



Postgraduate Certificate

Laser and Light Sources in Aesthetic Medicine

» 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/laser-light-sources-aesthetic-medicine

Index

 $\begin{array}{c|c} 01 & 02 \\ \hline & & Objectives \\ \hline 03 & 04 & 05 \\ \hline Course Management & Structure and Content & Methodology \\ \hline & & p. 18 & 06 \\ \hline \end{array}$

Certificate

p. 30





tech 06 | Introduction

The importance of beauty, both feminine and masculine, is booming in recent years. Therefore, it is not surprising that many people decide to undergo cosmetic treatments to improve their image, especially to reduce skin aging

This course will provide students with the appropriate knowledge to use the different types of lasers and light sources in the treatment of rejuvenation and skin disorders in an effective way, highlighting the knowledge of the basic principles of physics on which their use is based, without forgetting to provide knowledge regarding the safety standards of use

In addition, we will provide current training on the use of lasers in pigmented lesions, rejuvenation, vascular lesions, hair removal, emphasizing the proper selection of technology that will allow us to adapt to the needs of each patient, highlighting a global vision of treatment strategies, indications, contraindications and possible adverse effects

The Postgraduate Certificate in Laser and Light Sources in Aesthetic Medicine is a training program designed to provide physicians with the necessary knowledge to implement the specialization in their professional life. It brings an added balance to working life and opens a door to a growing demand for healthcare

This **Postgraduate Certificate in Laser and Light Sources in Aesthetic Medicine** contains the most complete and up-to-date educational program on the market. The most important features of the program include:

- The development of case studies presented by experts in Laser and Light Sources in Aesthetic Medicine
- The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- The latest developments in Laser and Light Sources in Aesthetic Medicine
- Practical exercises where the self-assessment process can be carried out to improve learning
- Special emphasis on innovative methodologies in Laser and Light Sources in Aesthetic Medicine
- 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



Expand your knowledge through this course in Laser and Light Sources in Aesthetic Medicine that will allow you to specialize until you achieve excellence in this field"

Introduction | 07 tech



This course may be the best investment you can make in the selection of a refresher program for two reasons: besides updating your knowledge in Laser and Light Sources in Aesthetic Medicine, you will obtain a University Course certificate by TECH Global University"

The teaching staff includes professionals from the field of Aesthetic Medicine, who bring their experience to this training program, as well as renowned specialists from leading societies and prestigious universities

Theultimerdia 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 programmed to train in real situations

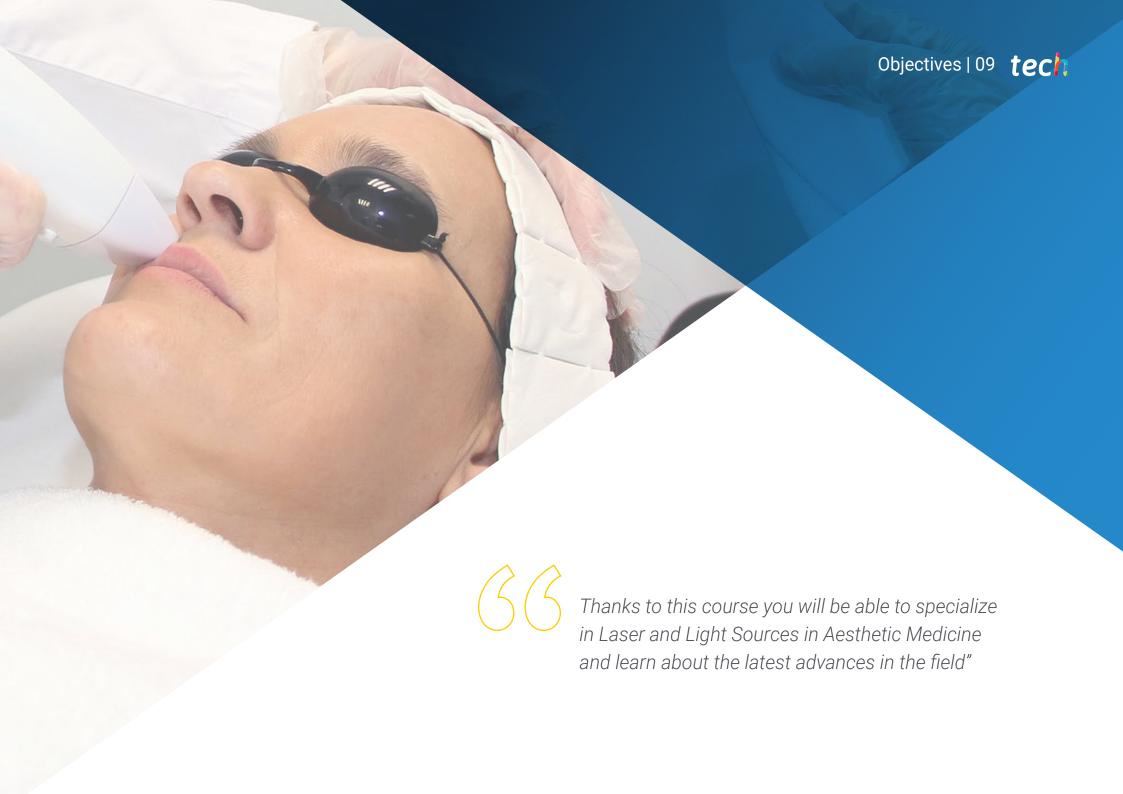
This program is designed around Problem Based Learning, whereby the physician must try to solve the different professional practice situations that arise during the academic year. For this purpose, the teacher will be assisted by an innovative interactive video system made by recognized and experienced experts in the field of Laser and Light Sources

Do not hesitate to take this training with us. You will find the best teaching material with virtual lessons.

This 100% online course will allow you to combine your studies with your professional work while increasing your knowledge in this field.







tech 10 | Objectives



General Objectives

- Gain knowledge of all anti-aging modalities and aesthetic treatments, incorporating the necessary tools to exercise this specialty in their daily practice
- Learn how to control, delay and prevent the aging that exists today



Update your knowledge with this Postgraduate Certificate in Laser and Light Sources in Aesthetic Medicine"







Specific Objectives

- Provide students with the appropriate knowledge to use the different types of lasers and light sources in rejuvenation treatment and skin disorders in an effective way, highlighting the knowledge of the basic principles of physics on which their use is based without forgetting to include knowledge concerning the safety guidelines for their use
- Provide up-to-date information on the use of lasers for pigmented lesions, rejuvenation, vascular lesions and hair removal, with emphasis on the appropriate selection of the technology that enables us to adapt to the needs of each patient, highlighting a comprehensive overview of treatment strategies, indications, contraindications and possible adverse effects
- Get up to date on the types of authorized botulinum toxin, the precise knowledge
 of the action mechanisms of each one and the detailed instructions for each
 anatomical area
- Get to know the therapeutic application of the factors that intervene in biological processes
- Learn about the therapeutic application of the factors that intervene in biological processes



03

Course Management





tech 14 | Course Management

Management



Dr. Mosquera González, Margarita

- Medical Director of the Comprehensive Aesthetic Medicine area. C&M Clinic. Rivas. Madri
- Specialist Physician in the Preventive Medicine Unit of the Alcorcón Foundation University Hospita
- Specialist in Aesthetic and Anti-Aging Medicine



Dr. Lacosta Esclapez, Pilar

- Head of the Department of Aesthetic Medicine of the Lipedema Unit Virgen de la Paloma Viamed Hospita
- Head of the Department of Aesthetic Oncological Medicine at the Plastic Surgery Clinic of Dr. Granado Tiogonce
- Responsible for the Unit of Quality of Life of the Oncology Patient
- Aesthetic Physician at Nuestra Señora de La Paloma Hospital
- Aesthetic Physician at Pilar Lacosta Clinic
- Medical Director of the Sergesa Center for Dependency
- Director of Aesthetic Oncology Medicine Unit in the clinic of Dr. Granado in Pozuelo de Alarcón
- Medical Director of Dr. Pilar Lacosta Clinic in Boadilla del Monte
- Some societies to which she belongs, Member of the Board of Directors of the group of experts in aesthetic medicine in oncology patients (GEMEON), SEMNO (Spanish Society of Nutrition and Orthomolecular Medicine), SEME (Spanish Society of Aesthetic Oncological Medicine)

tech 16 | Course Management

Professors

Dr. Arroyo Romo, César

- Head Physician of the Regenerative and Aesthetic Medical Laser Unit of the HM Montepríncipe Hospital, Madrid
- President of the Spanish Society of Aesthetic, Functional and Regenerative Gynecology
- Former International Director of the Iberoamerican Academy of Medical Lasers AILMED
- International teacher of Aesthetic Medicine, Aesthetic and Laser Techniques
- Member of numerous prestigious societies, American Society for Laser Medicine and Surgery ASLMS, Spanish Society of Medical Surgical Laser SELMQ, Portuguese Society of Aesthetic Medicine (SPME), Scientific Committee of the International Association of Aesthetic Gynecology and Sexual Wellbeing IAAGSWS, International Society of Aesthetic Gynecology ISAGSS

Dr. Aldana López, Guillermo

- Director of Aldana Laser Miami and Venezuela
- Lead researcher in the study of applications of light technology in the treatment of facial rejuvenation
- Award for the best presentation at the 19th Conference of the Spanish Society of Medical Laser Surgery; photoepilation with Alexandrite laser on skin grafts after facial reconstructive surgery
- Member of several societies, American Society for Laser Medicine and Surgery, American Association of Aesthetic Medicine and Surgery





Course Management | 17 tech

Dr. Saco Mera, Edmundo

- Medical Director at D'Láser Clinic
- National and International Speaker of Laser and Photoluminescent Platforms for some of the most important laser equipment commercial houses
- Speaker at national and international congresses and courses on aesthetic medicine and medical lasers
- Collaborator of the Editorial Committee of the Scientific Magazine of the Faculty of Medicine of the Ricardo Palma University



Our teaching team will provide you with all their knowledge so that you are up to date with the most up-to-date information on the subject"

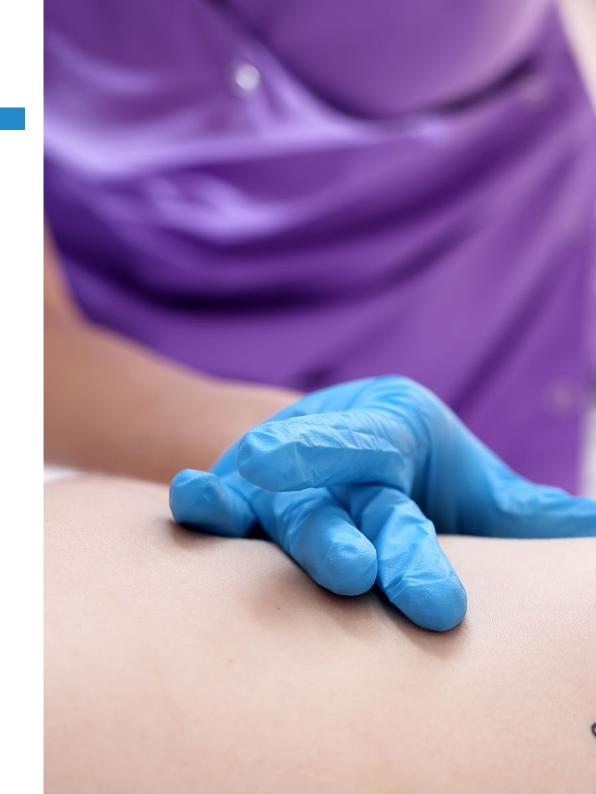




tech 20 | Structure and Content

Module 1. Laser and Light Sources in Aesthetic Medicine

- 1.1. History of the Use of Light Sources. Current Indications
 - 1.1.1. History of the Use of Light Sources
 - 1.1.2. What is Light? What is Wavelength? What is a Chromophore?
 - 1.1.3. Fabric Optics
 - 1.1.4. Interaction of Light and Tissue: Biological Effects
 - 1.1.5. Therapeutic Effects: Theories of Action
 - 1.1.6. Light Emission Systems: Laser, Intense Pulsed Light and LEDs
- 1.2. Treatment of Vascular Lesions
 - 1.2.1. Main Indications: Most Commonly Used Laser Types and Light Sources
 - 1.2.2. Contraindications
 - 1.2.3. Side Effects
- 1.3. Treatment of Pigmented Lesions and Tattoos
 - 1.3.1. Differential Diagnosis of Pigmented Blemishes. Importance of the Use of Wood's Light and Dermatoscope
 - 1.3.2. Laser and Light Source Treatment of Pigmented Blemishes
 - 1.3.3. Laser Treatment of Tattoos
 - 1.3.4. Contraindications
 - 1.3.5. Side Effects
- 1.4. Laser Photoepilation and Light Sources
 - 1.4.1. Patient Selection and Types of Treatment
 - 1.4.2. Treatment of Particular Cases
 - 1.4.3. Contraindications
 - 1.4.4. Side Effects
- 1.5. Treatment of Acne, Scars, and Stretch Marks with Lasers and Light Sources
 - 1.5.1. Acne: Treatment with Laser and Light Sources, Contraindications and Side Effects
 - 1.5.2. Scars: Grading, Treatment Types, Contraindications and Side Effects
 - 1.5.3. Stretch Marks: Types of Treatment, Contraindications and Side Effects



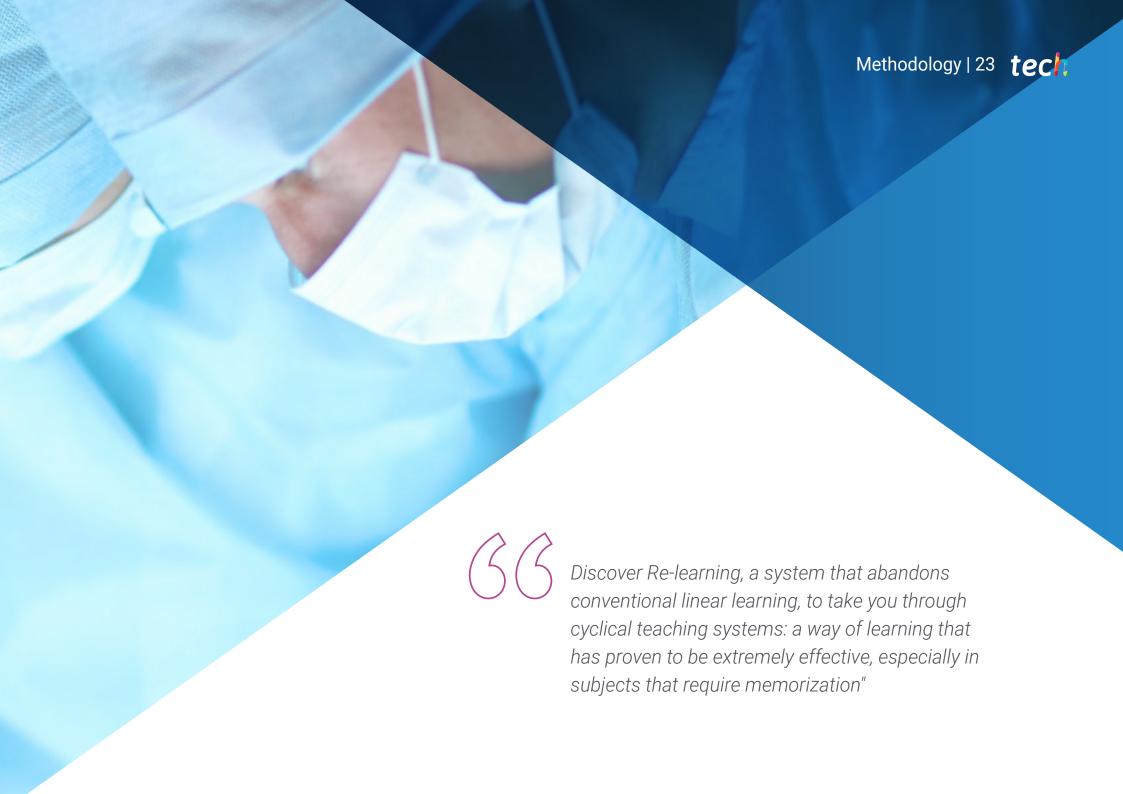


Structure and Content | 21 tech

- 1.6. Rejuvenation
 - 1.6.1. Ablative
 - 1.6.2. Non-Ablative
 - 1.6.3. Fractional Treatment
 - 1.6.4. Combination of Treatments
 - 1.6.5. Contraindications
 - 1.6.6. Side Effects
- 1.7. Localized Fat Treatment
 - 1.7.1. Laser Lipolysis
 - 1.7.2. LLLT (Low Level Laser Therapy)
- 1.8. Photobiomodulation
 - 1.8.1. What is Photobiomodulation?
 - 1.8.2. Indications
 - 1.8.3. Contraindications
 - 1.8.4. Side Effects
- 1.9. Photodynamic Therapy
 - 1.9.1. Definition
 - 1.9.2. Indications
 - 1.9.3. Contraindications
 - 1.9.4. Side Effects
- 1.10. Safety of Use of Light Sources
 - 1.10.1. Regulations
 - 1.10.2. Eye Protection
 - 1.10.3. Occupational Hazards







tech 24 | 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
- 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





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 | 27 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 socio-economic 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.

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

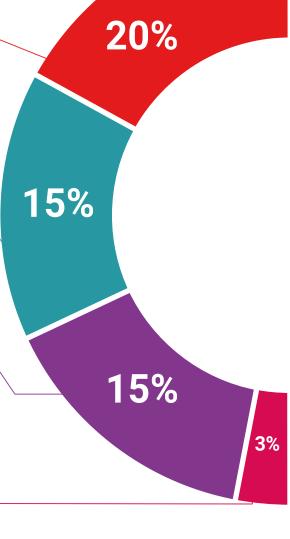
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want



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



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

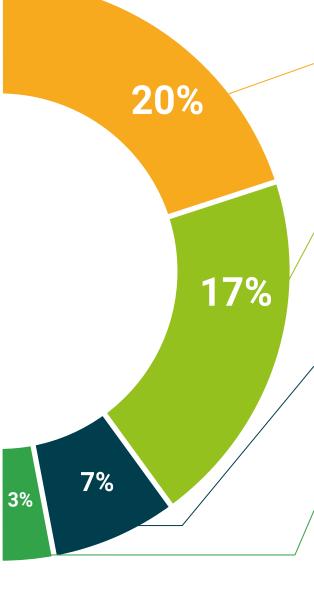
There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an expert strengthens knowledge and memory, and generates confidence in our future difficult decisions



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







tech 32 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Laser and Light Sources** in **Aesthetic Medicine** 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 Laser and Light Sources in Aesthetic Medicine

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



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

Postgraduate Certificate in Laser and Light Sources in Aesthetic Medicine

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.

tech global university



Postgraduate Certificate

Laser and Light Sources in Aesthetic Medicine

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

