

# Postgraduate Certificate

## Laser in Advanced Aesthetic Medicine





## Postgraduate Certificate Laser in Advanced Aesthetic Medicine

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

Website: [www.techtute.com/us/medicine/postgraduate-certificate/laser-advanced-aesthetic-medicine](http://www.techtute.com/us/medicine/postgraduate-certificate/laser-advanced-aesthetic-medicine)

# 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

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*p. 28*

# 01

# Introduction

Due to its ability to treat a wide range of skin and body conditions, lasers have become one of the most demanded alternatives by patients. There are different types, both ablative and non-ablative, each with specific mechanisms of action and main applications. Physicians working in this field need to have this knowledge, as well as the necessary skin preparation, anesthesia and safety during its application. Physicians working in this field need to have this knowledge, as well as the necessary skin preparation, anesthesia and safety during its application. For this reason, TECH has created the following degree with the aim of training professionals in this area, providing them with the most up-to-date knowledge in the sector and with the most cutting-edge informative contents. All of this through audiovisual resources, complementary readings and practical exercises and practical exercises developed with the Relearning methodology.



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*Update yourself at your own pace,  
without having to submit to simultaneous  
classes or transfers to centers”*

Nowadays, advanced aesthetic medicine is a constantly evolving specialty. More and more people are resorting to this type of non-invasive treatments to improve their physical appearance and combat aging. This has generated a greater demand for professionals specialized in the use of technologies such as lasers for medical intervention.

Due to this reality, it is necessary for physicians to be trained and up-to-date in the latest techniques and technologies in order to satisfy the needs of patients and maintain their competitiveness in the labor market. This is why the Postgraduate Certificate in Laser in Advanced Aesthetic Medicine is an effective response to this demand for specialized training.

This program provides physicians with the necessary knowledge to perform aesthetic laser treatments safely and effectively, applying the latest trends and techniques in the field. In its 100% online format, it allows the professional to accommodate his or her healthcare work with the acquisition of new knowledge. It also has the participation of experts and specialists in the sector, who, committed to updating the new generations, have poured their experience into each of the topics of study.

This **Postgraduate Certificate in Laser in Advanced Aesthetic Medicine** 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 experts in Laser in Advanced Aesthetic Medicine
- ◆ 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 stand out in a booming sector with great future projection due to the needs of patients"*



*Download the content of the program to your preferred device and review it as many times as you need while offline"*

*You will learn the latest advances in the use of lasers for pigmented lesions and tattoos.*

*A 100% online program that allows you to develop it at your convenience.*

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.



# 02 Objectives

The aim of this program is to train the medical professional in the use of lasers in advanced aesthetic procedures. For this purpose, it will present them with high impact academic content developed with audiovisual resources, complementary readings and practical exercises. In this way, as you overcome each of the topics of study, you will implement this information to your practice, applying it in turn with new skills acquired in each of the proposed activities.







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*This training is a quality leap in your medical updating. What are you waiting for? Enroll now!*”



## General Objectives

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- ◆ Update the professional's knowledge in order to be a Aesthetic Medicine expert on the best and newest treatments and to know how to apply them in an adequate and individualized way for each patient
- ◆ Influence the establishment of the most innovative guidelines for an exquisite doctor-patient relationship
- ◆ Get updated on the most important advices regarding risk prevention, complications and emergency situations
- ◆ Learn about the latest developments in Aesthetic Medicine, its treatments and techniques in a way that is not purely theoretical, but through dynamic and practical material





## Specific Objectives

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- ◆ Deepen in laser technology, and the different types of lasers that currently exist, both ablative and non-ablative
- ◆ Deepen in how to treat different types of lesions (vascular lesions and pigmented lesions) based on current and pigmented lesions) based on the current criteria of Aesthetic Medicine
- ◆ Update in depigmentation of tattoos
- ◆ Update on the use of laser photoepilation

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*You will be one step closer to professional excellence after successfully completing this Postgraduate Certificate”*



03

# Course Management

One of TECH's priorities when designing its programs is the formation of a teaching staff that provides knowledge and experience. Therefore, for this Postgraduate Certificate, has selected outstanding professionals in aesthetic medicine, who in addition to excel in procedures of extreme complexity, have implemented in their practice the use of laser. Therefore, the student will have access to exclusive material that will allow him/her to be trained by the best.

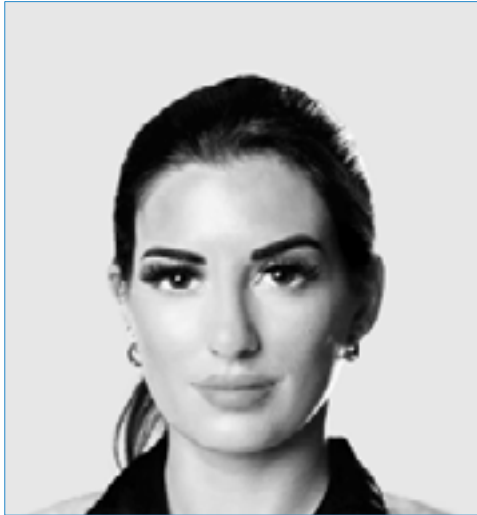




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*In addition to its extensive informative content, the best active teaching staff will provide you with the keys to advanced aesthetics"*

## Management



### Dr. Ruiz Allende, Alba María

- ◆ Medical Director of Aesthetic Medicine of the Clínica Londres Group
- ◆ Director of the Department of Aesthetic Medicine in the IMEMA Clinic
- ◆ Aesthetic medicine workshops trainer
- ◆ University professor at the CEU and UCAM
- ◆ Professor of MIR preparation at CTO
- ◆ Clinical researcher and editor of the magazine Emergency Live
- ◆ Residency in the specialty of Family, Community and Emergency Medicine at the Hospital Clínico San Carlos
- ◆ Master in Aesthetic Medicine and Nutrition at the Catholic University San Antonio of Murcia
- ◆ Master's Degree in Business Management from the Catholic University San Antonio of Murcia
- ◆ Master's Degree in Clinical Bioethics from UIMP

## Professors

### Dr. Miguel Ferrero, Miriam

- ◆ Specialist in Pediatric Surgery at Hospital Universitario Quirónsalud Madrid
- ◆ Pediatric surgeon and specialist in Reconstructive and Plastic Surgery
- ◆ Teaching collaborator in the Master in Pediatric Dermatology
- ◆ Teaching collaborator in Master's Degree in Grandes Quemados (Major Burns)
- ◆ Teaching collaborator in Master in Applied Mastology and Breast Cancer Treatment
- ◆ Expert in laser treatment of scars

### Dr. López García, María del Valle

- ◆ Specialist in Dental and Orofacial Esthetics
- ◆ Orthodontist
- ◆ Degree in Dentistry
- ◆ Master in Orthodontics and Dentofacial Orthodontics
- ◆ Master of Excellence in Orthodontics and Orthognathodontics
- ◆ Invisalign Certification
- ◆ Member of the Official College of Dentists and Stomatologists



# 04

## Structure and Content

TECH has selected for the development of this degree the academic topics of greatest demand and with great repercussion within the field. Each one of them is exposed through audiovisual resources and complementary readings, in order to allow the professional to catapult their skills and abilities to achieve their work goals. In this way, a new acquisition of knowledge is guaranteed in a dynamic and effective way, also using the Relearning methodology.





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*First-hand information presented through high-impact audiovisual resources by experts and specialists”*

## Module 1. Laser

- 1.1. General Classification: Types of Laser
  - 1.1.1. Ablative laser
    - 1.1.1.1. Mode of execution
    - 1.1.1.2. Types
    - 1.1.1.3. Main Applications
  - 1.1.2. No Ablative laser
    - 1.1.2.1. Mode of execution
    - 1.1.2.2. Types
    - 1.1.2.3. Main Applications
    - 1.1.2.4. Comparative table:
- 1.2. Intense Pulsed Light Laser (IPL)
  - 1.2.1. Mechanisms of action
  - 1.2.2. Principal indications
  - 1.2.3. Results
- 1.3. Led Laser
  - 1.3.1. Mechanisms of action
  - 1.3.2. Principal indications
  - 1.3.3. Results
- 1.4. CO2 Laser
  - 1.4.1. Mechanism of Action
  - 1.4.2. Principal indications
  - 1.4.3. Results
- 1.5. Erbium Laser YAG
  - 1.5.1. Mechanism of Action
  - 1.5.2. Principal indications
  - 1.5.3. Results
- 1.6. Q-Switched Laser
  - 1.6.1. Mechanisms of action
  - 1.6.2. Principal indications
  - 1.6.3. Results





- 1.7. Hair removal laser
  - 1.7.1. Mode of execution
  - 1.7.2. Laser types used for hair removal
    - 1.7.2.1. Ruby (694 nm)
    - 1.7.2.2. Alexandrite (755 nm)
    - 1.7.2.3. Diode( 800 nm)
    - 1.7.2.4. Neodymium Yag (1064 nm)
    - 1.7.2.5. Intense Pulsed Light IPL
  - 1.7.3. Results
- 1.8. Laser for pigmented lesions and tattoos
  - 1.8.1. Laser used for pigmented lesion removal
  - 1.8.2. Laser used for tattoo depigmentation
  - 1.8.3. Results
- 1.9. Laser in some medical pathologies
  - 1.9.1. Acne laser treatment
  - 1.9.2. Scar treatment with laser
  - 1.9.3. Stretch mark treatment with laser
  - 1.9.4. Vascular lesion treatment (percutaneous vascular laser)
  - 1.9.5. Laser Lipolysis
    - 1.9.5.1. Concept
    - 1.9.5.2. Laser type used
    - 1.9.5.3. Results
- 1.10. Skin Preparation Anesthesia. Safety and protection during the use of lasers and other light sources
  - 1.10.1. Pre-laser skin preparation
  - 1.10.2. Anesthesia used prior to laser
  - 1.10.3. Physician and patient safety
    - 1.10.3.1. Eye Protection
  - 1.10.4. Intralesional photodynamic therapy (novel treatment modality that improves clinical results)

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.





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*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.

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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 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 Laser in Advanced Aesthetic Medicine guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

This **Postgraduate Certificate in Laser in Advanced Aesthetic Medicine** contains 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 diploma 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.

Title: **Postgraduate Certificate in Laser in Advanced Aesthetic Medicine**

Official N° of Hours: **150 h.**



\*Apostille Convention. In the event that the student wishes to have their paper diploma 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  
development language  
virtual classroom



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