Postgraduate Certificate
Corneal Refractive Surgery

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Postgraduate Certificate
Corneal Refractive Surgery

- Modality: **online**
- Duration: **6 weeks**
- Certificate: **TECH Technological University**
- Dedication: **8h/week**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/in/medicine/postgraduate-certificate/corneal-refractive-surgery**

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01

Introduction

Visual health is an issue of great importance in today's society, and Corneal Refractive Surgery has become an increasingly popular option to treat vision problems such as myopia, astigmatism and presbyopia. Therefore, if you are a professional interested in this branch of ophthalmology, TECH Technological University presents you with an excellent learning opportunity: a specialized program in Corneal Refractive Surgery. Through this course, you will acquire knowledge about corneal anatomy, physiology and pathology, as well as the most advanced surgical techniques such as PRK, LASIK/LASEK, Femtolasik and Smile, among others. Best of all, the degree is delivered 100% online, allowing you to study at your own pace and adapt to your needs.

Do you want to be an expert in Corneal Refractive Surgery? With this University Course, you will deepen your knowledge of the anatomy, physiology and pathology of the cornea, as well as update you on laser techniques with both microkeratome and femtosecond"

Corneal Refractive Surgery is a branch of ophthalmology that has evolved significantly in the last decades. Thanks to it, a wide variety of visual problems, such as myopia, astigmatism and presbyopia, have been corrected, thus improving the quality of life of many people. This technique consists of modifying the shape of the cornea through the use of lasers and other surgical techniques. However, to ensure the safety and efficacy of these procedures, it is essential that specialists have up-to-date knowledge on the subject.

The reason for this is simple, because technological advances and surgical techniques have evolved at an accelerated pace. Specialists who are not up to date on the latest developments could become obsolete and fail to provide the best treatment options to their patients. Likewise, the management of possible complications that may arise during surgery is crucial, and only a properly trained specialist will be able to ensure quality care and safety for his patients.

In this University Course on Corneal Refractive Surgery, the fundamental topics that every specialist in the area should know will be addressed. First, the anatomy, physiology and pathology of the cornea, as well as its healing process, will be studied in depth. Then, the different laser surgical techniques available, such as PRK, LASIK/LASEK, Femtolasik and Smile, among others, will be discussed. Postoperative management and complications that may arise during and after surgery will also be taught. In addition, other disused surgical techniques will be reviewed and current trends will be discussed.

The 100% online program will use audiovisual tools and state-of-the-art technology for a comprehensive learning experience. In addition, recognized experts in the field will be present to share their experience and knowledge.

This Postgraduate Certificate in Corneal 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 Corneal 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

Transform people's lives through the knowledge you will acquire in this University Course in Corneal Refractive Surgery. Propel your career towards change!"

Thanks to the autonomous learning at your own pace that TECH's teaching methodology allows you to combine this program with other professional or personal activities"

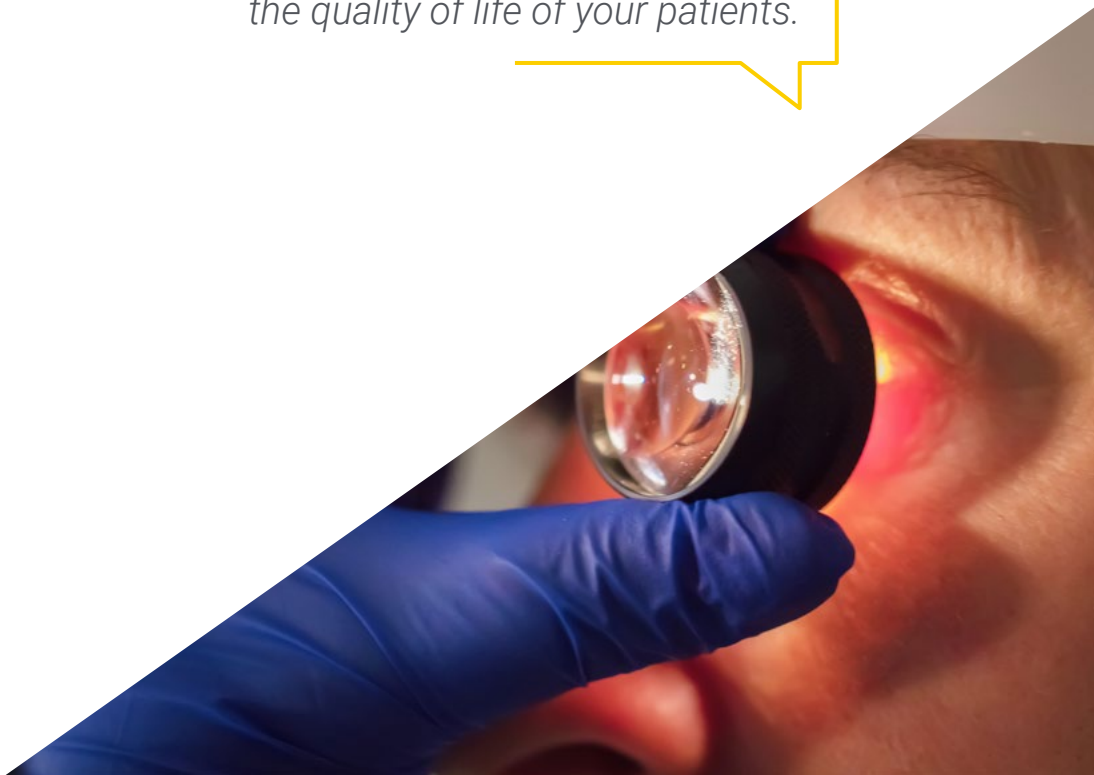
TECH's teaching methodology, Relearning, ensures you a complete and updated training in this field of medicine.

Become an expert in Corneal Refractive Surgery and help improve the quality of life of your patients.

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.



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Objectives

The design of the program of this University Course in Corneal Refractive Surgery will allow the student to acquire anatomical and physiological knowledge of the cornea, addressing the different laser surgical techniques, as well as postoperative management and prevention and treatment of complications. In addition, the degree aims to enable participants to identify special situations in which the use of lasers is necessary and to know how to act in such situations. With this program, ophthalmology professionals will be able to improve their skills and knowledge in corneal refractive surgery and offer high quality treatment to their patients.

Delve into the corneal tissue and learn to identify the best action in special situations with the use of lasers in this University Course in Corneal Refractive Surgery"

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 deepen in the operation of an excimer laser and what are the fundamental characteristics of some excimer platforms
- 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 deeper into the cornea, the tissue on which the excimer acts
- To update knowledge on techniques that can be lasered on the cornea with both microkeratome and femtosecond
- Address the complications of surgery, as well as the need for reoperation on occasion
- Identify the action to be taken when using lasers in special situations

Update your knowledge on corneal laser techniques and prevent complications in Corneal Refractive Surgery thanks to the specialized University Course"

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Course Management

The direction of the University Course in Corneal Refractive Surgery has been carefully chosen by TECH Technological University to guarantee the academic and professional excellence of the program. The lecturers selected to teach the classes are prestigious experts in the field of Corneal Refractive Surgery, with extensive experience and up-to-date knowledge. Their work is essential for students to acquire the necessary skills to perform successfully in their future professional practice. In addition, the program management is committed to the Relearning pedagogical methodology, which allows for an innovative and effective didactic approach to online learning.

TECH together with the best experts in Corneal Refractive Surgery assure you a quality education in this medical specialty in constant evolution, during the development of this Professional Course"

Management

Mr. Román Guindo, José Miguel

- Ophthalmologist at Oftalvist Málaga
- Ophthalmologist at Vissum Madrid
- Ophthalmologist at Dubai International Medical Center
- Medical Director of Vissum Madrid Sur and Vissum Málaga
- Specialist in Ophthalmology, San Carlos Hospital Clinic, Madrid
- Doctor of Ophthalmology
- Degree in Medicine and General Surgery from the Universidad Autónoma de 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 Hospital Universitario Poniente
- Head of the Ophthalmology Diseases Department, of 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

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Structure and Content

The syllabus of this degree has been comprehensively designed to provide graduates with the necessary knowledge to perform laser surgical techniques for the correction of vision problems such as myopia, hyperopia and astigmatism. The topics to be covered in the University Course include basic aspects such as anatomy, physiology, pathology and corneal healing. Laser surgical techniques such as PRK, LASIK/LASEK, Femtolasik and Smile, among others, are also treated. In addition, microkeratome and femtosecond laser techniques are taught, as well as postoperative management and complications that may arise. All these woodworking skills are also taught 100% online through dynamic and interactive materials such as downloadables and case studies.

Enroll now in this 100% online program and get your degree in just a few weeks Don't miss the opportunity to become an expert in Corneal Refractive Surgery"

Module 1. Corneal Refractive Surgery

1.1. Cornea
- 1.1.1. Anatomy
- 1.1.2. Physiology
- 1.1.3. Pathology
- 1.1.4. Corneal Healing

1.2. Laser surgical techniques
- 1.2.1. PRK
- 1.2.2. LASIK/LASEK
- 1.2.3. Femtolasik
- 1.2.4. Smile

1.3. Microkeratomes and femtosecond lasers
- 1.3.1. Corneal flap
- 1.3.2. Nasal hinge microkeratomes
- 1.3.3. Upper hinge microkeratomes
- 1.3.4. Femtosecond laser

1.4. Post-Operative Care
- 1.4.1. Physical Activity
- 1.4.2. Hygiene standards
- 1.4.3. Treatment
- 1.4.4. Postoperative revisions

1.5. Complications of laser surgery
- 1.5.1. Pre Surgery
- 1.5.2. Pre Surgery
- 1.5.3. Specific trans-operative procedures for laser use
- 1.5.4. Post-Operatives

1.6. Retoques con láser
- 1.6.1. Preoperative evaluation and indications
- 1.6.2. Surgical Techniques
- 1.6.3. Risk
- 1.6.4. Postoperative Care

1.7. Laser after keratoplasty (QPP)
- 1.7.1. How and when
- 1.7.2. Surgical Technique
- 1.7.3. Results
- 1.7.4. Conclusions

1.8. Laser after surgery with phakic and pseudophakic lenses
- 1.8.1. PRK
- 1.8.2. Lasik
- 1.8.3. Triple procedure
- 1.8.4. Aphakia

1.9. Intrastromal rings
- 1.9.1. Patient selection
- 1.9.2. Surgical technique and mechanisms of action
- 1.9.3. Results
- 1.9.4. Complications

1.10. Other Surgical Techniques
- 1.10.1. Presbyopic Lasik
- 1.10.2. Thermal/conductive keratoplasty
- 1.10.3. PTK
- 1.10.4. Other techniques in disuse

A wide range of innovative content and the latest methodologies in education await you. Look no further and get up to date with this University Course in Corneal Refractive Surgery"

05

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

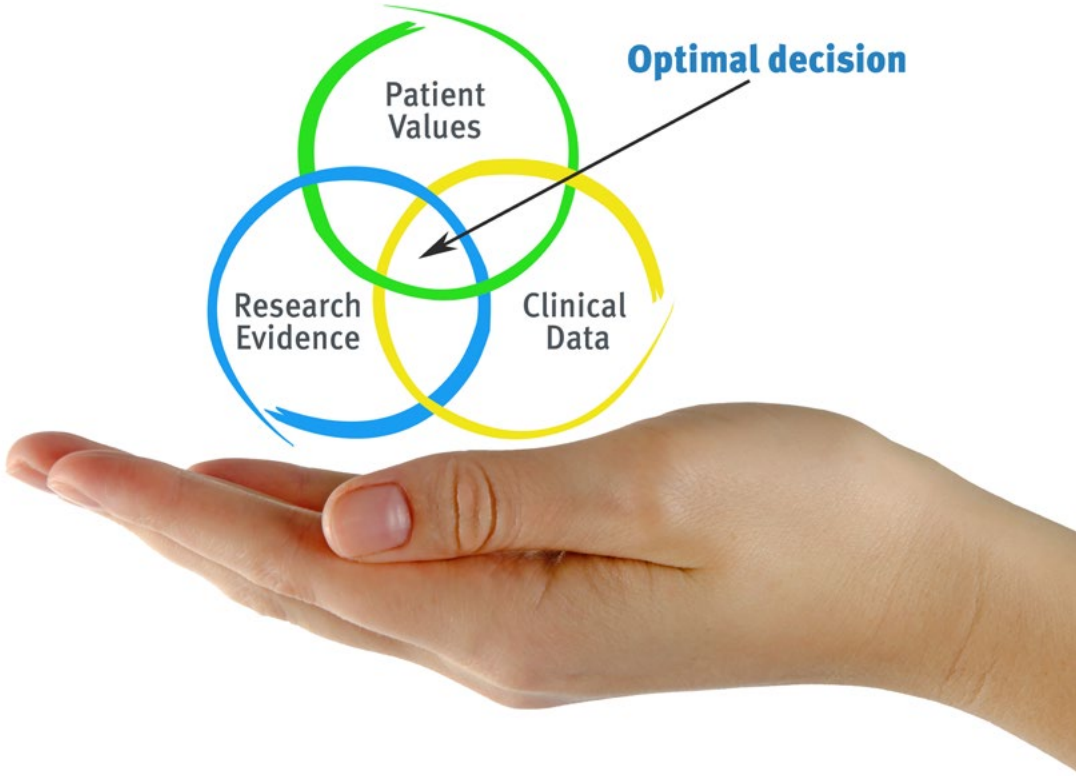
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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:

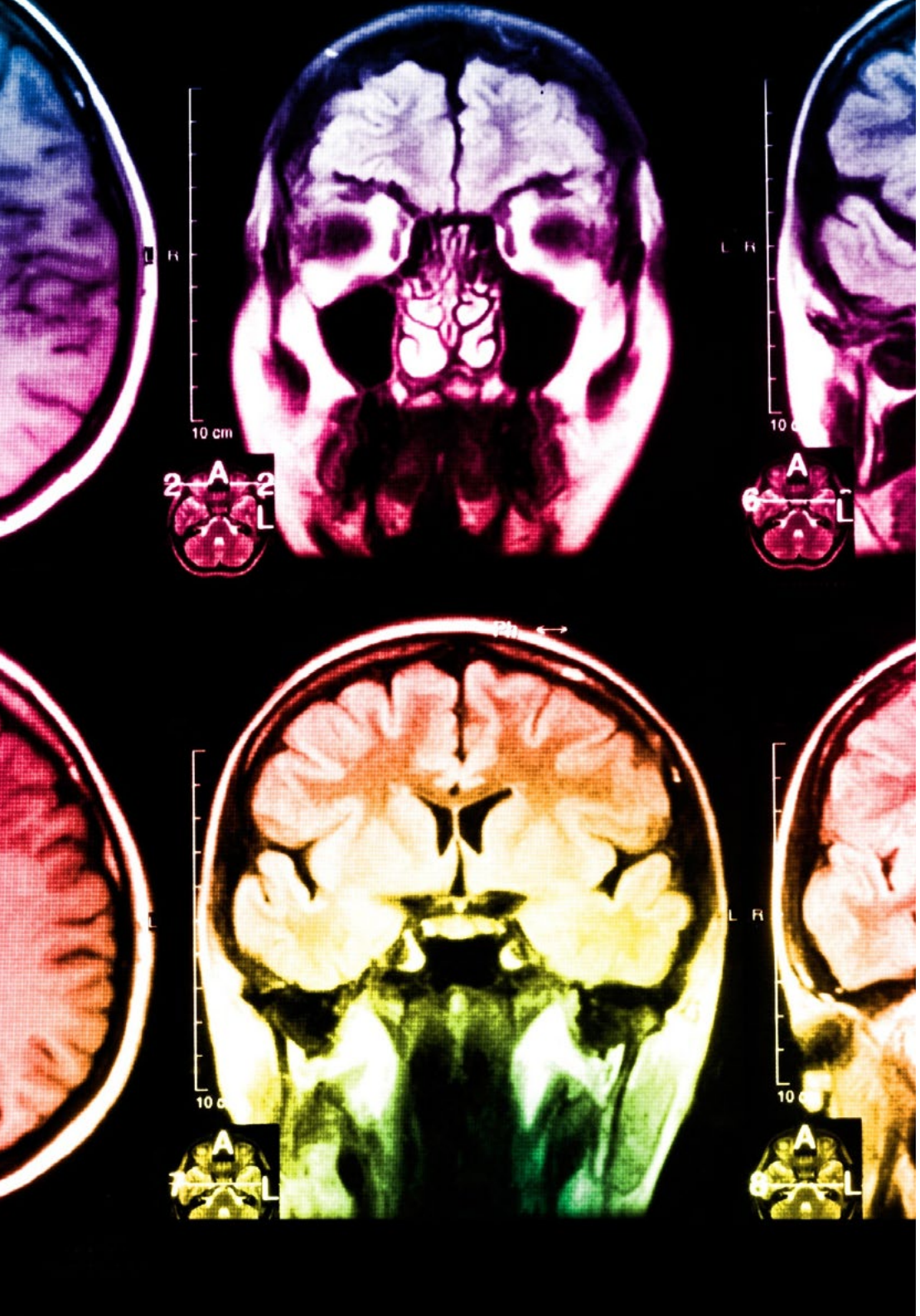
1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better 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.

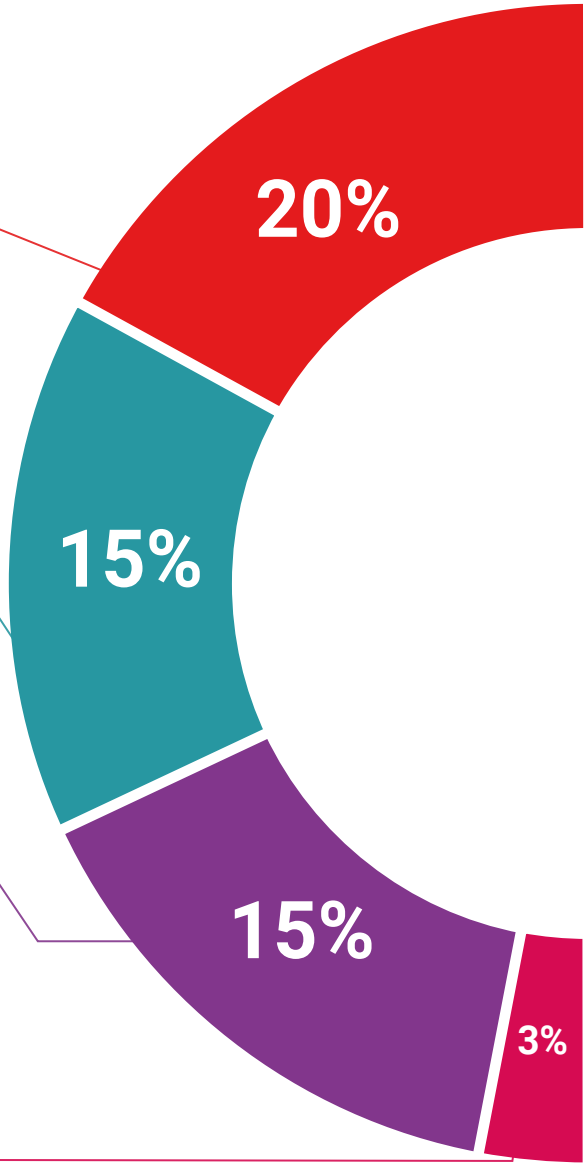
Interactive Summaries

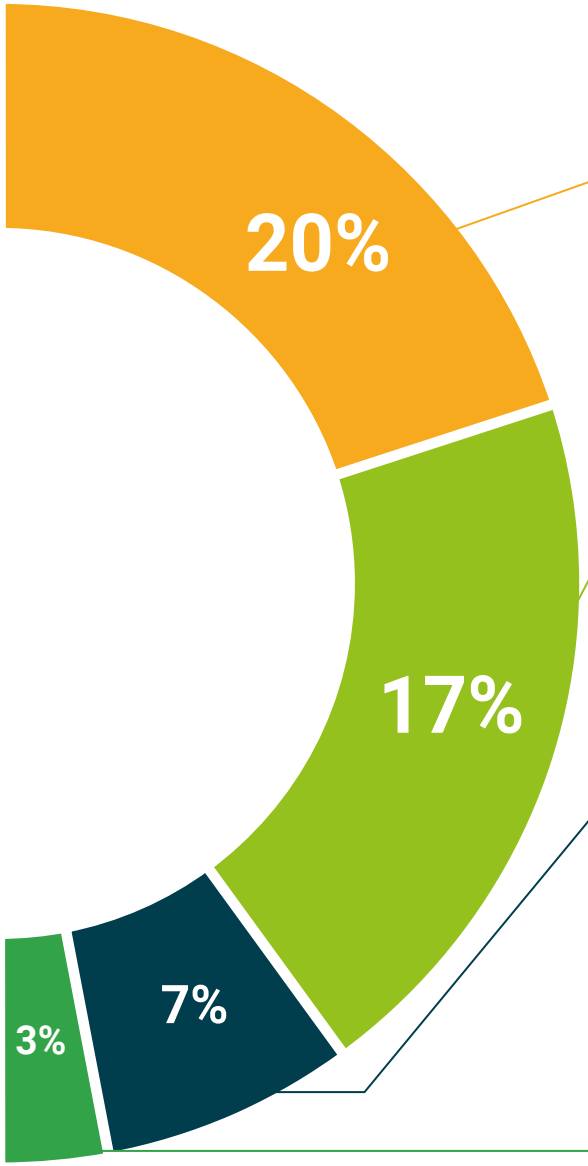
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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 Corneal Refractive Surgery guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

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

This **Postgraduate Certificate in Corneal Refractive Surgery** ontains 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 certificate 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.

Program: **Postgraduate Certificate in Corneal Refractive Surgery**

Official Nº of Hours: **150 h.**


tech technological university

Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Corneal Refractive Surgery

This is a qualification awarded by this University, equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro

Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*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.

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Postgraduate Certificate
Corneal Refractive Surgery

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- Dedication: **8h/week**
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