

Hybrid Professional Master's Degree Sports Injury Prevention and Readaptation

Endorsed by the NBA



tech technological
university



Hybrid Professional Master's Degree

Sports Injury Prevention and Readaptation

Modality: Hybrid (Online + Internship)

Duration: 12 months

Certificate: TECH Technological University

Website: www.techtute.com/us/sports-science/hybrid-professional-master-degree/hybrid-professional-master-degree-sports-injury-prevention-readaptation

Index

01

Introduction

p. 4

02

Why Study this Hybrid
Professional Master's Degree?

p. 8

03

Objectives

p. 12

04

Skills

p. 18

05

Course Management

p. 22

06

Educational Plan

p. 30

07

Clinical Internship

p. 36

08

Where Can I Do the
Internship?

p. 42

09

Methodology

p. 46

10

Certificate

p. 54

01

Introduction

Sports Injury Prevention and Rehabilitation are increasingly relevant areas in sports medicine, given the growing awareness of the importance of athletes' health and well-being. In fact, technological advances are revolutionizing the way specialists prevent and manage injuries. In addition, greater emphasis is being placed on personalized training programs, which not only seek to improve performance, but also to minimize the risk of injury, through muscle strengthening techniques and improved flexibility. Within this framework, TECH has initiated a program with two phases: the first, focused on theoretical aspects, and the second, a practical stay of 3 weeks in a sports center.





“

With this comprehensive Hybrid Professional Master's Degree, you will acquire advanced knowledge on injury prevention and rehabilitation techniques, also developing skills for the evaluation and individualized treatment of athletes"

With the advancement of science and technology, increasingly sophisticated methods have been developed to identify, prevent and treat injuries in athletes of all disciplines. From specific training programs to individualized rehabilitation techniques, health and sports professionals are adopting a comprehensive approach to ensure the optimal health and performance of athletes.

This is how this Hybrid Professional Master's Degree was created, which will deepen the knowledge of the most common pathologies of the locomotor system in the sports and general population. In this way, professionals will acquire a detailed understanding of the biomechanics, physical condition and functionality of the human body, which is crucial to evaluate and detect factors that may contribute to recurrent injuries or prevent effective recovery.

Also included will be the planning and administration of comprehensive programs, which not only seek recovery from existing injuries, but also prevent the occurrence of new ones. This will be complemented with a focus on sports nutrition, providing the necessary tools to evaluate the needs of athletes and make recommendations that favor the recovery process.

Finally, coaching skills and personal training techniques will also be incorporated. These components will be essential to manage the psychological aspects of injured athletes, facilitating a more holistic and effective approach, which improves overall fitness and accelerates recovery. In addition, specific Marketing concepts will be introduced for personal trainers in the field of sports rehabilitation.

Therefore, TECH has developed a program that mixes online and face-to-face teaching, adjustable to the needs and schedules of the students. Initially, the theory of the Hybrid Professional Master's Degree will be fully addressed through an online format, using the most advanced didactic resources in the educational sector and an innovative methodology called Relearning. Afterwards, the graduates will carry out a practical stay of 3 weeks in a prestigious sports center, where they will test the knowledge acquired in a real context.

This **Hybrid Professional Master's Degree in Sports Injury Prevention and Readaptation** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Development of more than 100 cases presented by Sports Science professionals with expertise in Sports Injuries and university professors with extensive experience with the prevention and readaptation
- ♦ 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
- ♦ All of this will be complemented by 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
- ♦ Furthermore, you will be able to do an internship in one of the best Rehabilitation centers



This program will provide you with an updated practical and theoretical approach, reflecting the latest research and trends in the field of sports injuries. What are you waiting for to enroll?"

“

You will spend 3 weeks in a sports center, where you will acquire the knowledge to grow professionally in the Prevention and Rehabilitation of Sports Injuries"

In this Hybrid Professional Master's Degree proposal, of professionalizing character and blended mode, the program is aimed at updating sports professionals who develop their functions in the prevention and rehabilitation of sports injuries, and who require a high level of qualification. The contents are based on the latest scientific evidence, and oriented in a didactic way to integrate theoretical knowledge in sports practice, and the theoretical-practical elements will facilitate the updating of knowledge and will allow decision making in patient management.

Thanks to its multimedia content elaborated with the latest educational technology, they will allow the sports professional to obtain a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to specialize 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 throughout the program. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Don't miss this unique opportunity offered by TECH! You will address the monitoring and evaluation of progress in the recovery of sports injuries, making adjustments based on the evolution of the athlete.

You will design and implement individualized and specific programs, both for functional recovery and for readaptation after an injury. With all the TECH quality guarantees!

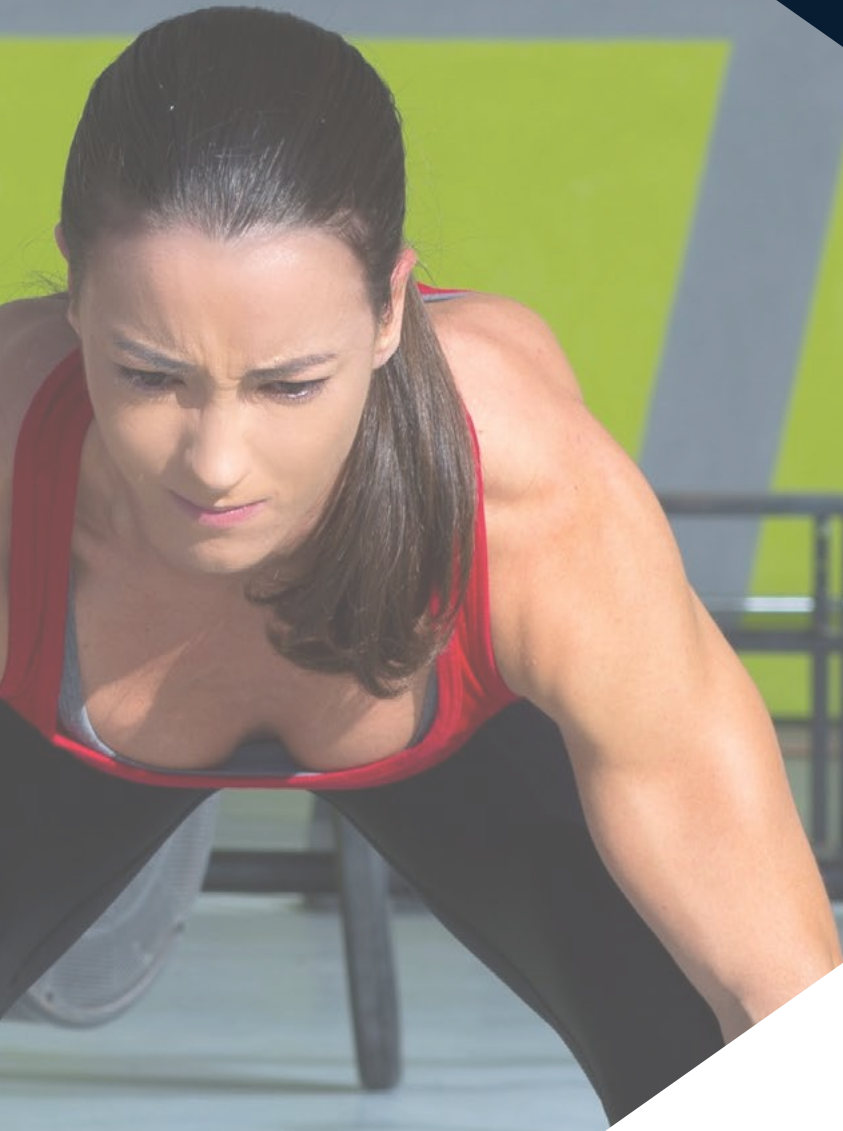


02

Why Study this Hybrid Professional Master's Degree?

Taking this Hybrid Professional Master's Degree in Sports Injury Prevention and Rehabilitation represents an exceptional opportunity for those seeking to specialize in a critical field in sports health and performance. In fact, this type of program is ideal for professionals who wish to deepen their knowledge while maintaining their work commitments, as it allows for greater flexibility in time management and location. As a result, graduates will benefit from an updated curriculum that covers everything from biomechanics to nutrition, coaching techniques and marketing.





“

You will have the possibility of establishing a solid professional network, a crucial element for those seeking to stand out and advance in a dynamic and constantly evolving specialty”

1. Updating from the latest technology available

In the field of Sports Injury Prevention and Rehabilitation, the latest technology has revolutionized traditional practices and procedures. Of particular note are innovations such as Virtual Reality and Augmented Reality, which are used to simulate training environments that can be controlled and modified to suit the specific rehabilitation needs of individual athletes. In addition, sensor-based motion analysis platforms and Artificial Intelligence provide detailed assessments of the athlete's biomechanics, allowing potential areas of risk to be identified.

2. Gaining in-depth knowledge from the experience of top specialists

The large team of professionals that will accompany the specialist throughout the practical period is a first-class and an unprecedented guarantee of updating. With a specifically designated tutor, the student will be able to see real patients in a state-of-the-art environment, which will allow them to incorporate in their daily practice the most effective procedures and approaches in the Prevention and Readaptation of Sports Injuries

3. Entering first-class environments

TECH carefully selects all available centers for Internship Programs. Thanks to this, the specialist will have guaranteed access to a prestigious sports environment. Thanks to this, the specialist will have guaranteed access to a prestigious sports environment.





4. Combining the best theory with state-of-the-art practice

The academic market is plagued by teaching programs that are poorly adapted to the daily work of the specialist and that require long teaching hours, often not very compatible with personal and professional life. For this reason, TECH offers a new learning model, 100% practical, which allows you to get to grips with state-of-the-art procedures in Sports Injury Prevention and Readaptation and, best of all, to put it into professional practice in just 3 weeks.

5. Opening the door to new opportunities

By combining the flexibility of online learning with face-to-face practical sessions, the program will provide advanced and specialized training, equipping professionals with the skills necessary to effectively assess, prevent and treat sports injuries. And it also expands career possibilities, from working with high-performance sports teams to establishing private training and rehabilitation practices.



You will have full practical immersion at the center of your choice"

03 Objectives

The main objective of this university program is to prepare professionals capable of effectively intervening in the prevention, diagnosis and treatment of injuries in the field of sports. Therefore, graduates will be provided with a deep and specialized knowledge in the latest methodologies and technologies applied to sports, focusing on biomechanics, exercise physiology and rehabilitation strategies. Likewise, you will be equipped with clinical and research skills to design personalized and scientific evidence-based rehabilitation and recovery programs.



“

You will develop skills in the comprehensive evaluation of the athlete, from their physical and nutritional condition, to their psychological aspects, through an extensive library of multimedia resources”



General Objective

- ♦ The objective of the Hybrid Professional Master's Degree in Sports Injury Prevention and Rehabilitation will be to equip professionals with advanced knowledge and practical skills in prevention, diagnosis, treatment and rehabilitation of sports injuries. As such, graduates will develop a comprehensive understanding of the mechanisms of injury and best intervention practices to promote optimal and safe recovery of athletes. They will also foster the capacity for research and continuous updating in emerging techniques, ensuring contribution to the evolution of the field, at the forefront in the prevention and management of sports injuries



You will be able to assess the physical condition and biomechanics of athletes, design specific training programs to prevent injuries and manage readaptation programs"





Specific Objectives

Module 1. Personal Training

- ♦ Acquire a better understanding of the different characteristics of the personal trainer profession
- ♦ Integrate the concepts of balance training, cardiovascular, strength, plyometrics, speed, agility, etc. as a key tool for staff to prevent and readapt injuries
- ♦ Design training programs individualized to the characteristics of the subject in order to achieve better results

Module 2. Preventive Work for Sports Practice

- ♦ Identify the risk factors involved in the practice of physical-sports activities
- ♦ Use different types of materials for the planning of different types of exercises in a customized training program
- ♦ Learning Pilates exercises with different types of machines designed to be fundamental in preventive work
- ♦ See *Stretching* and Postural Re-Education as essential methods for the prevention of injuries and alterations of the locomotor system

Module 3. Structure of the Locomotor System

- ♦ Manage the different anatomical concepts: axes, planes and anatomical position
- ♦ Differentiate the different elements that make up the locomotor apparatus
- ♦ See the functioning processes of the integrated active and passive locomotor apparatus

Module 4. *Fitness, Functional and Biomechanical Assessment*

- ♦ Use biomechanics of movement as a key tool in the prevention and rehabilitation process
- ♦ Clarify the importance of nutritional, biochemical, genetic and quality of life assessment from the initial period to the end of the process
- ♦ Evaluate the different parameters related to physical fitness: strength, speed, flexibility, endurance, etc.
- ♦ Detect anomalies that hinder or prevent a correct recovery/rehabilitation process

Module 5. Frequent Injuries in Athletes

- ♦ Determine the etiology of the most frequent injuries that occur in sports practice
- ♦ Identify the causes of the main injuries in sports
- ♦ Distinguish the different types of injuries: tendon, muscle, bone, ligament and joint injuries

Module 6. Exercise for the Rehabilitation of Sports Injuries

- ♦ Establish exercise and physical activity as a strategy for health improvement
- ♦ Classify the different types of exercises according to the planning of the personalized training to be performed
- ♦ Differentiate the different types of specific physical exercises according to the muscles or muscle groups to be readapted
- ♦ Manage the different techniques applied in the treatment of injuries produced in sports practice
- ♦ Employ proprioceptive re-education in the whole process of rehabilitation and recovery, as well as for a lower prevalence of injury recurrence
- ♦ Plan and design specific programs and protocols with preventive effects
- ♦ Manage the different types of sports and essential sports practices as adjuvants during the process of functional rehabilitation and recovery

Module 7. Frequent Pathologies of the Locomotor System

- ♦ Analyze the severity of ligament pathologies and their assessment for a better and more efficient rehabilitation
- ♦ Focus on the analysis of joint pathologies due to their high incidence in sports
- ♦ Examine the most common pathologies that usually occur in the spine
- ♦ Assess pain as an element to be taken into account in the diagnosis of a greater or lesser degree of injury





Module 8. Exercise for Functional Recovery

- ♦ Analyze the different possibilities offered by functional training and advanced rehabilitation
- ♦ Apply the Pilates method as an integral system for the rehabilitation of the locomotor system in functional recovery
- ♦ Plan specific Pilates exercises and programs for the different areas of the locomotor system with and without apparatus

Module 9. Nutrition for Functional Recovery and Rehabilitation

- ♦ Approach the concept of integral nutrition as a key element in the process of readaptation and functional recovery
- ♦ Distinguish the different structures and properties of both macronutrients and micronutrients
- ♦ Prioritize the importance of both water intake and hydration in the recovery process
- ♦ Analyze the different types of phytochemicals and their essential role in improving the state of health and regeneration of the organism

Module 10. Coaching and Personal Trainer Business

- ♦ In-depth knowledge of specific elements of the personal trainer profession
- ♦ Acquire and understand the different healthy habits and lifestyles, as well as their implementation possibilities
- ♦ Apply motivational strategies to achieve better results in the process of sports rehabilitation and functional recovery
- ♦ Plan and design spaces that favor a better development of the specific personal training work to be performed
- ♦ Understand the personal training process where the relationship with the client and the feedback provided by the client are fundamental to the process

04 Skills

The Hybrid Professional Master's Degree in Sports Injury Prevention and Rehabilitation has been designed to develop essential competencies in professionals in the field of sports. Among them, it will highlight the ability to perform comprehensive assessments of the physical, functional and biomechanical condition of athletes, identifying injury risk factors and designing personalized preventive interventions. In addition, graduates will acquire advanced skills in the planning and execution of rehabilitation and recovery programs, integrating specific techniques and evidence-based treatments.





“

You will develop appropriate nutritional recommendations to support the rehabilitation process and optimize physical performance, all thanks to the best didactic materials in the educational market"



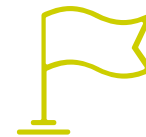
General Skills

- Program, plan and investigate the process of prevention, sports readaptation and functional recovery through an individualized training program
- Planning and execution of programs aimed at prevention, sports rehabilitation and functional recovery to be carried out in a sports club, sports federation and/or sports centers, entities related to physical activity for health and centers working with people with physical disabilities or injuries

“

Don't think twice and bet on TECH! You will equip yourself with interpersonal and communication skills, crucial for multidisciplinary teamwork and effective interaction with athletes”





Specific Skills

- ◆ Knowing the particularities of personal training adapted to each person

and to design individualized and specific programs according to the needs of the athletes

- ◆ Plan the specific exercises for each training, applying machines for functional training or pilates method techniques
- ◆ In-depth knowledge of the locomotor system
- ◆ In-depth knowledge of the biomechanics of movement and its application in the rehabilitation process
- ◆ Know and identify the main sports injuries
- ◆ Design and carry out customized training
- ◆ Identify the main joint and ligament pathologies
- ◆ Plan rehabilitation exercises using the Pilates method for the rehabilitation of the locomotor system
- ◆ Provide nutritional diets adapted to the needs of each athlete and taking into account his or her type of injury
- ◆ Apply coaching techniques to personal training and apply motivation to obtain better results in the recovery of the athlete

05

Course Management

The teachers of this Hybrid Professional Master's Degree are highly qualified and experienced professionals in the field of sport, health and rehabilitation. These mentors will not only provide a wealth of up-to-date academic knowledge, but will also share practical experiences and real cases from their own professional practice. This will enrich learning, providing graduates with a comprehensive and multidisciplinary vision of the treatment of sports injuries.





“

Thanks to the teaching team, you will be able to effectively apply what you have learned in real scenarios, preparing you to confidently face the challenges of the professional environment"

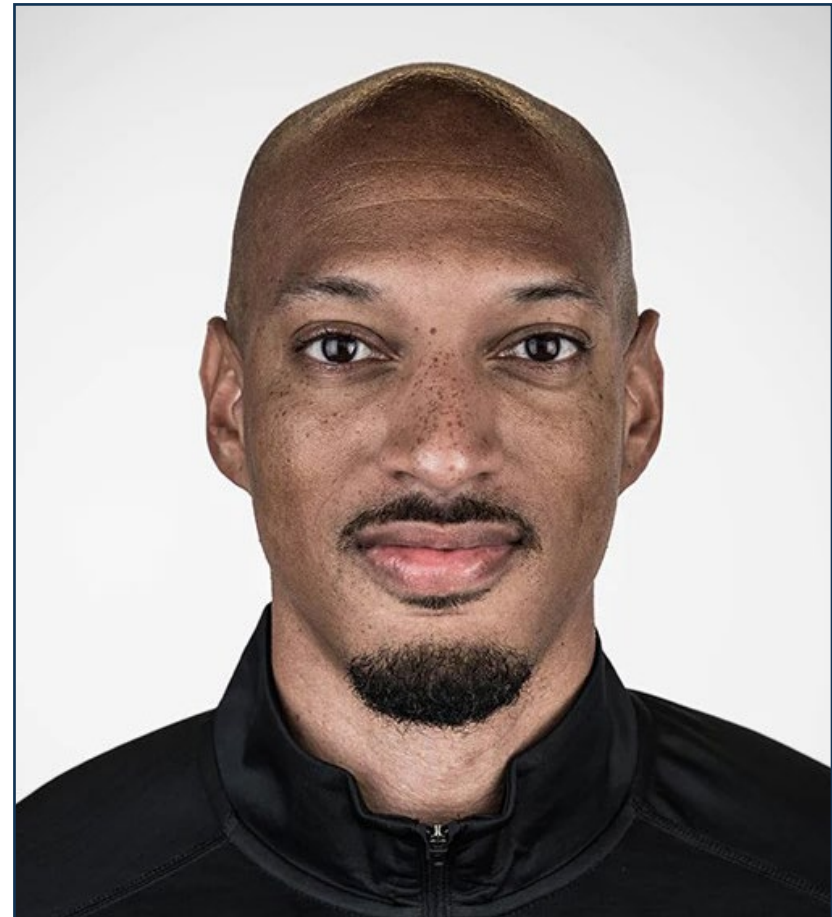
International Guest Director

Dr. Charles Loftis is a renowned specialist who serves as a sports performance therapist for the Portland Trail Blazers in the NBA. His impact on the world's premier basketball league has been significant, bringing distinguished expertise in creating strength and conditioning programs.

Prior to joining the Trail Blazers, he was the head strength and conditioning coach for the Iowa Wolves, implementing and overseeing the development of a comprehensive player program. In fact, his experience in the sports performance field began with the establishment of XCEL Performance and Fitness, of which he was the founder and head coach. There, Dr. Charles Loftis worked with a wide range of athletes to develop strength and conditioning programs, as well as working on the prevention and rehabilitation of sports injuries.

His academic background in the field of chemistry and biology gives him a unique perspective on the science behind sports performance and physical therapy. As such, he holds CSCS and RSCC designations from the National Strength and Conditioning Association (NSCA), which recognise his knowledge and skills in the field. He is also certified in PES (Performance Enhancement Specialist), CES (Corrective Exercise Specialist) and dry needling.

All in all, Dr. Charles Loftis is a vital member of the NBA community, working directly with both the strength and performance of elite athletes as well as the necessary prevention and rehabilitation of various sports injuries.



Dr. Loftis, Charles

- Physical Trainer at the Portland Trail Blazers, Portland, United States
- Head Strength and Conditioning Coach for the Iowa Wolves
- Founder and Head Coach at XCEL Performance and Fitness
- Head Performance Coach for Oklahoma Christian University men's basketball team
- Physical Therapist at Mercy
- PhD in Physical Therapy from Langston University
- Degree in Chemistry and Biology from Langston University

“

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

International Guest Director

Isaiah Covington is a highly skilled performance coach, with extensive experience in treating and addressing a variety of injuries in elite athletes. In fact, his professional career has been directed towards the NBA, one of the most important sports leagues in the world. He is the performance coach of the Boston Celtics, one of the most important teams in the Eastern Conference and with the greatest projection in the United States.

His work in such a demanding league has made him specialize in maximizing the physical and mental potential of the players. Key to this has been his past experience with other teams, such as the Golden State Warriors and the Santa Cruz Warriors. This has also allowed him to work on sports injuries, focusing on the prevention and rehabilitation of the most common injuries in elite athletes.

In the academic field, his interest has focused on the field of kinesiology, exercise science and high performance sport. This has led him to excel prolifically in the NBA, working day-to-day with some of the most important basketball players and coaching staffs in the world.



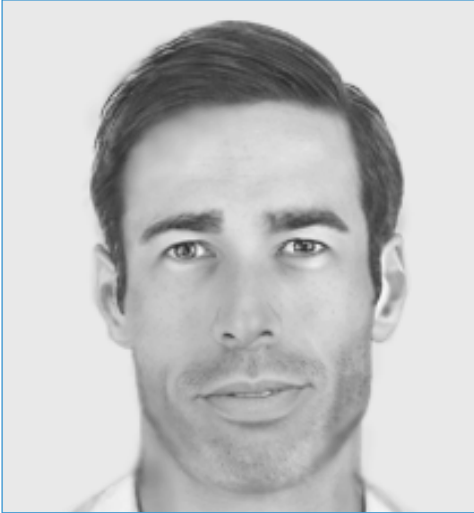
Mr. Covington, Isaiah

- Boston Celtics Performance Coach, Boston, USA
- Performance Coach, Golden State Warriors
- Head Performance Coach of the Santa Cruz Warriors
- Performance Coach at Pacers Sports & Entertainment
- Degree in Kinesiology and Exercise Science from the University of Delaware
- Specialization in Training Management
- Master's Degree in Kinesiology and Exercise Science from Long Island University
- Master's Degree in Performance Sport from the Australian Catholic University

“

A unique, key, and decisive educational experience to boost your professional development”

Management



Dr. González Matarín, Pedro José

- ♦ Researcher and Professor in Health Sciences
- ♦ Technical researcher of Health Education in Murcia
- ♦ Teacher and researcher at the University of Almeria
- ♦ Teacher and researcher at the University of Almeria
- ♦ High Performance Coach
- ♦ Doctor in Health Sciences
- ♦ Degree in Physical Education
- ♦ Master's Degree in Functional Recovery in Physical Activity and Sport
- ♦ Master's Degree in Regeneration Medicine
- ♦ Master's Degree in Physical Activity and Health
- ♦ Master's Degree in Dietetics and Diet Therapy
- ♦ Member of SEEDO, AEEM



06

Educational Plan

The teaching plan for this academic degree will be organized in modules that will cover everything from anatomical and biomechanical fundamentals to advanced intervention and rehabilitation strategies. In this sense, online sessions will focus on the transmission of theoretical content through innovative multimedia resources, video lectures and discussion forums, allowing graduates to learn at their own pace and facilitating flexibility in time management.



“

You will be prepared to successfully face the demands of the field of sports injury prevention and rehabilitation, always with the support of the revolutionary Relearning learning methodology"

Module 1. Personal Training

- 1.1. Personal Training
- 1.2. Flexibility Training
- 1.3. Endurance and Cardiorespiratory Training
- 1.4. Core Training
 - 1.4.1. Core Musculature
 - 1.4.2. The Training of Stabilization Systems
 - 1.4.3. Core Science and Training
 - 1.4.4. Core Training Guidelines
 - 1.4.5. Core Training Program Design
- 1.5. Balance Training
- 1.6. Plyometric Training
 - 1.6.1. Principles of Plyometric Training
 - 1.6.2. Designing a Plyometric Training Program
- 1.7. Speed and Agility Training
- 1.8. Strength Training
- 1.9. Integrated Program Design for optimal performance
- 1.10. Exercise Modalities

Module 2. Preventive Work for Sports Practice

- 2.1. Risk Factors in Sports
- 2.2. Working with Mat Exercises
- 2.3. Reformer and Cadillac
- 2.4. Wunda Chair
- 2.5. Active Global Stretching and Global Postural Re-education
- 2.6. FITBALL
- 2.7. TRX
- 2.8. Body Pump
- 2.9. Medicine Ball and Kettlebells
- 2.10. Thera Band
 - 2.10.1. Advantages and Properties
 - 2.10.2. Individual Exercises
 - 2.10.3. Exercises in Pairs
 - 2.10.4. Respiratory muscles



Module 3. Structure of the Locomotor System

- 3.1. Anatomical Position, Axes and Planes
- 3.2. Bone
- 3.3. Joints
 - 3.3.1. Etiology
 - 3.3.2. Synarthrosis
 - 3.3.3. Amphiarthrosis
 - 3.3.4. Diarthrosis
- 3.4. Cartilage
- 3.5. Tendons and Ligaments
- 3.6. Musculoskeletal
- 3.7. Development of the Musculoskeletal System
- 3.8. Components of the Musculoskeletal System
- 3.9. Nervous Control of Skeletal Muscles
- 3.10. Muscle Contraction
 - 3.10.1. Functioning of Muscle Contraction
 - 3.10.2. Type of Muscle Contraction
 - 3.10.3. Muscle Bioenergetics

Module 4. Fitness, Functional and Biomechanical Assessment

- 4.1. Anatomy and Kinesiology
- 4.2. The Science of Human Motion
- 4.3. Applied Biomechanics
- 4.4. Initial Customer Inquiry
- 4.5. Physical Fitness Testing Protocols and Standards
- 4.6. Functional Movement Assessment
 - 4.6.1. Motion Detection, Testing and Assessment
 - 4.6.2. Functional Movement Screen (FMS)
 - 4.6.3. Selective Assessment of Functional Movement
 - 4.6.4. Specific Functional Performance Tests

- 4.7. Nutritional Assessment, Genetic Evaluation, Biochemistry and Quality of Life
- 4.8. Biomechanics
 - 4.8.1. Biomechanical Fundamentals
 - 4.8.2. Biomechanics of Human Movement
 - 4.8.3. Muscular Control of Movement
 - 4.8.4. Biomechanics of Resistance Exercise
- 4.9. Evaluation of Physical Fitness
- 4.10. Risk Detection and Stratification

Module 5. Frequent Injuries in Athletes

- 5.1. Shoulder Injuries in Sports
 - 5.1.1. Relevant Aspects of the Shoulder
 - 5.1.2. Injuries and Disorders Related to Acute and Chronic Shoulder Instability
 - 5.1.3. Clavicular Injuries
 - 5.1.4. Nerve Injuries in the Shoulder Region
 - 5.1.5. Brachial Plexus Injuries
- 5.2. Upper Arm Injuries
- 5.3. Elbow Injuries in Sports
- 5.4. Forearm, Wrist and Hand Injuries in Sports
- 5.5. Head and Facial Injuries in Sports
- 5.6. Throat, Chest and Abdominal Injuries in Sports
- 5.7. Back/Spine Injuries in Sports
 - 5.7.1. Aspects Relevant to the Back and Spine
 - 5.7.2. Diagnosis of Back Pain
 - 5.7.3. Neck and cervical Injuries
 - 5.7.4. Injuries of the Thoracic and Lumbar Area
- 5.8. Hip Joint, Pelvic and Groin Injuries in Sports
- 5.9. Thigh, Knee and Leg Injuries in Sport
- 5.10. Ankle and Foot Injuries in Sport

Module 6. Exercise for Sports Injury Readaptation

- 6.1. Physical Activity and Physical Exercise for Health Improvement
- 6.2. Classification and Selection Criteria for Exercises and Movements
- 6.3. Principles of Sports Training
 - 6.3.1. Biological Principles
 - 6.3.1.1. Functional Unit
 - 6.3.1.2. Multilaterality
 - 6.3.1.3. Specificity
 - 6.3.1.4. Overload
 - 6.3.1.5. Supercompensation
 - 6.3.1.6. Individualization
 - 6.3.1.7. Continuity
 - 6.3.1.8. Progression
 - 6.3.2. Pedagogical Principles
 - 6.3.2.1. Transfer
 - 6.3.2.2. Efficacy
 - 6.3.2.3. Voluntary Stimulation
 - 6.3.2.4. Accessibility
 - 6.3.2.5. Periodization
- 6.4. Techniques Applied to the Treatment of Sports Injuries
- 6.5. Specific Action Protocols
- 6.6. Phases of the Process of Organic Recovery and Functional Recovery
- 6.7. Design of Preventive Exercises
- 6.8. Specific Physical Exercises by Muscle Groups
- 6.9. Proprioceptive Reeducation
 - 6.9.1. Bases of Proprioceptive and Kinesthetic Training
 - 6.9.2. Proprioceptive Consequences of Injury
 - 6.9.3. Development of Sport Proprioception
 - 6.9.4. Materials for Proprioception Work
 - 6.9.5. Phases of Proprioceptive Re-education
- 6.10. Sports Practice and Activity During the Recovery Process

Module 7. Frequent Pathologies of the Locomotor System

- 7.1. Cervical pain, Dorsalgia and Lumbalgia
- 7.2. Scoliosis
- 7.3. Herniated Disc
- 7.4. Shoulder Tendinitis
- 7.5. Epicondylitis
 - 7.5.1. Epidemiology
 - 7.5.2. Pathologic Anatomy
 - 7.5.3. Clinical Symptoms
 - 7.5.4. Diagnosis
 - 7.5.5. Treatment
- 7.6. Hip Osteoarthritis
- 7.7. Gonarthrosis
- 7.8. Plantar Fasciitis
 - 7.8.1. Conceptualization
 - 7.8.2. Risk Factors
 - 7.8.3. Symptoms
 - 7.8.4. Treatment
- 7.9. Hallux Valgus and Flat Feet
- 7.10. Sprained Ankle

Module 8. Exercise for Functional Recovery

- 8.1. Functional Training and Advanced Rehabilitation
 - 8.1.1. Function and Functional Rehabilitation
 - 8.1.2. Proprioception, Receptors and Neuromuscular Control
 - 8.1.3. Central Nervous System: Integration of Motor Control
 - 8.1.4. Principles for the Prescription of Therapeutic Exercise
 - 8.1.5. Restoration of Proprioception and Neuromuscular Control
 - 8.1.6. The 3-Phase Rehabilitation Model
- 8.2. The Science of Pilates in Rehabilitation
- 8.3. Principles of Pilates

- 8.4. The Integration of Pilates in Rehabilitation
- 8.5. Methodology and Equipment Necessary for Effective Practice
- 8.6. Cervical and Thoracic Spine
- 8.7. Lumbar Spine
- 8.8. Shoulder and Hip
- 8.9. Knee
- 8.10. Foot and Ankle

Module 9. Nutrition for Functional Recovery and Rehabilitation

- 9.1. Integral Nutrition as a Key Element in Injury Prevention and Recovery
- 9.2. Carbohydrates
- 9.3. Proteins
- 9.4. Fats
 - 9.4.1. Saturated
 - 9.4.2. Unsaturated
 - 9.4.2.1. Monounsaturated
 - 9.4.2.2. Polyunsaturated
- 9.5. Vitamins
 - 9.5.1. Water Soluble
 - 9.5.2. Fat Soluble
- 9.6. Minerals
 - 9.6.1. Macrominerals
 - 9.6.2. Microminerals
- 9.7. Fiber
- 9.8. Water
- 9.9. Phytochemicals
 - 9.9.1. Phenols
 - 9.9.2. Thiols
 - 9.9.3. Terpenes
- 9.10. Food Supplements for Prevention and Functional Recovery

Module 10. Coaching and Personal Trainer Business

- 10.1. The Beginning of the Personal Trainer
- 10.2. Coaching for the Personal Trainer
- 10.3. The Personal Trainer as a Promoter of Exercise and the Effects on Health and Performance
 - 10.3.1. Basic Fundamentals of Physical Exercise
 - 10.3.2. Acute Exercise Responses
 - 10.3.3. Health Effects of Exercise
 - 10.3.3.1. Resistance
 - 10.3.3.2. Strength and Power
 - 10.3.3.3. Balance
 - 10.3.4. Health Effects of Exercise
 - 10.3.4.1. Physical Health
 - 10.3.4.2. Mental Health
- 10.4. Need for Behavioral Changes
- 10.5. The Personal Trainer and the Relationship with the Client
- 10.6. Motivational Tools
 - 10.6.1. Appreciative Exploration
 - 10.6.2. Motivational Interview
 - 10.6.3. Building Positive Experiences
- 10.7. Psychology for the Personal Trainer
- 10.8. Personal Trainer's Career Path
- 10.9. Design and Maintenance and Material Installations
- 10.10. Legal Aspects of Personal Training



You will use state-of-the-art technological tools and online resources to facilitate independent learning, as well as your interaction with teachers”

07

Clinical Internship

After passing the online theoretical period, the program includes a practical training period in a reference clinical center. Students will have at their disposal the support of a tutor who will accompany them throughout the process, both in the preparation and the development of the internship.



“

The practical stay of this Hybrid Professional Master's Degree has been designed to provide you with a real and direct experience in a professional environment"

The Internship Program of this program of Prevention and Rehabilitation of Sports Injuries will consist of a practical stay in a prestigious sports center, lasting 3 weeks, from Monday to Friday and with 8 consecutive hours of practical training, next to an assistant specialist. Therefore, this stay will allow the treatment of real athletes alongside a team of professionals of reference in the area of prevention and rehabilitation of injuries, applying the most innovative diagnostic procedures and planning the latest generation of therapeutics.

In this totally practical training proposal, the activities are aimed at the development and improvement of the necessary competences for the care in areas and conditions that require a high level of qualification, and are oriented to the specific training for the exercise of the activity, in a safe environment for the athlete and a high professional performance.

It is, without a doubt, an opportunity to learn by working. An experience that will not only reinforce learning, but will also allow to build a network of professional contacts and gain valuable experience, essential for a promising future career in the field of sports health.

The practical teaching will be carried out with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of teachers and other training partners to facilitate teamwork and multidisciplinary integration as transversal skills for the practice of prevention and readaptation of sports injuries (learning to be and learning to relate).



The procedures described below will form the basis of the practical part of the internship, and its implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:

Module	Practical Activity
Diagnosis and Treatment of Injuries	Evaluate the physical condition and biomechanics of athletes
	Utilize motion analysis technologies to improve diagnostic accuracy
	Assist in the administration of physical and therapeutic treatments
	Monitor athletes' recovery progress
	Administer first aid and respond to emergencies during sporting events
	Provide emotional and motivational support to athletes during their recovery process
	Perform periodic follow-ups and adjustments to rehabilitation plans
Rehabilitation	Implement appropriate rehabilitation techniques for different types of injuries
	Prepare detailed reports on the condition and progress of athletes
	Evaluate the physical and functional condition of athletes
	Supervise therapeutic and rehabilitation exercise sessions
	Design personalized injury prevention programs
Prevention Plan Design	Implement rapid post-injury intervention strategies
	Facilitate sports health workshops and educational sessions
	Develop effective communication skills to interact with athletes and their support teams
	Instruct athletes in stretching and strengthening exercises to improve performance and prevent future injuries

Module	Practical Activity
Nutrition	Assess the specific nutritional needs of athletes based on their sport activity and health status
	Design personalized nutrition plans that support the rehabilitation process and improve sports performance
	Recommend appropriate nutritional supplements to facilitate recovery from injuries and prevention of new incidences
	Monitor the dietary intake of athletes to ensure compliance with established nutritional goals
	Teach weight management techniques that are healthy and effective, without compromising performance and recovery
	Evaluate the effects of different types of diets on injury recovery and injury prevention
	Research
Examine the use of emerging technologies, such as Virtual Reality and biofeedback, in sports rehabilitation	
Analyze the causes and risk factors associated with injuries in different sports and levels of competition	
Study the psychological impact of injuries in athletes and evaluate intervention techniques	
Perform longitudinal studies to follow the evolution of athletes after implementing specific readaptation programs	

Civil Liability Insurance

This institution's main concern is to guarantee the safety of the students and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



General Conditions of the Internship Program

The general terms and conditions of the internship agreement for the program are as follows:

1. TUTOR: During the Hybrid Professional Master's Degree, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

2. DURATION: The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

3. ABSENCE: If the students does not show up on the start date of the Hybrid Professional Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

4. CERTIFICATION: Professionals who pass the Hybrid Professional Master's Degree will receive a certificate accrediting their stay at the center.

5. EMPLOYMENT RELATIONSHIP: the Hybrid Professional Master's Degree shall not constitute an employment relationship of any kind.

6. PRIOR EDUCATION: Some centers may require a certificate of prior education for the Hybrid Professional Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

7. DOES NOT INCLUDE: The Hybrid Professional Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed.

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

08

Where Can I Do the Internship?

This Hybrid Professional Master's Degree includes in its itinerary a practical stay in a prestigious Rehabilitation center, where the students will put into practice everything they have learned in the field of Prevention and Rehabilitation of Sports Injuries. In this sense, and in order to bring this program to more professionals, TECH offers the opportunity to take it in different rehabilitation centers. In this way, this institution strengthens its commitment to quality and affordable education for all.





“

The practical immersion will allow you to develop key skills in the evaluation, diagnosis and design of programs of Prevention and Rehabilitation of Sports Injuries”

tech 44 | Where Can I Do the Internship?



The student will be able to complete the practical part of this Hybrid Professional Master's Degree at the following centers:



Sports Science

Avanza Rehabilitación

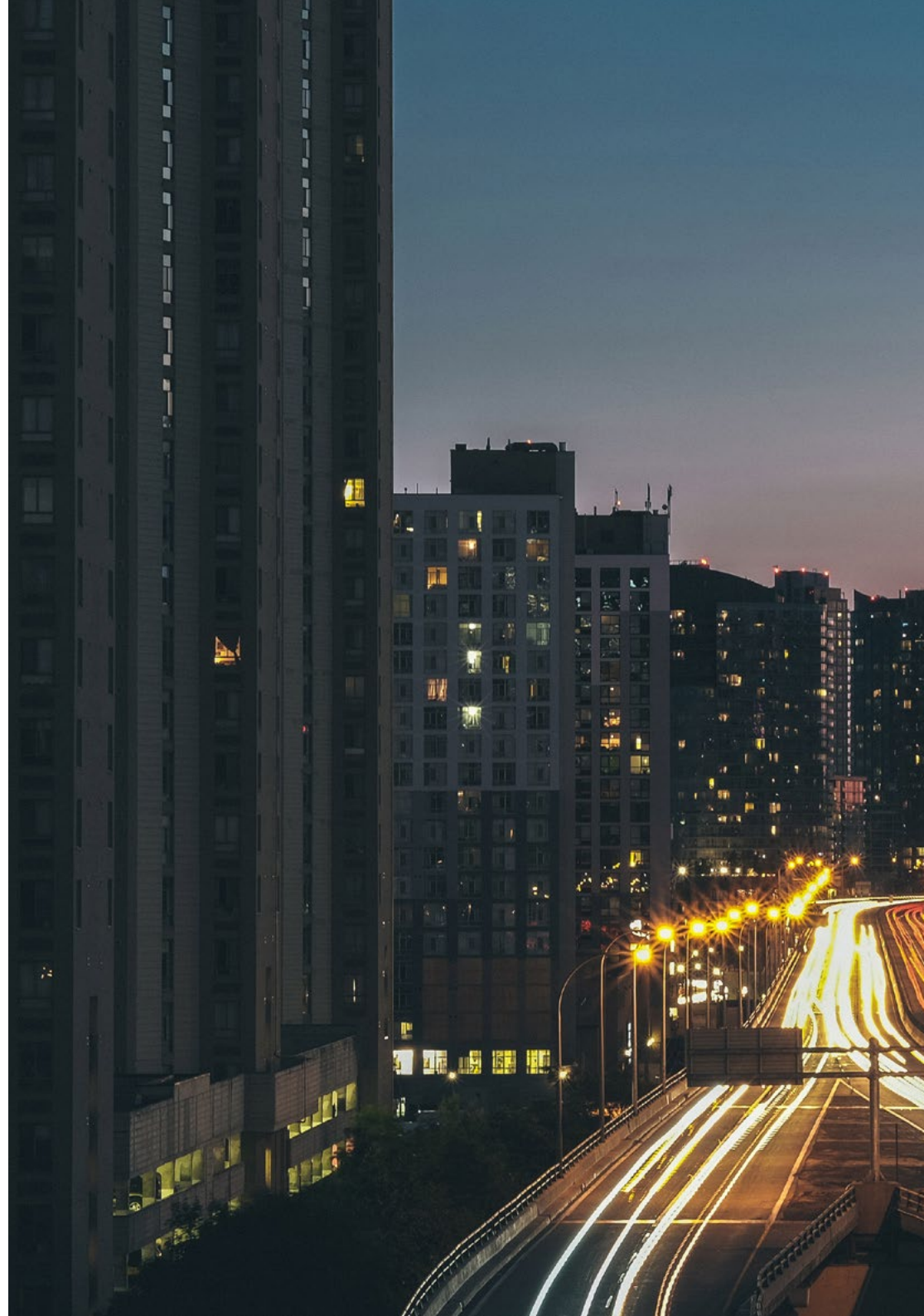
Country	City
Argentina	Tucumán

Address: Juan Gregorio de las Heras
581, T4000 San Miguel de Tucumán

Curative and preventive facility, integrating physiotherapy,
occupational therapy and social work

Related internship programs:

- Physiotherapy in the Approach to Acquired Brain Injury
- Sports Injury Prevention and Readaptation





Selected Trainers Granada Centro

Country	City
Spain	Granada

Address: Avenida Pablo Picasso 27, Local Izquierdo, 18006 Granada (España)

The team of professionals at Selected Trainers designs customized workouts for aesthetic and health purposes.

- Related internship programs:**
- High Performance in Sports
 - Therapeutic Personal Training



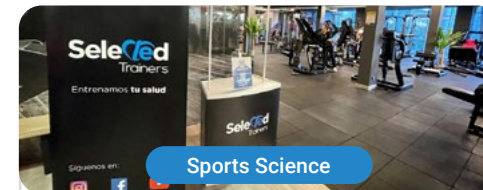
Selected Trainers Centro O2 Granada

Country	City
Spain	Granada

Address: Calle Neptuno, s/n, Ronda, 18004 Granada (España)

The team of professionals at Selected Trainers designs customized workouts for aesthetic and health purposes.

- Related internship programs:**
- High Performance in Sports
 - Therapeutic Personal Training



Selected Trainers Centro O2 Huelva

Country	City
Spain	Huelva

Address: Calle San Sebastián, S/N, 21004 Huelva (España)

The team of professionals at Selected Trainers designs customized workouts for aesthetic and health purposes.

- Related internship programs:**
- High Performance in Sports
 - Therapeutic Personal Training

09

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"

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.

“

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.



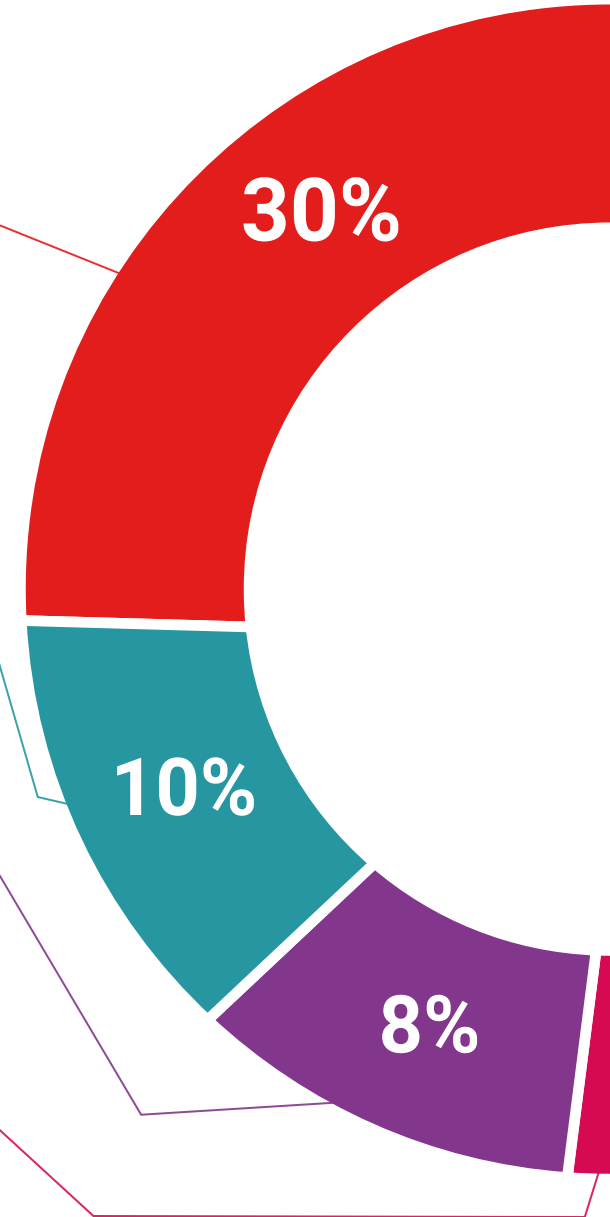
Practising Skills and Abilities

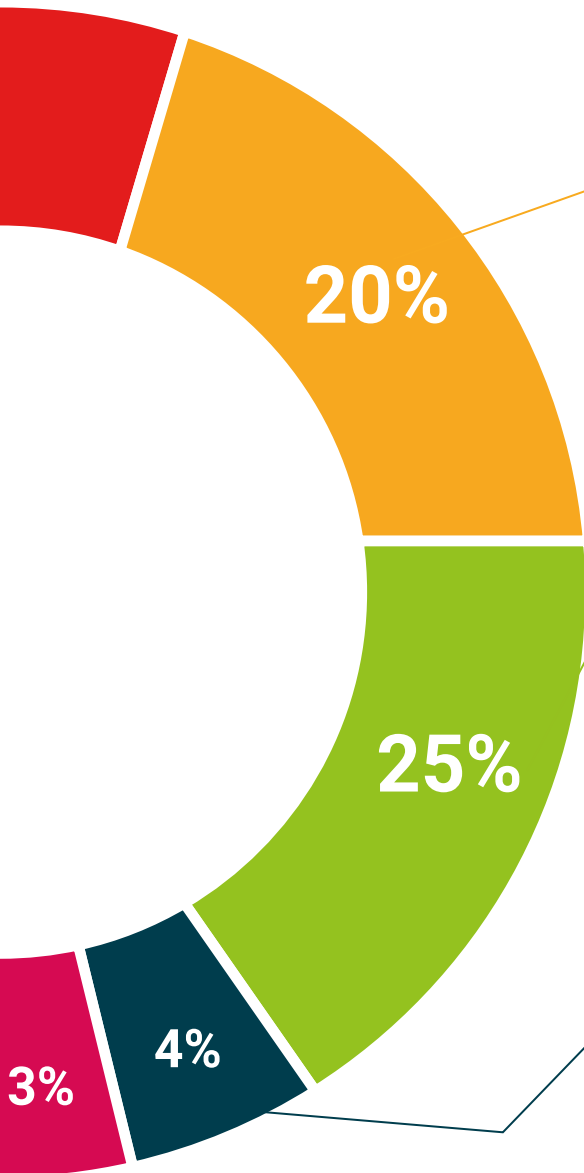
They will carry out activities to develop specific competencies and skills in each thematic area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



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.



10 Certificate

The Hybrid Professional Master's Degree in Sports Injury Prevention and Readaptation guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid Professional Master's Degree issued by TECH Technological University.



“

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

This **Hybrid Professional Master's Degree in Sports Injury Prevention and Readaptation** contains the most complete and up-to-date program on the professional and educational field.

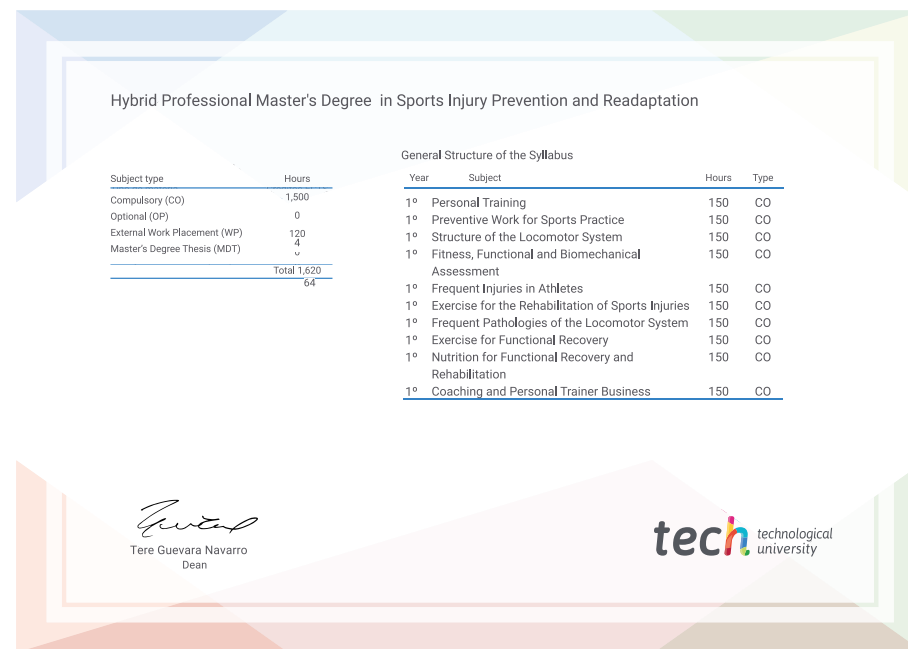
After the student has passed the assessments, they will receive their corresponding **Hybrid Professional Master's Degree** diploma issued by **TECH Technological University** via tracked delivery*.

In addition to the diploma, students will be able to obtain an academic transcript, as well as a certificate outlining the contents of the program. In order to do so, students should contact their academic advisor, who will provide them with all the necessary information.

Title: **Hybrid Professional Master's Degree in Sports Injury Prevention and Readaptation**

Modality: **Hybrid (Online + Internship)**

Duration: **12 months**



*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.

future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present quality
development learning
virtual classrooms



Hybrid Professional Master's Degree

Sports Injury Prevention and Readaptation

Modality: Hybrid (Online + Internship)

Duration: 12 months

Certificate: TECH Technological University

Hybrid Professional Master's Degree Sports Injury Prevention and Readaptation

Endorsed by the NBA



tech technological
university