

# Postgraduate Certificate

## Vision Correction Alternatives





## Postgraduate Certificate Vision Correction Alternatives

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

Website: [www.techtute.com/us/medicine/postgraduate-certificate/vision-correction-alternatives](http://www.techtute.com/us/medicine/postgraduate-certificate/vision-correction-alternatives)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Methodology

---

*p. 20*

06

Certificate

---

*p. 28*

# 01

# Introduction

The advances in Ocular Optics that have taken place in the last two decades have allowed the development of techniques and strategies for visual correction in its different variants, through surgery or treatments adapted to the needs of each patient. Thanks to this, professionals can offer more guarantees in their diagnoses and clinical management, working in a specialized way to improve the health of your eyes. In order for specialists in this area to be up-to-date on everything related to the most modern and effective vision correction alternatives, TECH has developed this intensive program. This is an online and flexible program, with which you will be able to keep your knowledge up-to-date in a comprehensive manner thanks to the use of the most advanced pedagogical methodology and the best academic tools in the university sector.



“

*Get up to date on the methods of vision correction currently being applied, from eyeglasses and contact lenses to surgical options such as corneal or intra ocular refractive surgery”*

The alternatives currently available for vision correction and eye health improvement are diverse and increasingly effective, thanks to their specificity and high level of personalized treatment based on the needs of each patient. Refractive corneal reshaping surgery with laser beams, the insertion of artificial lenses or the use of glasses or contact lenses are some of the most widely used techniques that are obtaining the best results.

In order for specialists in this field to learn in detail the latest advances related to the most modern and effective vision correction alternatives, TECH has designed this intensive and avant-garde program, adapted to the scientific evidence in the field of optics and optometry. The fact is that the completion of this program will help the graduate to broaden their knowledge in a comprehensive manner and to improve their skills in a significant way in their daily clinical practice.

The Postgraduate Certificate is developed in 6 weeks and is distributed in 180 hours of the best theoretical and additional material, presented in various formats, so that the doctor can delve into each section of the content that considers most relevant or interesting for the development of a better professional practice. In addition, the fact that it is 100% online will allow you to take this academic experience in a personalized way, not only in terms of schedule, but also in terms of access methodology, since it is fully compatible with any device with Internet connection, whether tablet, PC or cell phone. It is, therefore, a unique option to get up to date with the best experts and with the guarantee of the largest online medical school in the world.

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

- ◆ The development of practical cases presented by experts in Ocular Optics
- ◆ 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



*You will be able to delve into LASIK and PRK surgeries in a comprehensive manner, as well as their indications, procedures and the latest developments related to possible complications”*



“*TECH will provide you with all the tools you need so that you can update your knowledge from wherever you want and with a schedule totally adapted to your availability*”

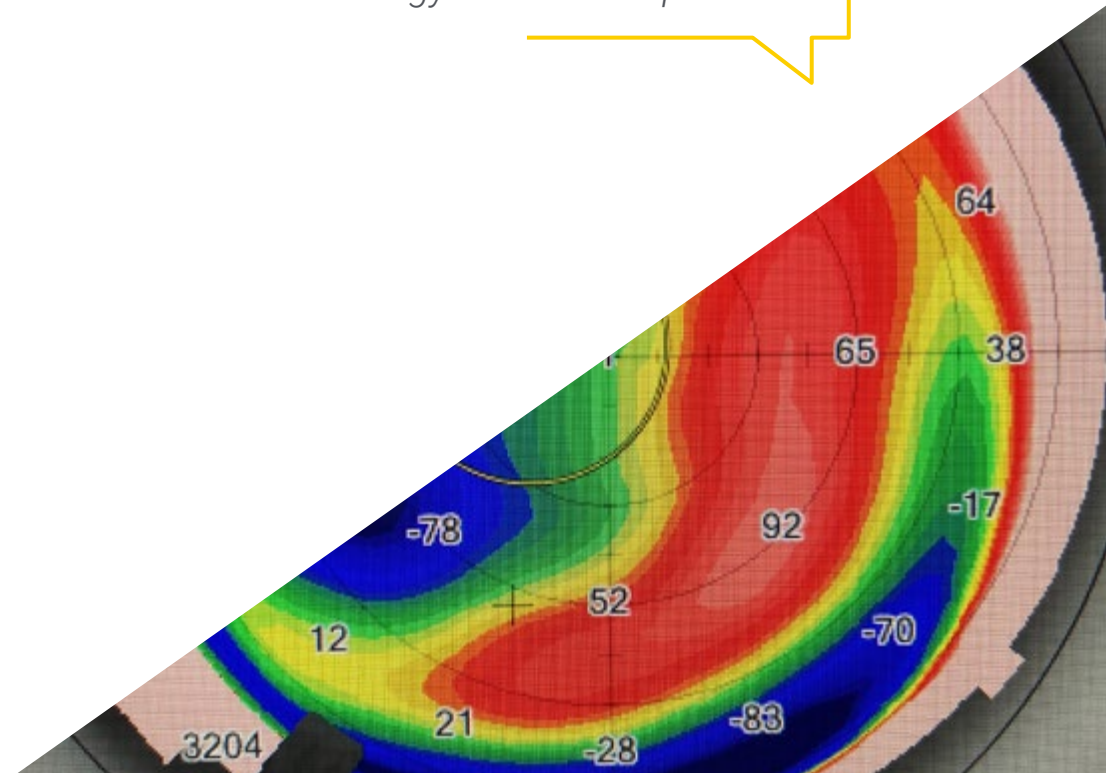
*You will have an exclusive section dedicated to the principles of ocular correction through different methods: glasses, contact lenses, intra ocular lenses, etc.*

*A Postgraduate Certificate adapted to the cutting edge of Optometry with which you will be able to master your skills in handling optical technology and its multiple tools.*

The program's teaching team includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious 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 the professional must try to solve the different professional practice situations that arise during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.



# 02 Objectives

The objective of this program is no other than to provide the student with all the academic tools that will allow them to achieve their own goals in the professional sector in which they work, in this case Ocular Optics. TECH and its team of experts have invested dozens of hours in creating a complete, up-to-date, comprehensive and top-quality qualification, adapted to the most demanding market specifications. Therefore, by completing the program, the student will have managed to master all the necessary skills to ensure that they have the most up-to-date knowledge related to current vision correction alternatives.





“

*Get up to date on the types of lenses that are currently achieving the best results, from phakic to pseudophakic”*



## General Objectives

---

- ◆ Present the optical principles of vision correction in the different corrective alternatives
- ◆ Describe the optical properties of corrective lenses

“

*You will have 6 weeks to complete the 180 hours of content, so you will be able to distribute the time comfortably and totally adapted to your availability”*





## Specific Objectives

---

- ◆ Present the optical principles of vision correction in the different corrective alternatives
- ◆ Describe the optical properties of corrective lenses
- ◆ Understand the most important aspects of contact lens correction
- ◆ Describe LASIK and PRK surgery, its indications, procedures and complications
- ◆ Describe intraocular surgery using phakic lenses, its indications, procedures and complications
- ◆ Describe pseudophakic intraocular lens surgery, its indications, procedures and complications

# 03

## Course Management

TECH has selected for this program, as it could not be otherwise, a teaching team specialized in Optometry and Vision Sciences. This is a group of professionals who will provide the graduate with their broad and extensive experience in the clinical management of patients with visual anomalies and in the use of treatment strategies that are currently having the best results. In this way, students will be able to keep their knowledge up to date and perfect their skills under the guidance of experts in the field and on the basis of the latest developments in the field.





“

*The teaching staff has selected for this Postgraduate Certificate real clinical cases extracted from their practices, so you can work on mastering your skills through practice”*



## Management



### **Dr. Calvache Anaya, José Antonio**

- Optometrist at Clínica Baviera in Palma de Mallorca
- Professor in courses on Biostatistics, Keratometry and Corneal Topography and Ocular Biometry
- Degree in Optics and Optometry from the University of Alicante
- PhD in Optometry and Vision Sciences by the University of Valencia
- Master's Degree Advanced Optometry and Vision Sciences, University of Valencia
- Postgraduate Diploma in Statistics Applied to Health Sciences UNED
- Postgraduate Certificate in Optics and Optometry from the University of Alicante



# 04

## Structure and Content

TECH uses the best academic tools and the effective and innovative Relearning methodology in all of its programs. In addition, it guarantees a series of minimum hours of additional material in different formats, so that the specialist can not only contextualize the information developed in the syllabus, but also delve deeper into those aspects they consider most interesting or relevant to their clinical performance. All this is what makes programs such as this one the best in the market, thanks to which the Doctor can extensively and conscientiously keep their knowledge up-to-date, contributing to master their professional praxis through a 100% online program.





A close-up photograph of a person's eye wearing a contact lens. The eye is looking slightly to the right. The background is a soft, out-of-focus blue. The image is partially obscured by a white diagonal shape that contains text.

“

*Would you like to learn more about overnight orthokeratology and the advances in contact lenses? With this 100% online program you will get to know every detail about the types of contact lenses and their current recommendations”*

## Module 1. Vision Correction Alternatives

- 1.1. Principle of Ocular Correction
  - 1.1.1. Correction in Glasses
  - 1.1.2. Correction in Contact Lenses
  - 1.1.3. Correction by Modification of Corneal Power
  - 1.1.4. Intraocular Options
    - 1.1.4.1. Phakic Lenses
    - 1.1.4.2. Pseudophakic Lenses
- 1.2. Optical Technology
  - 1.2.1. Types of Optical Glass
  - 1.2.2. Refractive Index
  - 1.2.3. Abbe Number
  - 1.2.4. Spherical Lenses
  - 1.2.5. Aspherical Lenses
  - 1.2.6. Astigmatic Lenses
    - 1.2.6.1. Cylindrical Lenses
    - 1.2.6.2. Spherocylindrical Lenses
    - 1.2.6.3. Transposition
- 1.3. Contactology
  - 1.3.1. Types of Contact Lenses
    - 1.3.1.1. Adaptation Study
  - 1.3.2. Nocturnal Orthokeratology
  - 1.3.3. Complications
- 1.4. Laser Corneal Refractive Surgery I
  - 1.4.1. Principle of Correction
  - 1.4.2. Preoperative Tests
  - 1.4.3. LASIK
    - 1.4.3.1. Indications
    - 1.4.3.2. Procedure
    - 1.4.3.3. Complications







- 1.5. Laser Corneal Refractive Surgery II
  - 1.5.1. PRK and LASEK
    - 1.5.1.1. Indications
    - 1.5.1.2. Procedure
    - 1.5.1.3. Complications
- 1.6. Phakic Lenses
  - 1.6.1. Types
  - 1.6.2. Indications
  - 1.6.3. Preoperative Tests
  - 1.6.4. Procedure
  - 1.6.5. Complications
- 1.7. Pseudophakic Lenses
  - 1.7.1. Ocular Biometry and Intraocular Lens Calculation
    - 1.7.1.1. Bio-Meters
    - 1.7.1.2. Calculation Formulas
    - 1.7.1.3. Types of Intraocular Lens
      - 1.7.1.3.1. Monofocal
      - 1.7.1.3.2. Multifocal
      - 1.7.1.3.3. O-rings
    - 1.7.1.4. Online Calculation Resources
  - 1.7.2. Types of Pseudophakic Intraocular Lenses



*Enroll now in the world's largest Online Medical School and become part of an international community of specialists to keep up-to-date with advances happening around the world"*

# 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.



“

*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.

“

*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 Vision Correction Alternatives guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



“

*Successfully complete this program  
and receive your university qualification  
without having to travel or fill out  
laborious paperwork”*

This program will allow you to obtain your **Postgraduate Certificate in Vision Correction Alternatives** 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 Vision Correction Alternatives**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



\*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.

future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

**tech** global  
university

personalized service innovation

knowledge present

online training

development languages

virtual classroom

## Postgraduate Certificate

Vision Correction

Alternatives

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



# Postgraduate Certificate Vision Correction Alternatives

