Postgraduate Certificate

Structure of the Locomotor System

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Postgraduate Certificate
Structure of the Locomotor System

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

Website: **www.techtitute.com/us/physiotherapy/postgraduate-certificate/structure-locomotor-system**

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01

Introduction

Designing yoga sessions adapted to individual needs, reducing the risk of injury and maximizing therapeutic benefits, is only possible with a thorough understanding of the anatomy and biomechanics of the Locomotor System. In this way, the physiotherapist will be able to correct and adjust practitioners´ positions , ensuring proper alignment and minimizing the risk of stress on joints, muscles and connective tissues. For this, it is essential that professionals have a solid qualification that allows them to know the structures in depth, as well as the application of different techniques to customize treatments. For this purpose, TECH has designed a program with the most advanced content in the Structure of the Locomotor System taught completely online to guarantee the graduate the greatest flexibility in learning.

Expand your knowledge about the structures of the locomotor system from the perspective of Therapeutic Yoga through a unique, effective and innovative didactic experience. Only with TECH"

Millions of people have embraced the practice of yoga because of its many benefits. This includes significant improvement in physical capacity, muscle function, posture and mobility. In addition, Yoga has been shown to be suitable for treating various conditions of the Locomotor System.

Therefore, Therapeutic Yoga has become an ideal tool for patients with various locomotor pathologies. Likewise, it is essential to know it in depth in order to complement conventional physiotherapeutic treatments. In this line, TECH has created a 6-week academic proposal to update graduates in the Structure of the Locomotor System.

This Postgraduate Certificate allows you to delve into the anatomy, the relationship between the skeletal and muscular system and the prevention of cartilage, tendon and ligament injuries, and their relationship with the practice of Therapeutic Yoga. This with a quality methodology supported by innovative multimedia materials and specialized readings provided by a team of experts in the field.

In this way, this academic proposal has been designed to meet the real needs of physiotherapeutic professionals, who are looking for continuous updating through a flexible and comfortable program. Therefore, to access this Postgraduate Certificate only requires a digital device with Internet connection with which you can view the syllabus of the program at any time of the day. An ideal option to reconcile with the most demanding daily activities.

In addition, as an outstanding part of this high-level academic offer, the prestigious teaching staff that makes up this program is joined by a renowned international guest director. With this, the graduate will have access to a masterclass taught by her in audiovisual format, where she will share the most outstanding aspects of the specialization.

This **Postgraduate Certificate in Structure of the Locomotor System** 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 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 assignments
- Content that is accessible from any fixed or portable device with an Internet connection

A comprehensive and condensed academic program in just 6 weeks where you will delve into the most common tendon injuries and their prevention"

A rigorous academic program that will allow you to explore in detail the most beneficial Yoga positions and movements for the musculoskeletal system"

You can download the latest teaching materials on the Structure of the Locomotor System for Physiotherapists, Enroll Now!

Clear up any doubts related to the components of the musculoskeletal system and the different approaches to implement Therapeutic Yoga.

The program's teaching staff includes professionals from the field who contribute their work experience to this educational 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

The objective of this program is to provide an update on the Structure of the Locomotor System to physiotherapists, focusing on the anatomy of the muscular, skeletal and articular systems, as well as the prevention of injuries and their approach from Therapeutic Yoga. A program designed to update professionals and with guaranteed effectiveness, as it is made up of a new syllabus based on the latest studies and quality teaching materials.

Achieve your professional goals through the most complete, cutting-edge and effective academic program with this completely online program"

General Objectives

- Incorporate knowledge and specific skills in the area of the Locomotor System for the correct development and application of treatment techniques
- Delve into the most appropriate treatments according to the characteristics of the person and their injuries
- Delve into the studies on biomechanics and the application of treatment for the Locomotor System
- Delve into the neurophysiological bases of musculoskeletal structures

Specific Objectives

- 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

Explore the different postures and movements of the human body, and understand how they affect the structure of the Locomotor System with this comprehensive TECH program"

03

Course Management

This university program has brought together a highly experienced teaching staff in the field of Therapeutic Yoga. In this way, students who take this program will have access to a syllabus prepared by experts who will provide the most current information on injury prevention and the impact of this physical activity on the Locomotor System. In addition, thanks to the friendliness of the teaching staff, you will be able to resolve any doubts you may have about any of the topics covered by this course.

Delve into the anatomy and physiology of the nervous system and its relationship with the practice of therapeutic yoga from renowned experts in this field"

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

- 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"

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. García, Mar

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

04

Structure and Content

The syllabus that makes up this program focuses on the fundamental aspects of elementary anatomy and physiology of the human body. In this way, students will begin an in-depth instruction in anatomical posture and body axes and planes. Thanks to the most cutting-edge teaching materials in today's academic landscape and in a 100% online format, the student will be able to minimize study hours and consolidate the concepts discussed to remain at the forefront of the industry.

You will have access to the best multimedia resources and will be able to download them at any time, even after completing the program"

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

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

05

Methodology

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

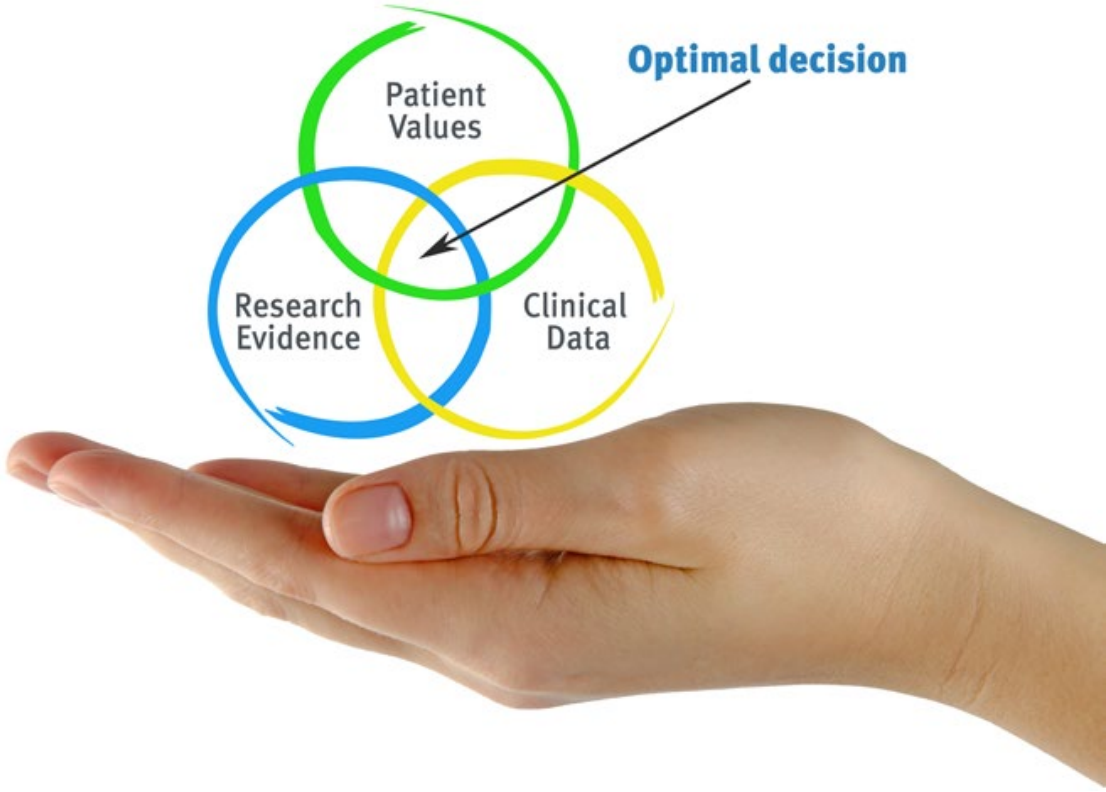
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. 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:

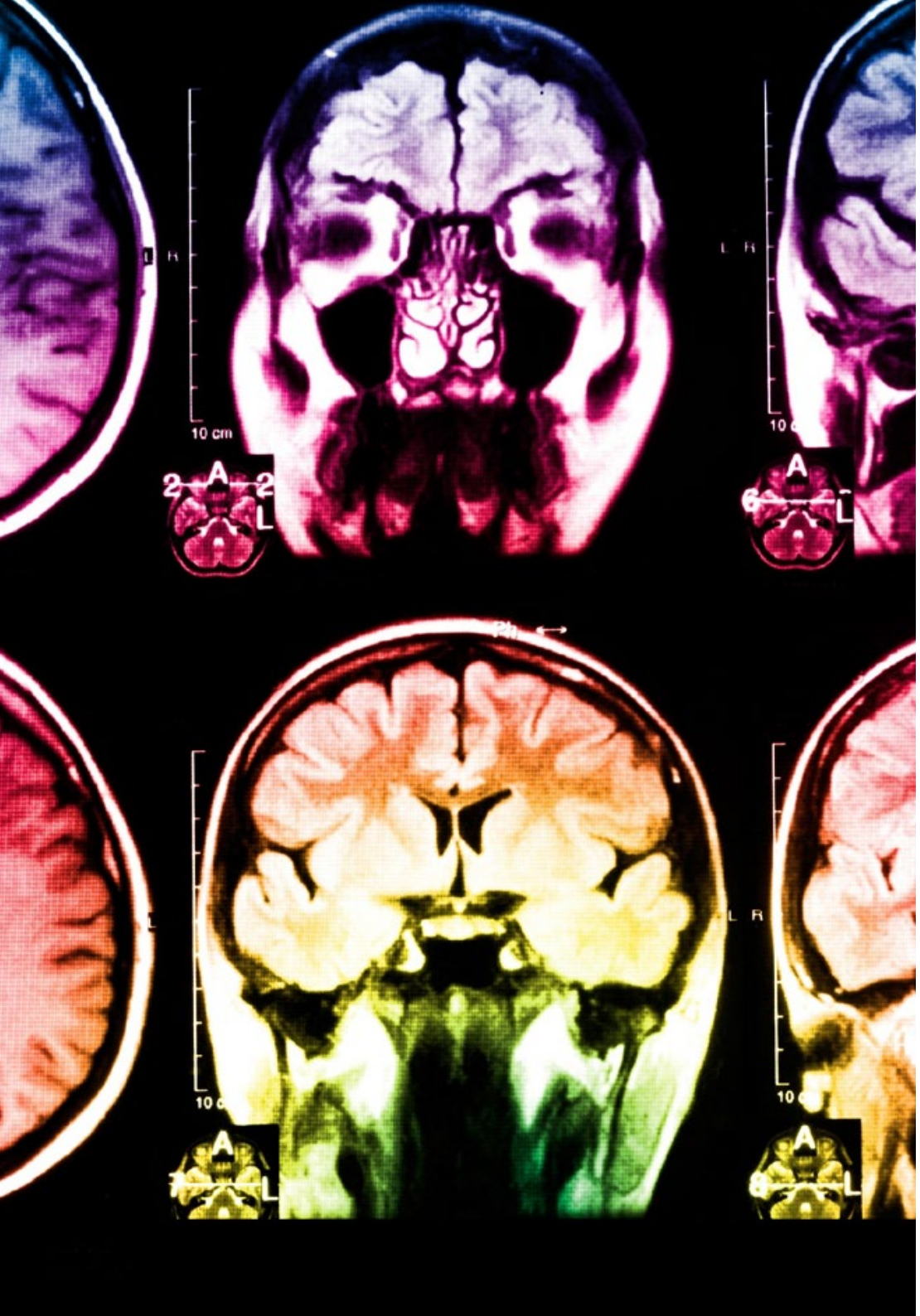
1. Physiotherapists/kinesiologists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the physiotherapist/kinesiologist to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
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.

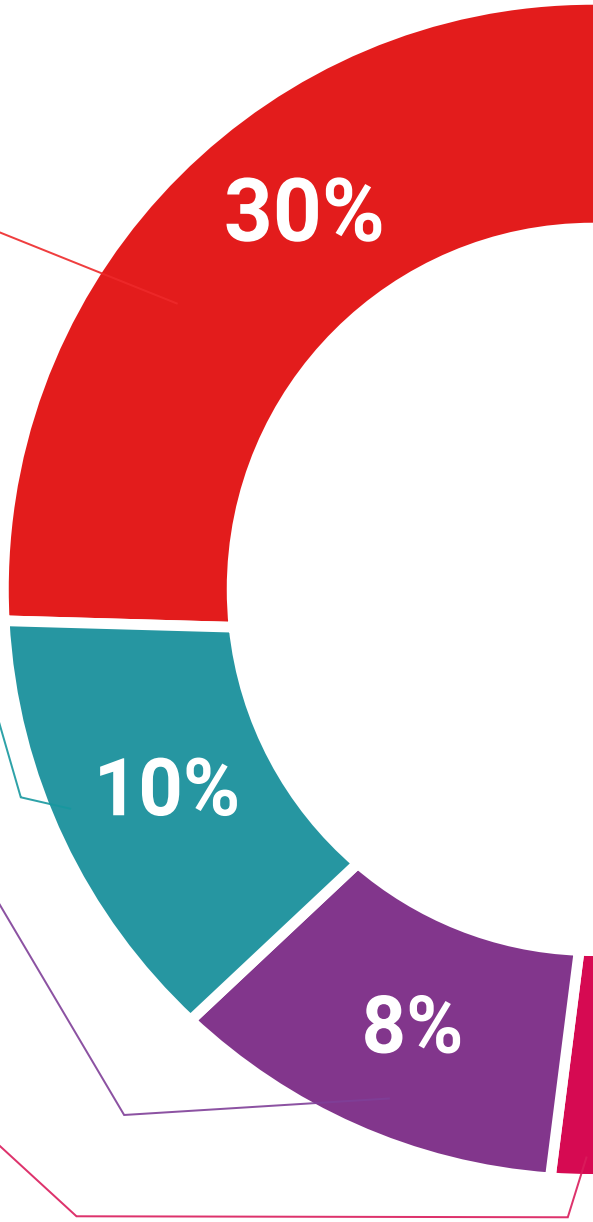
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

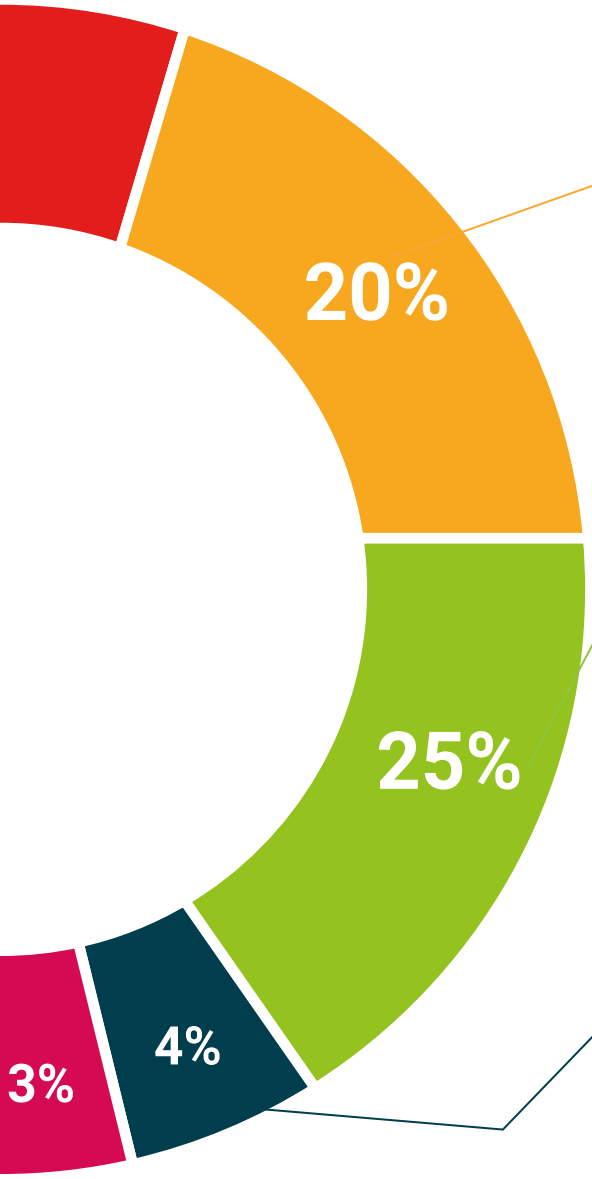
Practising Skills and Abilities

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

The Postgraduate Certificate in Structure of the Locomotor System guarantees students, in addition to the most rigorous and up-to-date scientific, access to a Postgraduate Certificate issued by TECH Technological University.

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

This **Postgraduate Certificate in Structure of the Locomotor System** 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 Structure of the Locomotor System**

Official Nº of Hours: **150 h.**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Awards the following

DIPLOMA

to

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

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Structure of the Locomotor System

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

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

June 17, 2020

Tere Guevara Navarro
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.

Unique TECH Code: AFWORD23S techtitute.com/certificates

*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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