

Postgraduate Certificate Structure of the Locomotor System

Endorsed by the NBA:





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.techtute.com/pk/sports-science/postgraduate-certificate/structure-locomotor-system

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01

Introduction

The study of the Locomotor System allows Yoga professionals to generate an assertive knowledge about how the body moves and how postures can affect this system. In addition, it allows them to perform more complete and personalized work sessions that focus on the physical needs of each user, thereby providing a noticeable improvement. With this in mind, TECH presents an academic program in which the professional will be able to delve into the anatomical position, axes and planes, as well as in the musculoskeletal system. All this will be developed 100% online, a benefit that will allow participants to have greater control over their time and in which they can expand their knowledge on this subject.



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This is the best Postgraduate Certificate in the market and the only one that will provide you with the essential elements on the functioning of the Locomotor System”

The popularity of yoga continues to increase and has become an efficient alternative to the treatment of diseases that cause pain and as a preventive measure against injuries. Therefore, it is essential that instructors who are dedicated to this activity have a structured knowledge about the functions that the Locomotor system fulfills and the capabilities it has when performing physical exercise.

In this sense, this Postgraduate Certificate seeks to offer a practical internship program to professionals in this field in terms of the composition of the Locomotor System Structure, so that they can develop a more solid vision of its limitations. It will also provide them with the necessary tools to perform complete yoga sessions in which they work on the postures of this activity, avoiding any type of injury.

This is a syllabus that contains the most contemporary concepts about the functions of the bone, muscle and joint systems, as well as their particularities. In addition, it will have an excellent teaching staff made up of the best professionals in this field, who will transfer to the student the knowledge acquired in years of professional experience.

All this thanks to the innovative *Relearning* methodology that will enable students to complete their syllabus 100% online, without time restrictions and from the comfort of their own home. This will be done through multimedia resources that will offer a didactic and complete presentation of all the topics of the program. In addition, students will be able to improve their problem-solving skills by analyzing case studies that simulate real work situations.

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 include:

- ◆ The development of case studies presented by experts in Structure of the Locomotor System
- ◆ 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



The best teachers, the most up-to-date content and the innovative Relearning methodology are the perfect combination for you to continue advancing in your career"

“

Take advantage of the opportunity to study from the comfort of your home and access the latest content with TECH's 100% online format”

Thanks to the methodology in which this Postgraduate Certificate is taught, you will be able to distribute the teaching load according to your own needs and learn at your own pace.

Delve into the most common tendon and ligament injuries and learn how to prevent them with this TECH program.

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

This Postgraduate Certificate aims to provide its participants with an in-depth understanding of the functioning of the elements that make up the Locomotor system. Therefore, they will learn about the anatomy and physiology of the human body to understand in depth the structure of the Locomotor System. In addition, you will have audiovisual resources presented in different media so that the integration of the concepts is natural, efficient and progressive, thereby achieving your professional objectives and goals in a short period of time.





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You will establish the relationship between muscles and bones in posture and movement and you will become a first level professional”



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

- ◆ 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

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You will reach your professional goals in a short period of time and you will excel in the field of Yoga thanks to an in-depth mastery of the Structure of the Locomotor System”

03

Course Management

TECH offers its students a quality education and has therefore carefully selected the team of teachers for this program. In this way, students will acquire a holistic view of the elements that make up the Locomotor System, since they will receive the teachings of the best working professionals in this field. In addition, they will strengthen their skills in the teaching of Yoga sessions and will be able to face any kind of challenge effectively.



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Learning from the best professionals will make you become one of them. Start this program and discover how to achieve it”

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

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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. García, Mar

- ◆ Yoga Center Director and Yoga Instructor at Satnam Yoga
- ◆ Vinyasa Yoga Teacher
- ◆ Special Yoga Instructor
- ◆ Yoga Instructor for Children and Families



04

Structure and Content

Understanding in depth the structure of the Locomotor system is an element of great value that allows Yoga professionals to organize sessions according to the body's limitations. Therefore, the syllabus of this Postgraduate Certificate is focused on providing its participants with the most specialized knowledge through multimedia content on bone anatomy, types of joints and muscle development. All this in only 6 weeks of intensive online training.





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The best working professionals in the field have developed the syllabus of this program to provide you with the most up-to-date solid knowledge in Structure of the Locomotor System”

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.





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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"

Case Study to contextualize all content

Our program offers a revolutionary approach to developing skills and knowledge. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

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At TECH, you will experience a learning methodology that is shaking the foundations of traditional universities around the world"



You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.



A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and professional reality is taken into account.

“*Our program prepares you to face new challenges in uncertain environments and achieve success in your career”*

The student will learn to solve complex situations in real business environments through collaborative activities and real cases.

The case method is the most widely used learning system in the best faculties in the world. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question we face in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.

Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

In 2019, we obtained the best learning results of all online universities in the world.

At TECH, you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our university is the only one in the world authorized to employ this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



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.

With this methodology, we have trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, markets, and financial instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

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.

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.



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.



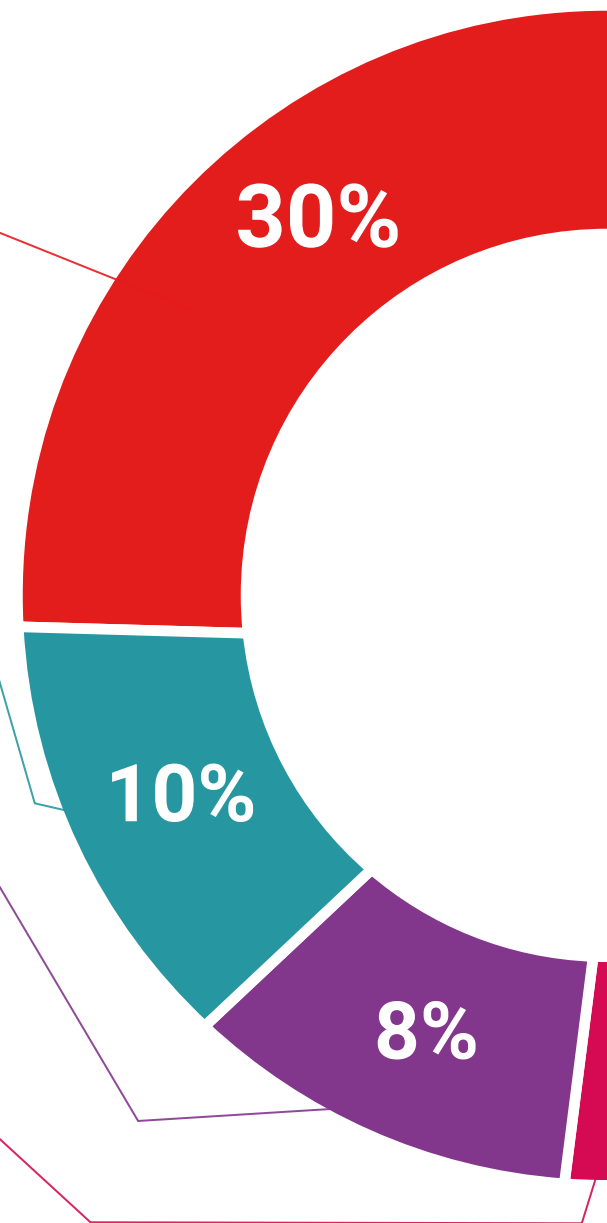
Practising Skills and Abilities

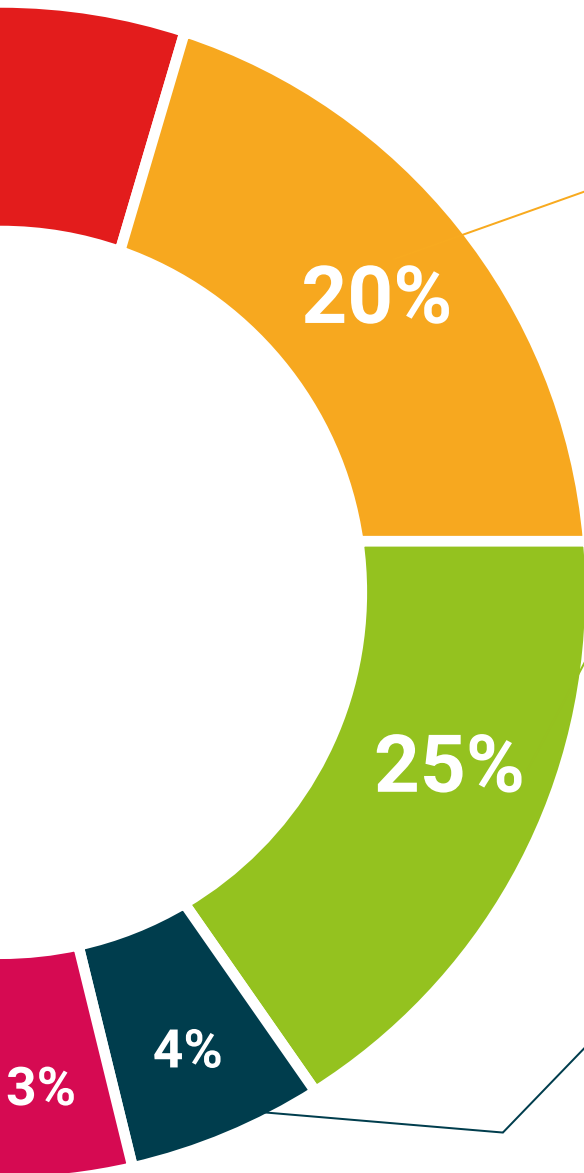
They will carry out activities to develop specific competencies and skills in each thematic area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



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 education, access to a Postgraduate Certificate issued by TECH Technological University.



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

This **Postgraduate Certificate in 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 certificate 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 N° of hours: **150 h.**

Endorsed by the NBA:



*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.

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community commitment
personalized service innovation
knowledge present
development lang
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university

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