Postgraduate Diploma Anatomy and Physiology in Therapeutic Yoga



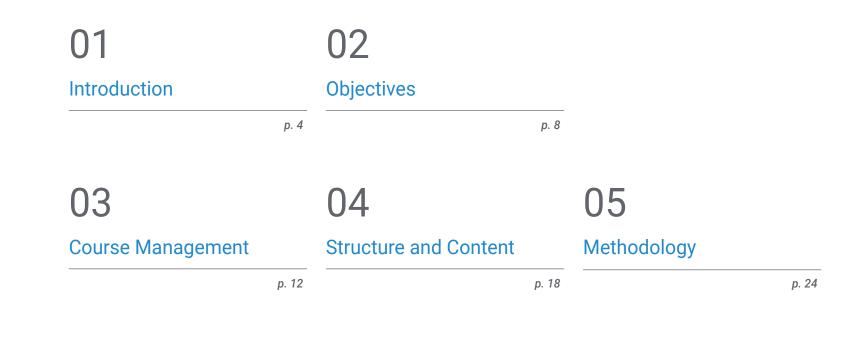


**Postgraduate Diploma** Anatomy and Physiology in Therapeutic Yoga

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

Website: www.techtitute.com/in/physiotherapy/postgraduate-diploma/postgraduate-diploma-anatomy-physiology-therapeutic-yoga

# Index



06

Certificate

р. 32

# 01 Introduction

Therapeutic Yoga is increasingly used to treat physical and mental ailments, which is why it has taken great relevance and has positioned itself as a complementary alternative for the treatment of diseases such as depression, anxiety, chronic pain and stress. Considering the above, it is essential that physiotherapy professionals have advanced knowledge about the Anatomy and Physiology of the body during the practice of different postures and respiratory techniques. For this, TECH has created an academic program that offers a broad perspective on the physical and biological aspects involved in the activation of the body during Therapeutic Yoga sessions. All this, through an informative conglomerate of great impact, enriched with audiovisual resources, additional readings and practical exercises.



A program that meets the demands and requirements of today's labor market. Don't wait any longer and enroll now"

# tech 06 | Introduction

Nowadays, more and more people are integrating Yoga into their therapeutic practice on a regular basis, finding greater benefits over traditional medical treatments or the abusive use of drugs. Therefore, it is essential that physiotherapy professionals know about the latest developments in this discipline in order to incorporate it into their daily practice to meet the needs of patients and improve their health conditions.

In view of this, TECH has developed an academic program for interested professionals to update their knowledge in aspects such as Anatomy and Physiology for the safe practice of Therapeutic Yoga. It is a Postgraduate Diploma made up of 3 academic modules that bring together cutting-edge and rigorous information on this field.

In this sense, during the next 6 months, the professional will find the most demanded knowledge and greater impact for the discipline of Yoga. All this presented through audiovisual resources, additional readings and practical exercises developed with the Relearning methodology.

As it is a 100% online program, the student will only need a device with an Internet connection, so you can organize your teaching load to study at the times of your convenience, without having to interrupt the personal aspects of your life. This will not only facilitate the acquisition of academic subjects, but will avoid cumbersome transfers to on-site attendance centers.

In addition, the prestigious teaching staff that has developed the syllabus for this program is joined by a renowned international director. Therefore, the graduate will have several Masterclasses given by her in audiovisual format, where she shares the knowledge acquired during the years of her extensive professional career. This **Postgraduate Diploma in Anatomy and Physiology in Therapeutic Yoga** 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 Anatomy and Physiology in Therapeutic Yoga
- 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 the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection work
- Content that is accessible from any fixed or portable device with an Internet connection



Don't miss this opportunity to specialize in the field of Therapeutic Yoga, which guarantees an increase in your work productivity"

## Introduction | 07 tech

A program that keeps you at the forefront of Therapeutic Yoga and its impact on Anatomy" TECH offers you a Virtual Campus with the most outstanding educational materials, available at any time and from anywhere.

Get up to date with the latest developments in Myofascial Pathways and Specific Postures.

The program's teaching staff includes professionals from the sector who contribute their work experience to this training 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 students will be assisted by an innovative interactive video system created by renowned and experienced experts.

# 02 **Objectives**

This Postgraduate Diploma aims to provide the physiotherapist an in-depth study of advanced concepts on the anatomy and physiology of the human body and its limitations during Yoga sessions. With this, the student will be able to design therapy sessions adapted to the needs and characteristics of each patient. The main objective is to provide students with a wide range of tools that allow them to have a comprehensive view of the discipline and its benefits in the context of physical therapy.

A program that presents you with multiple cases based on scientific evidence"

# tech 10 | Objectives



## **General Objectives**

- Incorporate the knowledge and skills that are necessary for the correct development and application of Therapeutic Yoga techniques from a clinical point of view.
- Create a Yoga program designed and based on scientific evidence.
- Delve into the most appropriate asanas according to the characteristics of the person and their injuries
- Delve into studies on biomechanics and its application to the asanas of Therapeutic Yoga
- Describe the adaptation of Yoga asanas to the pathologies of each person
- Delve into the Neurophysiological bases of the existing meditative and relaxation techniques





## Specific Objectives

### Module 1. Structure of the Locomotor System

- Delve into the anatomy and physiology of the skeletal, muscular and articular systems of the human body
- Identify the different structures and functions of the locomotor system and how they interrelate with one another
- Explore the different postures and movements of the human body, and understand how they affect the structure of the locomotor system
- Delve into common injuries of the musculoskeletal system and how to prevent them

### Module 2. Fascial System

- Delve into the history and concept of fascia, and its importance in yoga practice
- Delve into the different types of fascial mechanoreceptors and how to apply them in different styles of yoga
- Point out the need to apply the term fascia in yoga classes for a more effective and conscious practice
- Explore the origin and development of the term tensegrity, and its application in yoga practice
- Identify the different myofascial pathways and the specific postures for each of the chains
- Apply the biomechanics of fascia in yoga practice to improve mobility, strength and flexibility
- Identify the main postural imbalances and how to correct them through yoga practice and fascia biomechanics

### Module 3. Yoga at Different Evolutionary Moments

- Delve into the different needs of the body and yoga practice at different times of life, such as childhood, adulthood and old age
- Explore how yoga practice can help women during the menstrual cycle and menopause, and how to adapt the practice to meet their needs
- Delve into the care and practice of yoga during pregnancy and postpartum, and how to adapt the practice to meet women's needs at these times
- Identify the suitability of yoga practice for people with special physical and/or sensory needs, and how to adapt the practice to meet their needs
- Learn how to create yoga sequences specific to the human life cycle and individual need
- Identify and apply best practices to ensure safety and well-being during yoga practice in the human life cycle and special situations

You will be able to download the content of this program to your preferred device and review it as often as you need"

# 03 Course Management

TECH has carried out a careful selection of the teaching staff of this program to offer quality education and provide high-level pedagogical resources to its students. Students will have the opportunity to learn from leading professionals in the field, who will share a comprehensive update on the physical and biological aspects involved in the physiology of the body during Yoga therapies.

Course Management | 13 tech

TECH has brought together in a single program the most prominent professionals in the sector to provide you with the most up-to-date information"

## tech 14 | Course Management

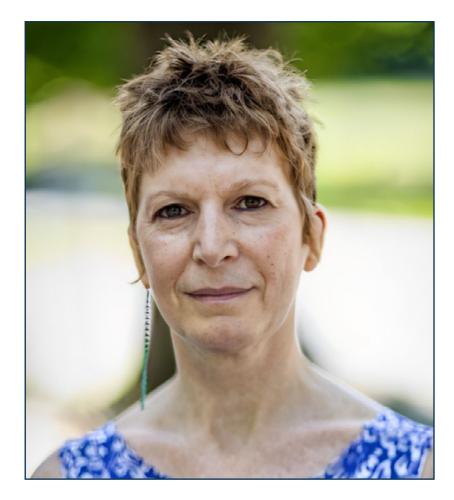
## **International Guest Director**

As the **Director of Teachers** and **Head of Instructor Education** at the Integral Yoga Institute in New York, Dianne Galliano is positioned as one of the most important figures in the field internationally. Her academic focus has been mainly **therapeutic yoga**, with more than 6,000 documented hours of teaching and continuing education.

In this way, her work has been to tutor, develop protocols and teaching criteria and provide continuing education to the instructors of the Integral Yoga Institute. She combines this work with her role as a therapist and instructor at other institutions such as The 14TH Street Y, Integral Yoga Institute Wellness Spa or the Educational Alliance: Center for Balanced Living.

Her work also extends to **creating and directing yoga programs**, developing exercises and assessing the challenges that may arise. Throughout her career, she has worked with many different profiles of people, including older and middle-aged men and women, prenatal and postnatal individuals, young adults and even war veterans with a range of physical and mental health issues.

For each of them she performs careful and customized work, having treated people with osteoporosis, recovering from heart surgery or post-breast cancer, vertigo, back pain, Irritable Bowel Syndrome and obesity. She has several certifications, most notably the E-RYT 500 from Yoga Alliance, Basic Life Support (BLS) from American Health Training and Certified Exercise Instructor from the Somatic Movement Center.



# Ms. Galliano, Dianne

- Director of Teachers at Integral Yoga Institute New York, USA
- Therapeutic Yoga Instructor at The 14TH Street Y
- Yoga Therapist at Integral Yoga Institute Wellness Spa New York
- Therapeutic Instructor at Educational Alliance: Center for Balanced Living
- Degree in Primary Education from the State University of New York
- Master's Degree in Therapeutic Yoga from the University of Maryland

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

6

# tech 16 | Course Management

## Management



## Ms. Escalona García, Zoraida

- Vice-president of the Spanish Association of Therapeutic Yoga
- Founder of the Air Core method (classes that combine TRX and Functional Training with Yoga)
- Therapeutic Yoga Traine
- Degree in Biological Sciences from the Autonomous University of Madrid
- Progressive Ashtanga Yoga, FisiomYoga, Myofascial Yoga, Yoga and Cancer Teaching Course
- Floor Pilates Instructor Course
- Phytotherapy and Nutrition Course
- Meditation Teaching Course

## Professors

#### Mr. Losada, Óscar

- Vinyasa Yoga and Power Yoga Teacher and Osteopath at El árbol de la vida center.
- Vinyasa Yoga Instructor and Yoga Coach at the European Institute of Yoga (IEY), Madrid
- Yin Yoga Trainer at IEY in Barcelona
- Vinyasa Yoga and Power Yoga Teacher at Gimnasio Fitness , Madrid
- Osteopath and Sports Massage Therapist at Gimnasio Fitness, Madrid
- Specialist in Rocket Yoga at IEY Huelva
- Specialist in Therapeutic Yoga, Yin Yoga and Fascias at IEY Huelva
- Specialist in Yoga for Children at IEY Alicante
- Structural Osteopath II at Kabat
- Sports Massage and Chiromassage at Orthos

### Ms. García, Mar

- Director and Instructor of the Satnam Yoga Center
- Vinyasa Yoga Teacher
- Special Yoga Instructor
- Yoga Instructor for Children and Families

Course Management | 17 tech

# 04 Structure and Content

The didactic materials included in the academic program of this qualification have been designed by the most distinguished specialists in Therapeutic Yoga. The syllabus includes 3 modules that address the structure of the locomotor system, the fascial system and the practice of Yoga at the different stages of human life. The student will also acquire skills that will allow them to carry out full sessions, selecting appropriate postures according to the needs and abilities of each patient.

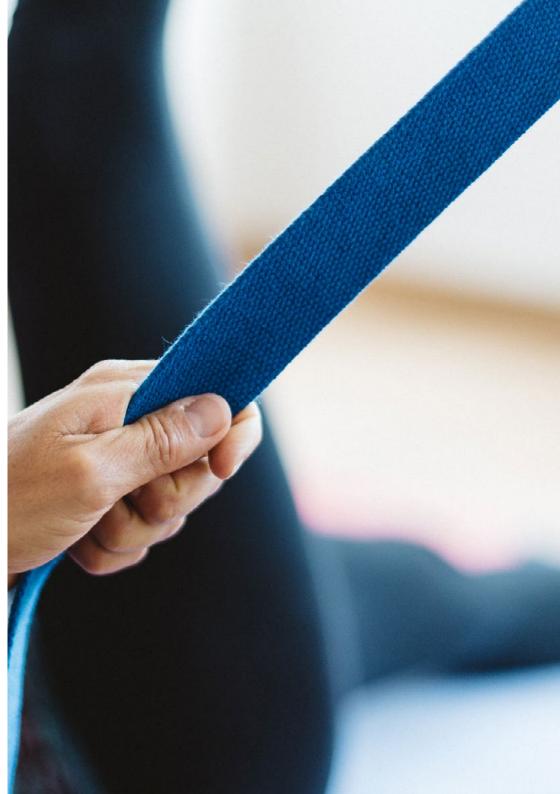
GG Her innc

Here you will find the most innovative audiovisual resources in the academic market"

# tech 20 | Structure and Content

### Module 1. Structure of the Locomotor System

- 1.1. Anatomical Position, Axes and Planes
  - 1.1.1. Basic anatomy and physiology of the human body
  - 1.1.2. Anatomic position
  - 1.1.3. Body axes
  - 1.1.4. Anatomical planes
- 1.2. Bone
  - 1.2.1. Bone anatomy of the human body
  - 1.2.2. Bone structure and function
  - 1.2.3. Different types of bones and their relationship to posture and movement
  - 1.2.4. The relationship between the skeletal system and the muscular system
- 1.3. Joints
  - 1.3.1. Anatomy and physiology of the joints of the human body
  - 1.3.2. Different Types of Joints
  - 1.3.3. The role of joints in posture and movement
  - 1.3.4. The most common joint injuries and how to prevent them
- 1.4. Cartilage
  - 1.4.1. Anatomy and physiology of the cartilage of the human body
  - 1.4.2. Different types of cartilage and their function in the body
  - 1.4.3. The role of cartilage in joints and mobility
  - 1.4.4. The most common cartilage injuries and their prevention
- 1.5. Tendons and Ligaments
  - 1.5.1. Anatomy and physiology of tendons and ligaments of the human body
  - 1.5.2. Different types of tendons and ligaments and their function in the body
  - 1.5.3. The role of tendons and ligaments in posture and movement
  - 1.5.4. Most common tendon and ligament injuries and how to prevent them
- 1.6. Skeletal Muscle
  - 1.6.1. Anatomy and physiology of the musculoskeletal system of the human body
  - 1.6.2. The relationship between muscles and bones in posture and movement
  - 1.6.3. The role of fascia in the musculoskeletal system and its relationship to the practice of therapeutic yoga
  - 1.6.4. The most common muscle injuries and how to prevent them



## Structure and Content | 21 tech

- 1.7. Development of the Musculoskeletal System
  - 1.7.1. Embryonic and fetal development of the musculoskeletal system
  - 1.7.2. Growth and development of the musculoskeletal system in childhood and adolescence
  - 1.7.3. Musculoskeletal changes associated with aging
  - 1.7.4. Development and adaptation of the musculoskeletal system to physical activity and training
- 1.8. Components of the Musculoskeletal System
  - 1.8.1. Anatomy and physiology of skeletal muscles and their relationship to the practice of therapeutic yoga
  - 1.8.2. The role of bones in the musculoskeletal system and their relationship to posture and movement
  - 1.8.3. The function of the joints in the musculoskeletal system and how to take care of them during the practice of therapeutic yoga
  - 1.8.4. The role of fascia and other connective tissues in the musculoskeletal system and their relationship to the practice of therapeutic yoga
- 1.9. Nervous Control of Skeletal Muscles
  - 1.9.1. Anatomy and physiology of the nervous system and its relationship to the practice of therapeutic yoga
  - 1.9.2. The role of the nervous system in muscle contraction and movement control
  - 1.9.3. The relationship between the nervous system and the musculoskeletal system in posture and movement during the practice of therapeutic yoga
  - 1.9.4. The importance of neuromuscular control for injury prevention and performance enhancement during the practice of therapeutic yoga
- 1.10. Muscle Contraction
  - 1.10.1. Anatomy and physiology of muscle contraction and its relationship to the practice of therapeutic yoga
  - 1.10.2. The different types of muscle contraction and their application during the practice of therapeutic yoga
  - 1.10.3. The role of neuromuscular activation in muscle contraction and its relationship to the practice of therapeutic yoga
  - 1.10.4. The importance of stretching and muscle strengthening in injury prevention and performance enhancement during the practice of therapeutic yoga

### Module 2. Fascial System

- 2.1. Fascia
  - 2.1.1. History
  - 2.1.2. Fascia vs. Aponeurosis
  - 2.1.3. Types
  - 2.1.4. Functions
- 2.2. Types of mechanoreceptors and their importance in the different styles of Yoga
  - 2.2.1. Importance
  - 2.2.2. Golgi
  - 2.2.3. Paccini
  - 2.2.4. Ruffini
- 2.3. Myofascial Chains
  - 2.3.1. Definition
  - 2.3.2. Importance in Yoga
  - 2.3.3. Concept of tensegrity
  - 2.3.4. The three diaphragms
- 2.4. SBL: Superficial Back Line
  - 2.4.1. Definition
  - 2.4.2. Anatomical pathways
  - 2.4.3. Passive postures
  - 2.4.4. Active postures
- 2.5. SFL: Superficial Front Line
  - 2.5.1. Definition
  - 2.5.2. Anatomical pathways
  - 2.5.3. Passive postures
  - 2.5.4. Active postures
- 2.6. LL: Lateral Line
  - 2.6.1. Definition
  - 2.6.2. Anatomical pathways
  - 2.6.3. Passive postures
  - 2.6.4. Active postures

## tech 22 | Structure and Content

- 2.7. SL: Spiral Line
  - 2.7.1. Definition
  - 2.7.2. Anatomical pathways
  - 2.7.3. Passive postures
  - 2.7.4. Active postures
- 2.8. Functional Lines
  - 2.8.1. Definition
  - 2.8.2. Anatomical pathways
  - 2.8.3. Passive postures
  - 2.8.4. Active postures
- 2.9. Arm Lines
  - 2.9.1. Definition
  - 2.9.2. Anatomical pathways
  - 2.9.3. Passive postures
  - 2.9.4. Active postures
- 2.10. Main Imbalances
  - 2.10.1. Ideal pattern
  - 2.10.2. Flexion and stretching group
  - 2.10.3. Opening and closing group
  - 2.10.4. Inspiratory and expiratory pattern

### Module 3. Yoga at Different Evolutionary Moments

- 3.1. Childhood
  - 3.1.1. Why is it important?
  - 3.1.2. Benefits
  - 3.1.3. What is a class like?
  - 3.1.4. Example of adapted sun salutation
- 3.2. Women and Menstrual Cycle
  - 3.2.1. Menstrual phase
  - 3.2.2. Follicular phase
  - 3.2.3. Ovulatory phase
  - 3.2.4. Luteal phase

- 3.3. Yoga and Menstrual Cycle
  - 3.3.1. Follicular phase sequence
  - 3.3.2. Ovulatory phase sequence
  - 3.3.3. Luteal phase sequence
  - 3.3.4. Sequence during menstruation
- 3.4. Menopause
  - 3.4.1. General considerations
  - 3.4.2. Physical and hormonal changes
  - 3.4.3. Benefits of the practice
  - 3.4.4. Recommended asanas
- 3.5. Pregnancy
  - 3.5.1. Why practice it
  - 3.5.2. First quarter asanas
  - 3.5.3. Second quarter asanas
  - 3.5.4. Third quarter asanaa
- 3.6. Postpartum
  - 3.6.1. Physical benefits
  - 3.6.2. Mental benefits
  - 3.6.3. General recommendations
  - 3.6.4. Practice with the baby
- 3.7. Old Age
  - 3.7.1. Main pathologies that we will encounter
  - 3.7.2. Benefits
  - 3.7.3. General considerations
  - 3.7.4. Contraindications
- 3.8. Physical Disability
  - 3.8.1. Brain damage
  - 3.8.2. Spinal cord damage
  - 3.8.3. Muscle damage
  - 3.8.4. How to design a class



## Structure and Content | 23 tech

- 3.9. Sensory Disability
  - 3.9.1. Hearing
  - 3.9.2. Visual
  - 3.9.3. Sensory
  - 3.9.4. How to design a sequence
- 3.10. General considerations of the most frequent disabilities that we will encounter
  - 3.10.1. Down syndrome
  - 3.10.2. Autism

66

- 3.10.3. Cerebral palsy
- 3.10.4. Intellectual development disorder

Delve into the notion of Tensegrity and how the use of this technique contributes to improve the mobility and flexibility of individuals"

# 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"

## tech 26 | 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. Physiotherapists/kinesiologists 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 of professional physiotherapy 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. Physiotherapists/kinesiologists 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 physiotherapist/kinesiologist 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.

 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.



# tech 28 | Methodology

## **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.

The physiotherapist/kinesiologist 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 | 29 tech

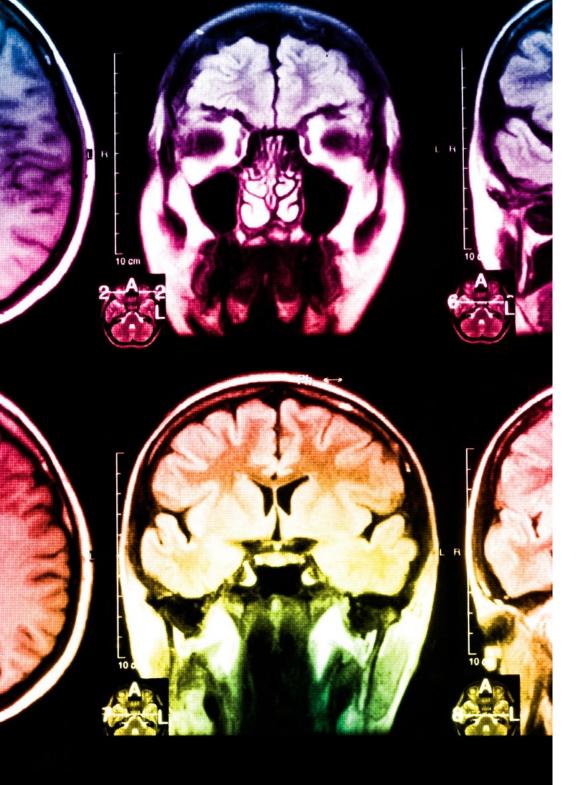
At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology we trained more than 65,000 physiotherapists/kinesiologists with unprecedented success in all clinical specialties, regardless of the workload. 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 training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for 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 our learning system is 8.01, according to the highest international standards.



## tech 30 | Methodology

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 really specific and precise.

20%

15%

3%

15%

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.



#### **Physiotherapy Techniques and Procedures on Video**

TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current Physiotherapy techniques and procedures. 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 them as many times as you want.



#### **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 unique multimedia content presentation training system 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.

## Methodology | 31 tech



#### **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.

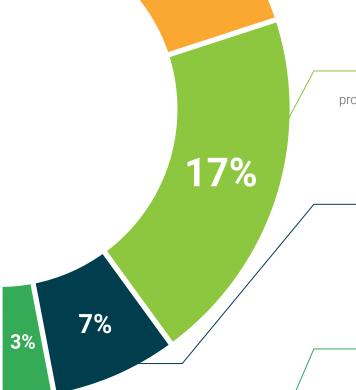


There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### 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.



20%

# 06 **Certificate**

The Postgraduate Diploma in Anatomy and Physiology in Therapeutic Yoga guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.



66

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

# tech 34 | Certificate

This **Postgraduate Diploma in Anatomy and Physiology in Therapeutic Yoga** 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 Diploma** issued by **TECH Technological University** via tracked delivery\*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: Postgraduate Diploma Anatomy and Physiology in Therapeutic Yoga Official N° of Hours: 450 h.



\*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.

technological university Postgraduate Diploma Anatomy and Physiology in Therapeutic Yoga » Modality: online » Duration: 6 months » Certificate: TECH Technological University » Dedication: 16h/week » Schedule: at your own pace » Exams: online

**Postgraduate Diploma** Anatomy and Physiology in Therapeutic Yoga

