

# Postgraduate Certificate

## Physiology of Respiratory Techniques



## Postgraduate Certificate

### Physiology of Respiratory Techniques

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

Website: [www.techtute.com/us/physiotherapy/postgraduate-certificate/physiology-respiratory-techniques](http://www.techtute.com/us/physiotherapy/postgraduate-certificate/physiology-respiratory-techniques)

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# 01

# Introduction

Numerous studies affirm that the regular practice of Yoga can have many benefits on breathing, including the improvement of lung capacity, the reduction of stress and anxiety, as well as the improvement of cardiovascular function. For this reason, this discipline has established itself as an ideal option for those who need to exercise without overtaxing their breathing ability. With this in mind, it has become essential for physical therapy professionals to be up to date in this field and to understand how the various pulmonary ventilation techniques affect the human body. For this purpose, a program has been designed with a 100% online format that will provide an advanced syllabus and innovative teaching materials.



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*You will have the opportunity to be up to date in  
Yoga and respiratory techniques that you can  
use in patients with cardiovascular problems"*

The practice of short-term Yogic Breathing brings important health benefits, such as the reduction of oxygen consumption at rest, the strengthening of the respiratory muscles, the expansion of the diaphragm and lungs, as well as improved thoracic elasticity. These benefits are especially relevant for patients with cardiovascular conditions, anxiety and/or stress.

That is why physiotherapists have incorporated Therapeutic Yoga as a complement to conventional treatments, and must keep up to date on advances in this field and how different breathing techniques affect the body. For this reason, TECH offers the student a Postgraduate Certificate that will allow them to be up to date in a comprehensive manner and in a short period of time of only 6 weeks.

This program has first level experts in the world of Yoga, including a Masterclass taught by an instructor with extensive international experience. In addition, innovative materials are included to deepen the physiology of Pranayama, the complete Yogic Breathing, the Kumbhaka, the Bandhas and the physiology of Mudras.

The teaching method used by TECH known as Relearning, based on repetition, allows students to focus on the most important concepts and consolidate them in a simple way. The developmental process is flexible and convenient, since only a device with an Internet connection is needed to access the content at any time of the day. This option is ideal for those with demanding responsibilities who cannot adapt to a fixed schedule.

This **Postgraduate Certificate in Physiology of Respiratory Techniques** contains the most complete and up-to-date scientific program on the market. The most important features of the include:

- ◆ Case studies presented by Yoga experts
- ◆ 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



*With the best multimedia materials available, we offer you a complete program on Therapeutic Yoga and how you can apply it to your work practice"*

“

*You will have a class taught by the director of teachers and head of instructor training at the Integral Yoga Institute in New York”*

The program’s teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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.

*You will delve into the complete Yogic Breathing and its effects on patients with respiratory diseases.*

*You will include in your therapeutic sessions the latest evidence on the use of Pranayama Techniques.*

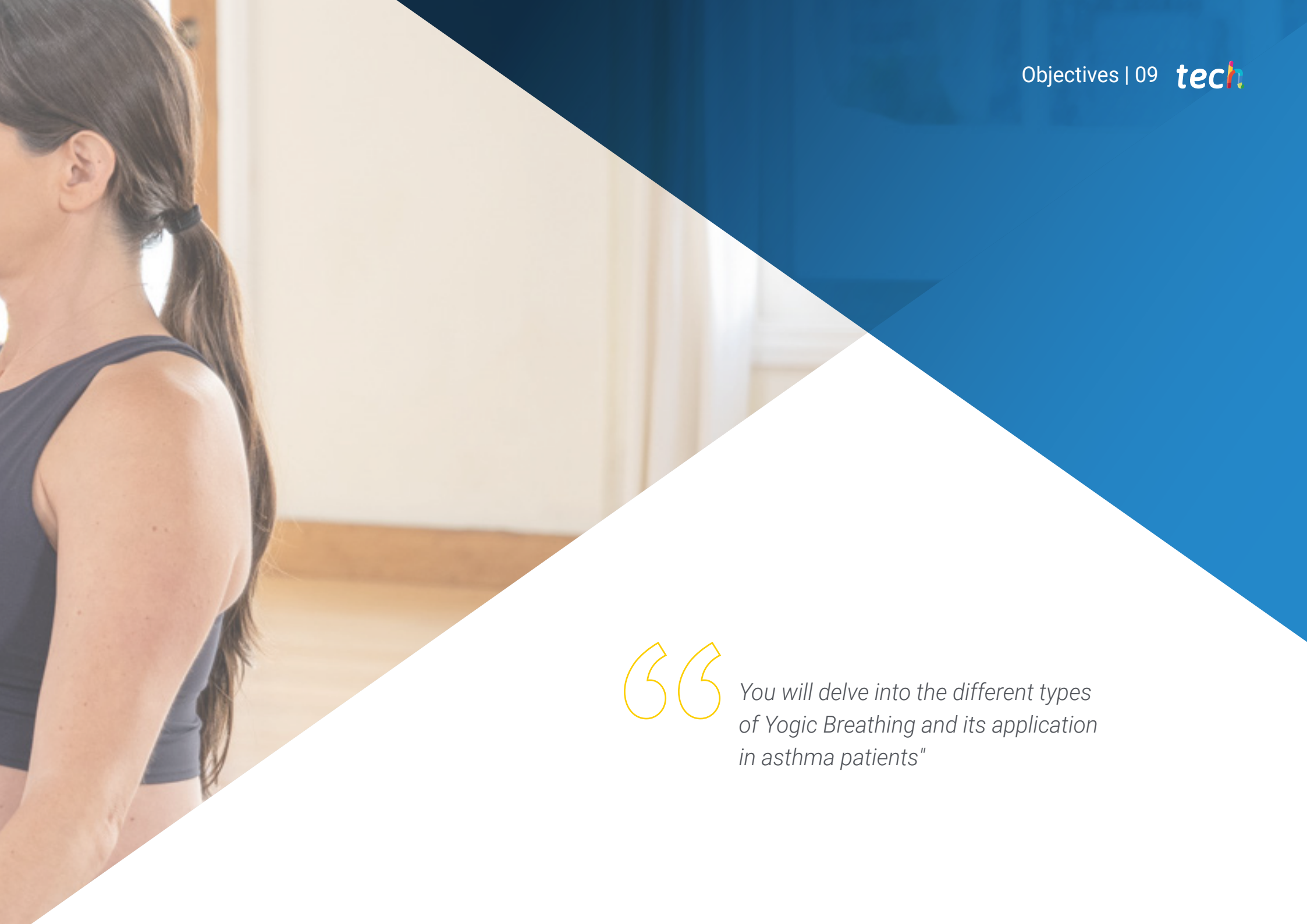


# 02 Objectives

The objective of this Postgraduate Certificate is to provide the physiotherapist with studies at the forefront of the respiratory techniques used in Yoga. This program focuses on a theoretical-practical methodology, which facilitates its assimilation, and is complemented with clinical case studies that will show the direct application in the student's therapeutic sessions.







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*You will delve into the different types of Yogic Breathing and its application in asthma patients”*



## General Objectives

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- ◆ 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 the injuries that they present
- ◆ 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



*This program includes the best multimedia materials available in Kumbakha breathing techniques"*





## Specific Objectives

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- ◆ Describe the physiology of the respiratory system and how it relates to the practice of Pranayama
- ◆ Delve into the different types of Breathing and how they affect the respiratory system
- ◆ Identify the different components of breathing, such as inspiration, exhalation and retention, and how each affects the physiology of the body
- ◆ Delve into the concepts of the energetic channels or nadis, and how they relate to the physiology of breathing and the practice of Pranayama
- ◆ Describe the different types of Pranayamas and how they affect the physiology of the body and mind
- ◆ Identify the basic concepts of Mudras and how they relate to the physiology of breathing and Pranayama practice
- ◆ Delve into the effects of the practice of Pranayama on the physiology of the body and how these effects can help improve health and wellness



# 03

# Course Management

In order to provide a high quality knowledge to the graduate, TECH has chosen a group of experienced and recognized teachers from prestigious reference societies and universities. Therefore, students will have access to the most accurate information, taught by instructors who pour into this training the experience of their work. Additionally, there will be a Masterclass given by an international eminence in the field of Therapeutic Yoga. In this way, thanks to materials developed with the latest educational technology, it will allow the professional a situated and contextual learning.





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*You will perform more efficient therapy sessions thanks to the most accurate information about the physiology of Mudras"*

## 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. She has worked throughout her career 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 a 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

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- 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

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

## 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 Trainer
- 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

### **Ms. Salvador Crespo, Inmaculada**

- ◆ Coordinator of the European Yoga Institute
- ◆ Professor of Yoga and Meditation at EYI
- ◆ Specialist in Integral Yoga and Meditation
- ◆ Specialist in Vinyasa Yoga and Power Yoga
- ◆ Specialist in Therapeutic Yoga

# 04

## Structure and Content

The curriculum is designed to familiarize the graduate with the scientific research on the practice of Yoga and the health benefits of the breathing techniques. This academic itinerary consists of 150 hours of study, accompanied by the best didactic materials available, such as interactive summaries and quick-action guides; besides, Thanks to the Relearning method, which is based on repetition, the student will be able to learn with less effort and better performance. This is a unique occasion that only TECH, the world's largest online university, could offer.





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*You will be up to date on new concepts such as Puraka, Rechaka and Kumbhaka frequently used in the practice of Yoga"*

## Module 1. Respiratory Physiotherapy Techniques

- 1.1. Pranayama
- 1.2. Types of Breathing techniques
- 1.3. Nadi or pranic energy purification conduits
- 1.4. Inhalation: Puraka
- 1.5. Expiration Rechaka
- 1.6. Retentions: Kumbhaka
- 1.7. Pranayama purifiers
- 1.8. Pranayamas stimulating and refreshing
- 1.9. Regenerative Pranayamas
- 1.10. Mudras





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*You will achieve an effective learning on the Physiology of Respiratory Techniques applied to Yoga through a completely virtual pedagogical format"*

# 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. 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.



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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. 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.
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.



*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.*

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.



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.



#### 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 future difficult decisions.



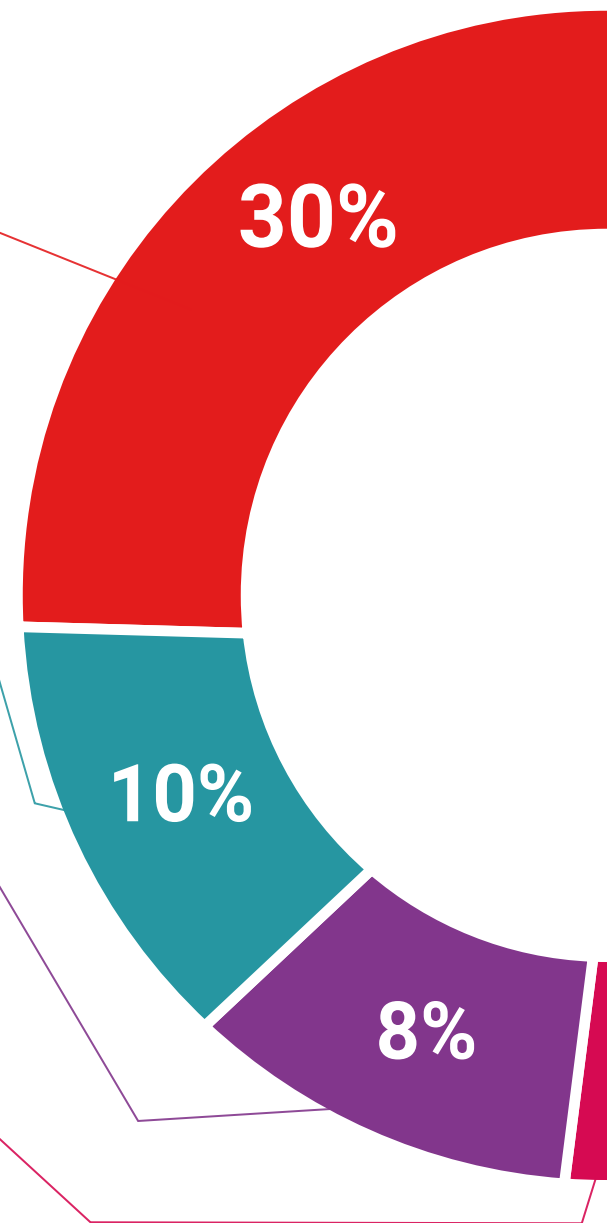
#### Practising Skills and Abilities

They will carry out activities to develop specific competencies and skills in each thematic area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



#### 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.





#### Case Studies

Students will complete a selection of the best case studies chosen specifically for this situation. Cases that are presented, analyzed, and supervised by the best specialists in the world.



#### 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".



#### 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.



# 06 Certificate

This Postgraduate Certificate in Physiology of Respiratory Techniques guarantees students, in addition to the most rigorous and up-to-date scientific, 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 Physiology of Respiratory Techniques** 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 Physiology of Respiratory Techniques**

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.





## Postgraduate Certificate

### Physiology of Respiratory Techniques

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

Postgraduate Certificate

Physiology of Respiratory Techniques