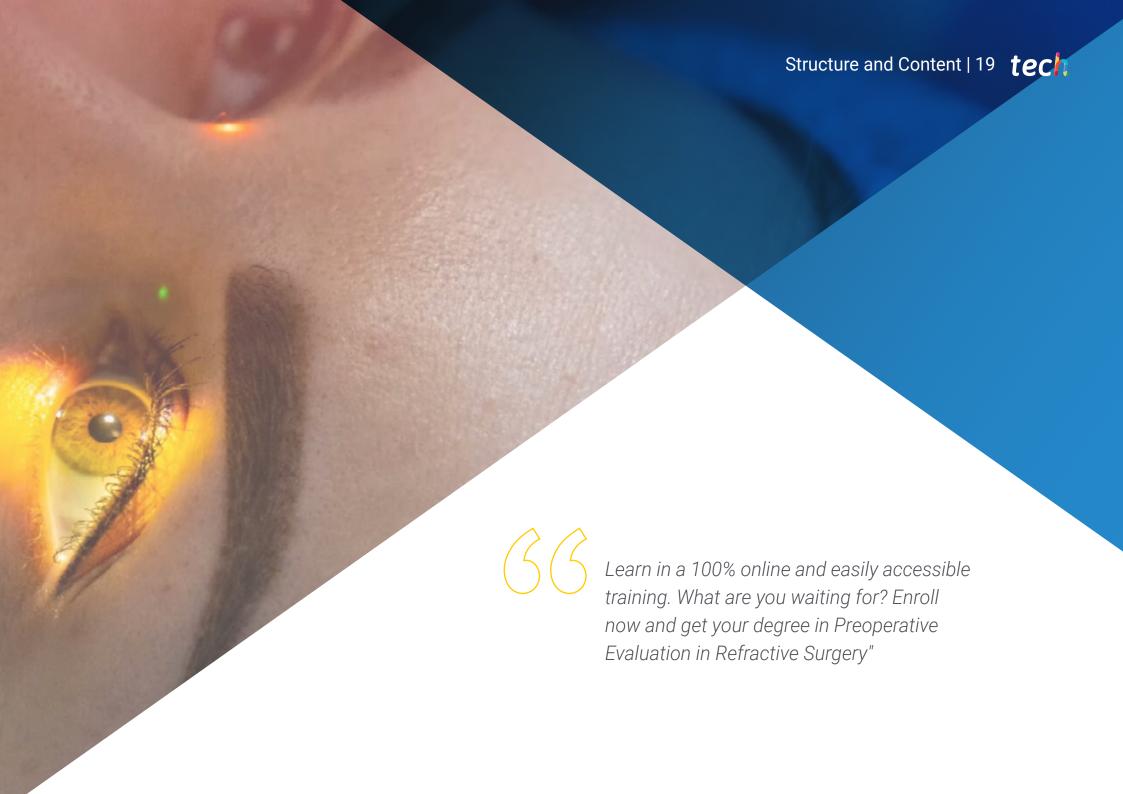
- · Ophthalmologist at Oftalvist Málaga
- Ophthalmologist at Vissum Madric
- Ophthalmologist at Dubai International Medical Center
- Medical Director of Vissum Madrid Sur and Vissum Málaga
- Specialist in Ophthalmology at the San Carlos Clinical Hospita
- Doctor in Ophthalmology
- Degree in Medicine and Surgery General: from the Autonomous University of Madrid
- Member of Spanish Society of Ophthalmology, International Society of Ocular Inflammation, International Society of Ocular Inflammation



Dr. Alaskar Alani, Hazem

- Ophthalmologist at Oftalvist Málaga
- Surgical Director of Poniente University Hospital
- Head of the Ophthalmology Diseases Department, Poniente Hospital
- Specialist in Ophthalmology at the Puerta De las Nieves University Hospital
- Degree in Medicine and Surgery from the University of Valencia
- Doctor of Medicine and Surgery from the University of Almería
- Master's Degree in Health Management and Planning, European University of Madrid
- Master's Degree in Ophthalmology Medicine from Cardenal Herrera University
- Member of: European Retina Society EURETINA, SEDISA, The Spanish Society of Health Managers, Fellow of the European Board
 of Ophthalmology, FEBO European Society of Cataract and Refractive Surgery, ESCRS, Spanish Society of Implanto Refractive
 Surgery SECOIR, Andalusian Society of Ophthalmology SAO, Spanish Society of Retina and Vitreous SERV, Fellow of the European
 School of Retina and Vitreous Surgery EVRS





tech 20 | Structure and Content

Module 1. Preoperative Evaluation for Refractive Surgery

- 1.1. Patient selection for Refractive Surgery
 - 1.1.1. Age
 - 1.1.2. Refractive defects
 - 1.1.3. Refractive stability
 - 1.1.4. Presence of contraindications
- 1.2. Medical History
 - 1.2.1. Current disease
 - 1.2.2. Personal background
 - 1.2.3. Family Background
 - 1.2.4. Previous surgeries
- 1.3. Ophthalmologic History
 - 1.3.1. History of previous procedures
 - 1.3.2. History of personal ocular pathologies
 - 1.3.3. Family history of ocular pathologies
 - 1.3.4. History of contraindication in another center
- 1.4. Medications
 - 1.4.1. General Notions
 - 1.4.2. Amiodarone
 - 1.4.3. Venlafaxine
 - 1.4.4. Sumatriptan
 - 1.4.5. Isotrethionine
- 1.5. Expectations
 - 1.5.1. Patient Expectations
 - 1.5.2. What we can offer
 - 1.5.3. Alternatives to the treatment proposed by the patient
 - 1.5.4. Avoid problems
- 1.6. Physical Evaluation
 - 1.6.1. Visual acuity
 - 1.6.2. Keratometry
 - 1.6.3. Biomicroscopy
 - 1.6.4. Fundus





Structure and Content | 21 tech

- 1.7. Preoperative studies
 - 1.7.1. Ocular surface analysis
 - 1.7.2. Corneal biomechanics analysis
 - 1.7.3. Biometry and pupils
 - 1.7.4. Optical Coherence Tomography (OCT)
- 1.8. Study of the retina
 - 1.8.1. Papilla
 - 1.8.2. Macula
 - 1.8.3. Vascular Disorders
 - 1.8.4. Peripheral retina
- 1.9. Other studies
 - 1.9.1. Endothelial count
 - 1.9.2. Meibography
 - 1.9.3. Contrast Sensitivity
 - 1.9.4. Aberrometry
- 1.10. Special considerations for each type of surgery
 - 1.10.1. Laser Refractive Surgery
 - 1.10.2. Refractive surgery with intraocular lens
 - 1.10.3. Phaco-refractive surgery
 - 1.10.4. Secondary implant surgery



With a complete content prepared by TECH and based on the most cutting-edge studies and research in the field, you will learn about Preoperative Evaluation in Refractive Surgery"





tech 24 | 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 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 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.



Methodology | 27 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.

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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.









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This program will allow you to obtain your **Postgraduate Certificate in Preoperative Evaluation in Refractive 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 Preoperative Evaluation in Refractive 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 Preoperative Evaluation in Refractive Surgery

This is a program 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.



Postgraduate Certificate

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- » Schedule: at your own pace
- » Exams: online

