

Postgraduate Certificate

Sports Performance Assessment in Strength Training

Endorsed by the NBA





Postgraduate Certificate

Sports Performance Assessment in Strength Training

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

Website: www.techtitute.com/us/sports-science/postgraduate-certificate/sports-performance-assessment-strength-training

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01

Introduction

Any strength training process must necessarily be accompanied by a periodized strategy of neuromuscular assessment which allows us to provide objective data about the subject's response (performance fitness effect), as well as the proposed method for achieving The goals.

With this intensive training the student will obtain the necessary management, from the theoretical foundation and practical management, of most of the tests and evaluation protocols proposed in the most current bibliography, in order to apply them according to specific requirements and professional performance field.





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This 100% online Postgraduate Certificate will allow you to balance your studies with your professional work while increasing your knowledge in this field”

In recent years, strength training has burst with great impetus in the scientific community, covering multiple contexts ranging from sports performance in time and brand sports, to situational sports through the whole range of sports modalities.

Information regarding tests to objectify neuromuscular performance has always been proposed by recognized specialists in the field of strength training and study. In this sense, countless scientific publications, as well as trainers in the field of practice, propose a wide variety of tests for the assessment and control of this capacity.

Both realities, the need to assess the trained subject, as well as the impact or transfer (+ or -) of the methodology on his or her performance capacity, make it essential to have a strict knowledge and a deep understanding of each of the possible proposals presented in the literature and applicable to the field of practice.

Students of this Postgraduate Certificate will have a differentiating qualification with respect to their professional colleagues, being able to perform in all areas of sport as a specialist in Strength Training.

The faculty of this Postgraduate Certificate in Sports Performance Assessment in Strength Training has made a careful selection of each of the topics of this qualification to offer the student an educational opportunity as complete as possible and always linked to current events.

As such, TECH Technological University has set out to create contents of the highest teaching and educational quality that will turn students into successful professionals, following the highest quality standards in teaching at an international level. Therefore, this Postgraduate Certificate offers you a wide range of content that will help you to reach the elite of physical training. In addition, as it is an online course, the student is not conditioned by fixed schedules or the need to move to another physical location, but can access the contents at any time of the day, balancing their work or personal life with their academic life.

This **Postgraduate Certificate in Sports Performance Assessment in Strength Training** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ◆ The development of numerous case studies presented by specialists in personal training
- ◆ The graphic, schematic and practical contents of the course are designed to provide all the essential information required for professional practice
- ◆ Exercises where the self-assessment process can be carried out to improve learning
- ◆ Algorithm-based interactive learning system for decision making
- ◆ Special emphasis on innovative methodologies in personal training
- ◆ 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



Immerse yourself in this Postgraduate Certificate of high scientific rigor and improve your skills in strength training for high-performance sports"

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This Postgraduate Certificate is the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge as a personal trainer, you will obtain a qualification from TECH Global University"

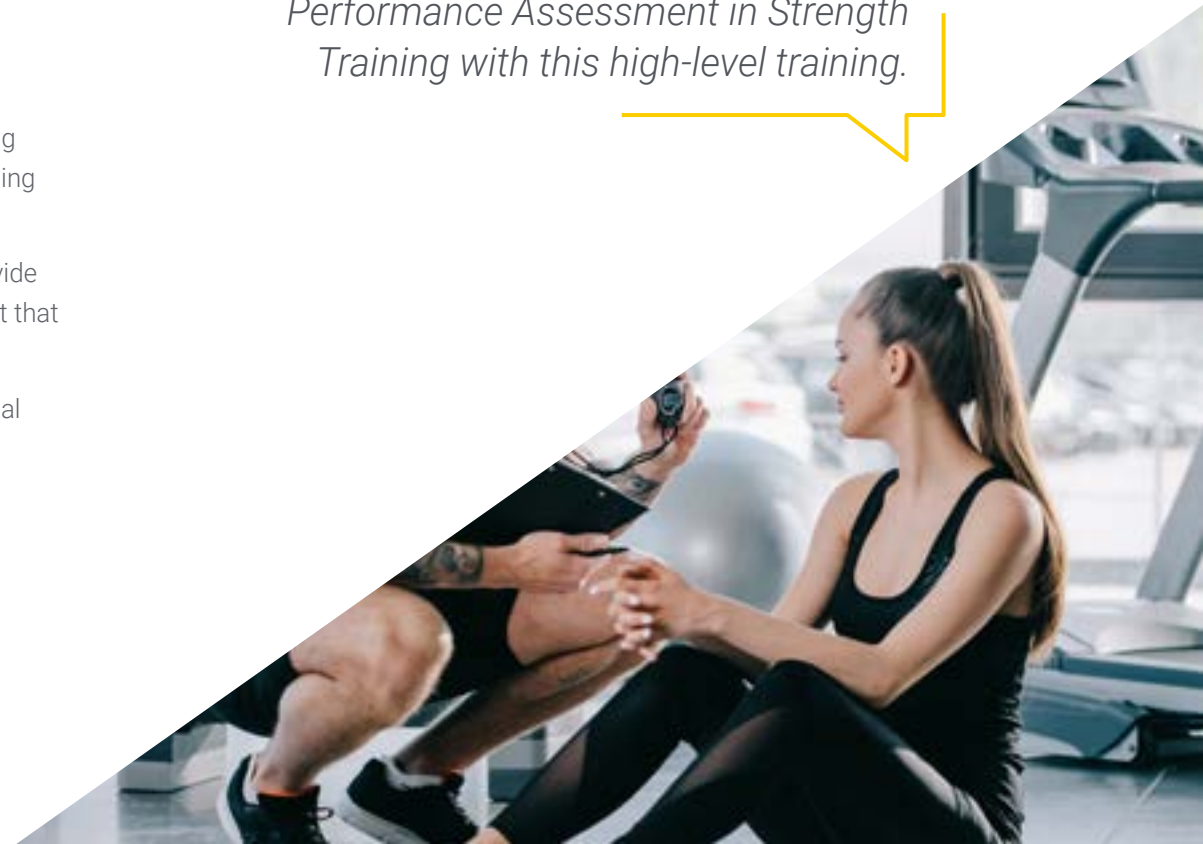
The teaching staff includes professionals from the field of sports science, who bring their experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the course. To do so, the professional will be assisted by an innovative interactive video system developed by recognized experts in Strength Training under Sports Performance and with great experience.

This Postgraduate Certificate allows training in simulated environments, which provide immersive learning programmed to train for real situations.

Increase your knowledge in Sports Performance Assessment in Strength Training with this high-level training.



02 Objectives

The main objective of this program is the development of theoretical and practical learning, so that the sports science professional can master in a practical and rigorous way with this Postgraduate Certificate of in Sports Performance Assessment in Strength Training.



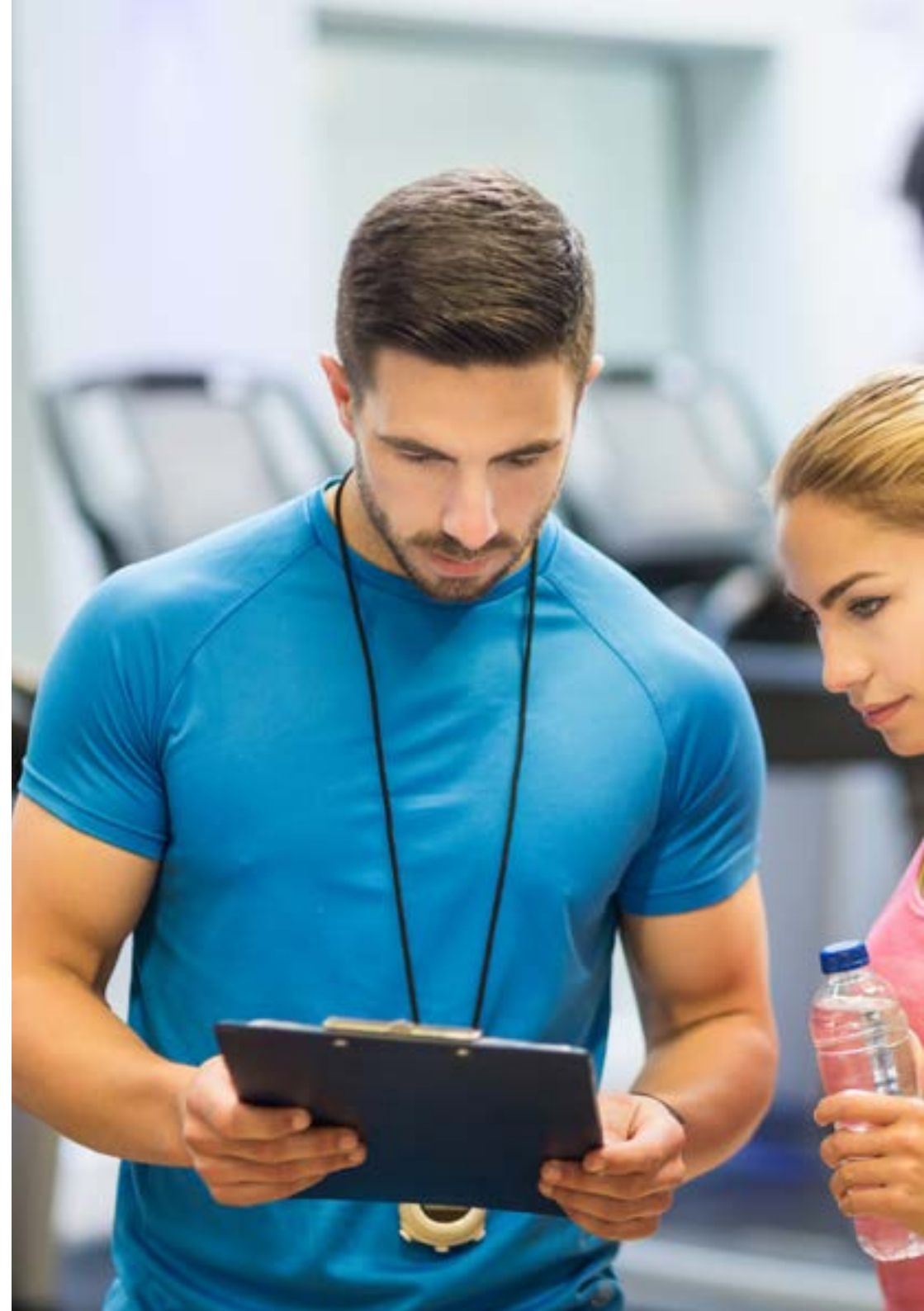
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Our goal is to achieve academic excellence and help you achieve professional success. Don't hesitate any longer and join us”



General Objectives

- ◆ Delve into the knowledge based on the most current scientific evidence with full applicability in the practical field of strength training
- ◆ Master all the most advanced methods of strength training
- ◆ Apply with certainty the most current educational methods to improve sports performance regarding strength
- ◆ Effectively master strength training for performance enhancement in time and mark sports as well as situational sports
- ◆ Master the principles governing exercise physiology and biochemistry
- ◆ Delve into the principles that govern the Theory of Complex Dynamic Systems as they relate to strength training
- ◆ Successfully integrate strength training for the improvement of motor skills immersed in sport
- ◆ Successfully master all the knowledge acquired in the different modules in real practice





Specific Objectives

- ◆ Specialize in the different types of assessment and their applicability to the field of practice
- ◆ Select the most appropriate tests for your specific needs
- ◆ Correctly and safely administer the protocols of the different tests and the interpretation of the data collected
- ◆ Delve into and apply different types of technologies currently used in the field of assessment, in the field of health and fitness performance at any level of demand



The sports field requires prepared professionals and we give you the keys to position yourself among the professional elite"

03

Course Management

The teaching staff, experts in Personal Training, enjoys considerable prestige in the profession and are professionals with years of teaching experience who have come together to help Students to give a boost to their career. To this end, they have developed this Postgraduate Certificate with recent updates on the subject that will allow you to train and increase your skills in this sector.

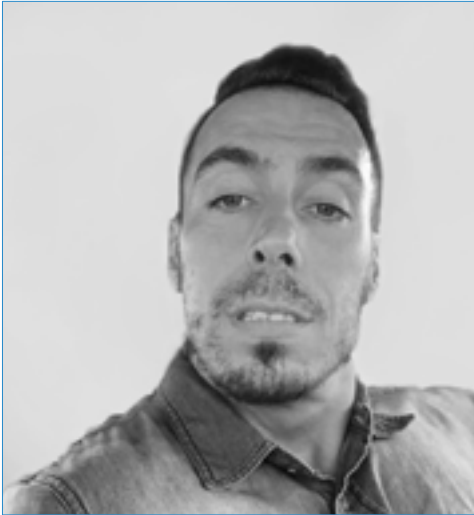




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*Learn from the best professionals
and become a successful
professional yourself”*

Management



Dr. Rubina, Dardo

- ◆ Specialist in High Performance Sports
- ◆ CEO of Test and Training
- ◆ Physical Trainer at Moratalaz Sports School
- ◆ Teacher of Physical Education in Football and Anatomy. CENAFE Schools Carlet
- ◆ Coordinator of Physical Preparation in Field Hockey. Club Gimnasia y Esgrima de Buenos Aires
- ◆ Doctorate in High Performance Sports
- ◆ Postgraduate Certificate in Advanced Research Studies (DEA), University of Castilla la Mancha
- ◆ Master's Degree in High Performance Sports by the Autonomous University of Madrid
- ◆ Postgraduate in Physical Activity in Populations with Pathologies by the University of Barcelona
- ◆ Competitive Bodybuilding Technician. Extremadura Federation of Bodybuilding and Fitness
- ◆ Expert in Sports Scouting and Quantification of Training Load (specialization in Soccer), Sports Sciences
- ◆ Expert in Advanced Weight Training by IFBB
- ◆ Expert in Advanced Nutrition by IFBB
- ◆ Specialist in Physiological Assessment and Interpretation of Physical Fitness by Bio
- ◆ Certification in Technologies for Weight Control and Physical Performance. Arizona State University

Professors

Mr. Mase, Juan Manuel

- ◆ Physical trainer for high performance athletes
- ◆ Director of the Athlon Science Study Group
- ◆ Physical trainer for several professional soccer teams in South America



04

Structure and Content

The structure of the contents has been designed by a team of professionals knowledgeable about the implications of learning in daily practice, aware of the relevance of the current relevance of quality education in the field of personal training; and committed to quality teaching through new educational technologies.





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We have the most complete and up-to-date scientific program on the market. We want to provide you with the best education”

Module 1. Sports Performance Assessment in Strength Training

- 1.1. Assessment
 - 1.1.1. General Concepts on Assessment, Test and Measuring
 - 1.1.2. Test Characteristics
 - 1.1.3. Types of Tests
 - 1.1.4. Assessment Objectives
- 1.2. Technology and Neuromuscular Assessments
 - 1.2.1. Contact Mat
 - 1.2.2. Strength Platforms
 - 1.2.3. Load Cell
 - 1.2.4. Accelerometers
 - 1.2.5. Position Transducers
 - 1.2.6. Cellular Applications for Neuromuscular Evaluation
- 1.3. Submaximal Repetition Test
 - 1.3.1. Protocol for its Assessment
 - 1.3.2. Validated Estimation Formulas for the Different Training Exercises
 - 1.3.3. Mechanical and Internal Load Responses During a Submaximal Repetition Test
- 1.4. Progressive Maximum Incremental Exercise Test (IETmax)
 - 1.4.1. Naclerio and Figueroa Protocol 2004
 - 1.4.2. Mechanical (linear encoder) and internal load (PSE) responses during one TPI max
 - 1.4.3. Determination of the optimal zone for power training
- 1.5. Horizontal Jump Test
 - 1.5.1. Assessment Without Using Technology
 - 1.5.2. Evaluation using technology (Horizontal Encoder and Force Platform)
- 1.6. Simple Vertical Jump Test
 - 1.6.1. Squat Jump (SJ) Assessment
 - 1.6.2. Counter Movement Jump Assessment
 - 1.6.3. Assessment of an Abalakov Salto ABK
 - 1.6.4. Drop Jump (DJ) Assessment





- 1.7. Rebound Jump Test
 - 1.7.1. 5-second Repeated Jump Test
 - 1.7.2. 15-second Repeated Jump Test
 - 1.7.3. 30-second Repeated Jump Test
 - 1.7.4. Fast Strength Endurance Index (Bosco)
 - 1.7.5. Effort Exercise Rate in the Rebound Jump Test
- 1.8. Mechanical Responses (Strength, Power and Speed/Time) During Single and Repeated Jumps Tests
 - 1.8.1. Strength/Time in Simple and Repeated Jumps
 - 1.8.2. Speed/Time in Single and Repeated Jumps
 - 1.8.3. Power/Time in Simple and Repeated Jumps
- 1.9. Strength/Speed Profiles in Horizontal Vectors
 - 1.9.1. Theoretical Basis of an S/S Profile
 - 1.9.2. Morin and Samozino Assessment Protocols
 - 1.9.3. Practical Applications
 - 1.9.4. Contact Carpet, Linear Encoder and Force Platform Evaluation of Forces
- 1.10. Strength/Speed Profiles in Vertical Vectors
 - 1.10.1. Theoretical Basis of an S/S Profile
 - 1.10.2. Morin and Samozino Assessment Protocols
 - 1.10.3. Practical Applications
 - 1.10.4. Contact Carpet, Linear Encoder and Force Platform Evaluation of Forces.
- 1.11. Isometric Tests
 - 1.11.1. McCall Test
 - 1.11.1.1. Evaluation Protocol and Values Recorded With a Force Platform
 - 1.11.2. Mid-Thigh Pull Test
 - 1.11.2.1. Evaluation Protocol and Values Recorded With a Force Platform



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

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.



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.



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

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 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 Sports Performance Assessment in Strength Training guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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

This private qualification will allow you to obtain a **Postgraduate Certificate in Sports Performance Assessment in Strength Training** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Sports Performance Assessment in Strength Training**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



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

future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology

community commitment

personalized service innovation

knowledge present

development language

virtual classroom

tech global
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