Postgraduate Diploma

High Performance in Sports: Assessment, Planning and Biomechanics

Endorsed by the NBA

tech technological university

tech technological university

Postgraduate Diploma

High Performance in Sports: Assessment, Planning and Biomechanics

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

Website: www.techtitute.com/us/sports-science/postgraduate-diploma/postgraduate-diploma-high-perfomance-sports-assessment-planning-biomechanics

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01

Introduction

This Postgraduate Diploma is the most up-to-date academic program in the market, taught by extraordinary professors with extensive experience in the practical field at the highest level of sports performance.

The teaching team of this Postgraduate Diploma in High Performance in Sports: Assessment, Planning and Biomechanics has made a careful selection of each of the topics of this training in order to offer the student a study opportunity as complete as possible and always linked to current events.

The most up-to-date academic training provided by outstanding teachers experienced in the world of sports and academics"

In this Postgraduate Diploma you will find detailed training on key aspects of sports performance, treated with a unique didactic and depth in the current academic offer.

Each module will be taught by true specialists in the field, which guarantees the highest level of knowledge in the subject.

This Postgraduate Diploma in High Performance in Sports: Assessment, Planning and Biomechanics will provide the student with high quality and in-depth theoretical content in each module. One of the characteristics that differentiate this Postgraduate Diploma from others is the relationship between the different topics of the modules at a theoretical level, but above all at a practical level so that the student obtains real examples of teams and athletes of the highest sports performance worldwide, as well as from the professional world of sports, resulting in the student being able to build knowledge in the most complete way.

Another strong point of this Postgraduate Diploma in High Performance in Sports: Assessment, Planning and Biomechanics is the training of the student in the use of new technologies applied to Sports Performance. The student will not only learn about new technology in the field of performance, but will learn how to use it and, more importantly, how to interpret the data provided by each device to make better decisions in terms of training programming.

Thus, at TECH we have set out to create contents of the highest teaching and educational quality that will turn our students into successful professionals, following the highest quality standards in teaching at an international level. Therefore, we show you this Postgraduate Diploma with a rich content that will help you reach the elite of High Performance in Sports. In addition, as it is an online Postgraduate Diploma, 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 Diploma in High Performance in Sports: Assessment, Planning and Biomechanics** contains the most complete and up-to-date scientific program on the market. The most important features of the program include

- Development of practical cases presented by experts 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
- The interactive algorithm-based learning system for decision making
- Its special emphasis on innovative methodologies in personal training for injury recovery and nutrition
- 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 the study of this high-level Postgraduate Diploma and improve your skills in High Performance in Sports"

This Postgraduate Diploma is the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge as a personal trainer, you will obtain a certificate from TECH"

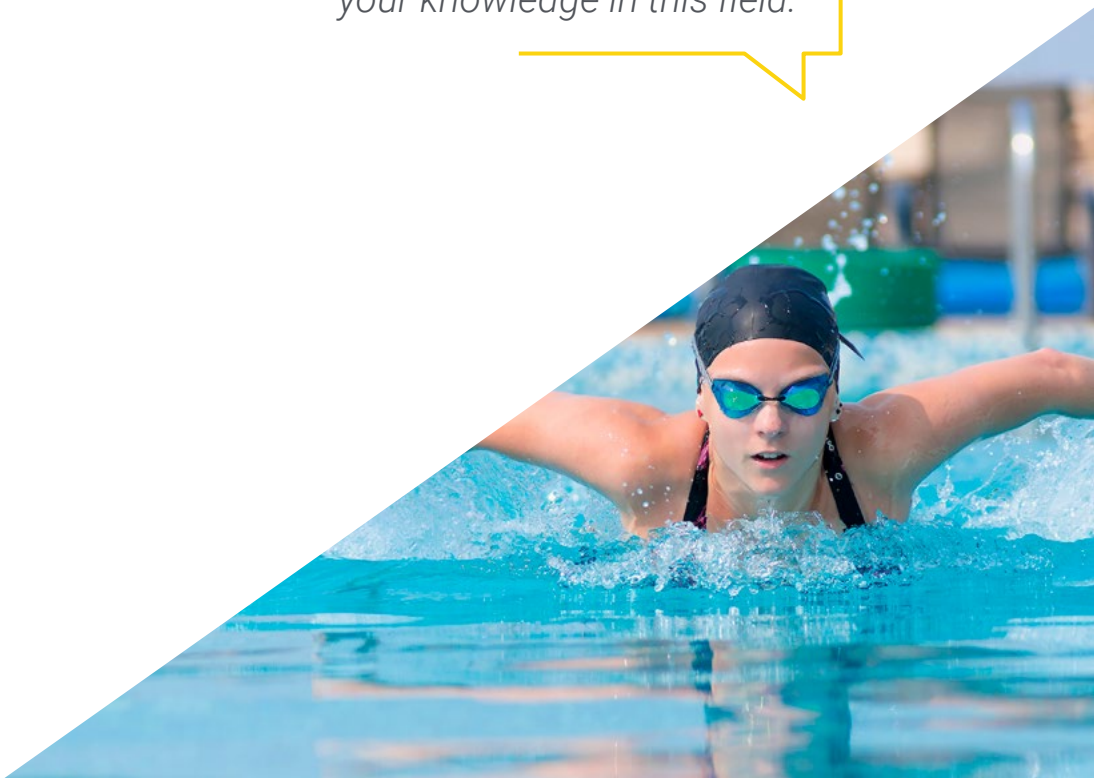
This Specialist Diploma offers training in simulated environments, which provides an immersive learning experience designed to train for real-life situations.

This 100% online Specialist Diploma will allow you to combine your studies with your professional work while increasing your knowledge in this field.

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 training programmed to train 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 professional will be assisted by an innovative interactive video system created by renowned and experienced experts in injury rehabilitation and functional recovery exercises.



02

Objectives

The main objective of this program is to conduct theoretical and practical learning, so that the sports science professional can master in a practical and rigorous way the novelties in High Performance in Sports.

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

General Objectives

- Master and apply with certainty the most current training methods to improve sports performance
- Effectively master statistics and thus be able to make correct use of the data obtained from the athlete, as well as initiate research processes
- Acquire knowledge based on the most current scientific evidence with full applicability in the practical field
- Master all the most advanced methods of sports performance assessment
- Master the principles governing Exercise Physiology, as well as Biochemistry
- Master the principles governing Biomechanics applied directly to Sports Performance
- Master the principles governing Nutrition applied to sports performance
- Successfully integrate all the knowledge acquired in the different modules in real practice

Specific Objectives

Module 1. Sports Performance Assessment

- Become familiar with 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
- Apply different types of technologies currently used in the field of exercise assessment, whether in the field of health and fitness performance at any level of demand

Module 2. Planning applied to High Performance in Sports

- Understand the internal logic of planning, such as its proposed core models
- Apply the Dose-Response concept in training
- Clearly differentiate the impact of programming with planning and its dependencies
- Acquire the ability to design different planning models according to the work reality
- Apply the concepts learned in an annual and/or multi-year planning design

Module 3. Biomechanics applied to High Performance in Sports

- Specialize in the principles of Biomechanics oriented to physical education and Sport
- Apply the basic knowledge and technologies of biomechanics as a function of physical education, sport, performance and daily life
- Value the importance of protocols and the different types of biomechanical evaluation as a fundamental factor in the process of sports development and assessment
- Develop critical and analytical thinking that will allow him/her to generate innovative protocols and procedures, with different types of technology

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

03

Course Management

Our teaching team, experts in Personal Training, all have extensive prestige in the profession and are professionals with years of teaching experience who have come together to help you give a boost to your profession. To this end, they have developed this Postgraduate Diploma with recent updates in the field that will allow you to train and increase your skills in this sector.

Learn from the best professionals and become a successful professional yourself"

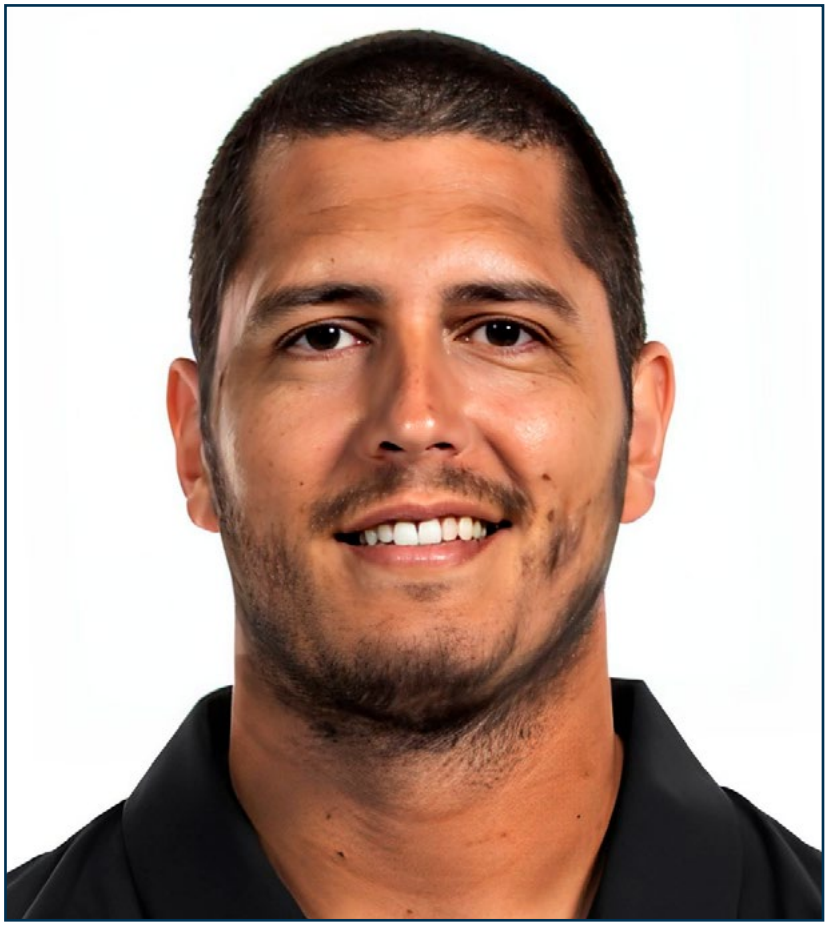
International Guest Director

Tyler Friedrich, Ph.D., is a leading personality in the international field of Sports Performance and Applied Sports Science. With a strong academic background, he has demonstrated an exceptional commitment to excellence and innovation, and has contributed to the success of numerous elite athletes internationally.

Throughout his career, Tyler Friedrich has deployed his expertise in a wide range of sporting disciplines, from football to swimming, volleyball to field hockey. His work in performance data analysis, especially through the Catapult athlete GPS system, and his integration of sports technology into performance programs, has established him as a leader in athletic performance optimization.

As Director of Sports Performance and Applied Sports Science, Dr. Friedrich has led strength and conditioning training, as well as the implementation of specific programs for several Olympic sports, including volleyball, rowing and gymnastics. Here, he has been responsible for integrating equipment services, sports performance in soccer and sports performance in Olympic sports. In addition, incorporating DAPER sports nutrition within an athlete performance team.

Also certified by USA Weightlifting and the National Strength and Conditioning Association, he is recognized for his ability to combine theoretical and practical knowledge in the development of high performance athletes. In this way, Dr. Tyler Friedrich has left an indelible mark on the world of Sports Performance, being an outstanding leader and driver of innovation in his field.

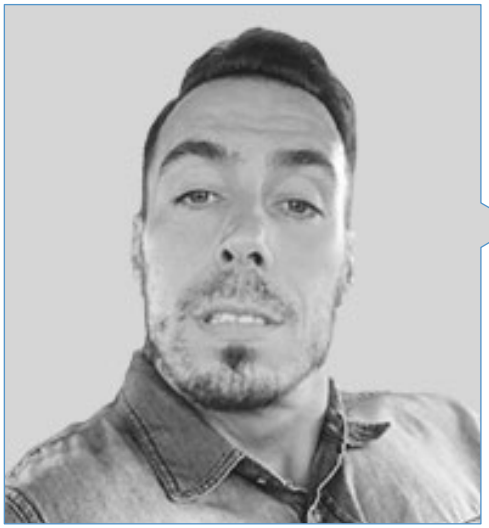


Dr. Friedrich, Tyler

- Director of Sports Performance and Applied Sports Science at Stanford University
- Sports Performance Specialist
- Associate Director of Athletics and Applied Performance at Stanford University
- Director of Olympic Sport Performance at Stanford University
- Sports Performance Coach at Stanford University
- Ph.D. in Philosophy, Health and Human Performance from Concordia University Chicago
- Master of Science in Exercise Science from the University of Dayton
- Bachelor of Science, Exercise Physiology from the University of Dayton

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

Management



Ms. Rubina, Dardo

- CEO of Test and Training
- EDM Physical Training Coordinator
- Physical Trainer of the EDM First Team
- Master's Degree in ARD COE
- EXOS Certification
- Specialist in Strength Training for the Prevention of Injuries, Functional and Physical-Sports Rehabilitation
- Specialist in Strength Training Applied to Physical and Sports Performance
- Certification in Weight Management and Physical Performance Technologies
- Postgraduate course in Physical Activity in Populations with Pathologies
- Diploma in Advanced Studies (DEA) University of Castilla la Mancha
- PhD Candidate in ARD

Professors

Dr. Masse, Juan

- Director of the Athlos study group
- Physical trainer for several professional soccer teams in South America, experienced teacher

Dr. Represas, Gustavo

- Master's Degree in ARD COE, PhD in ARD
- Head of the Biomechanics Laboratory at CAR from 1993 to the present

Mr. Vaccarini, Adrián

- Degree in sports medicine
- Head of the Applied Sciences Department of the Peruvian soccer federation
- Physical trainer of the Peruvian National Soccer Team (present in the last World Cup)

Our teaching team will provide you with all their knowledge so that you are up to date with the latest information on the subject"

04

Structure and Content

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

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

Module 1 Sports Performance Assessment

1.1. Assessment
- 1.1.1. Definitions: Test, Assessment, Measurement
- 1.1.2. Validity, Reliability
- 1.1.3. Purposes of the Evaluation

1.2. Types of Tests
- 1.2.1. Laboratory Test
- 1.2.1.1. Strengths and Limitations of Laboratory Tests
- 1.2.2. Field Tests
  - 1.2.2.1. Strengths and Limitations of Field Tests
- 1.2.3. Direct Tests
  - 1.2.3.1. Applications and Transfer to Training
- 1.2.4. Indirect Tests
  - 1.2.4.1. Practical Considerations and Transfer to Training

1.3. Assessment of Body Composition
- 1.3.1. Bioimpedance
  - 1.3.1.1. Considerations in its Application to Field
  - 1.3.1.2. Limitations on the Validity of Its Data
- 1.3.2. Anthropometry
  - 1.3.2.2. Tools for its Implementation
  - 1.3.2.3. Models of Analysis for Body Composition
- 1.3.3. Body Mass Index (IMC)
  - 1.3.3.1. Restrictions on the Data Obtained for the Interpretation of Body Composition

1.4. Assessing Aerobic Fitness
- 1.4.1. Vo2max Test on the Treadmill
  - 1.4.1.1. Astrand Test
  - 1.4.1.2. Balke Test
  - 1.4.1.3. ACSM Test
  - 1.4.1.4. Bruce Test
  - 1.4.1.5. Foster Test
  - 1.4.1.6. Pollack Test
- 1.4.2. Cycloergometer VO2max Test
  - 1.4.2.1. Astrand.Ryhming
  - 1.4.2.1. Fox Test
- 1.4.3. Cycloergometer Power Test
  - 1.4.3.1. Wingate Test
- 1.4.4. Vo2max Test in the Field
  - 1.4.4.1. Leger Test
  - 1.4.4.2. Montreal University Test
  - 1.4.4.3. 1-MR Test
  - 1.4.4.4. 12-Minute Test
  - 1.4.4.5. 2.4-Kilometer Test
- 1.4.5. Field Test to Establish Training Areas
- 1.4.5. 30-15 Test IFT
- 1.4.6. UNca Test
- 1.4.7. Yo Yo Test
  - 1.4.7.1. Yo-Yo Endurance YYET Level 1 and 2
  - 1.4.7.2. Yo-Yo Intermittent Endurance YYEIT Level 1 and 2
  - 1.4.7.3. Yo-Yo Intermittent Recovery YYERT Level 1 and 2

1.5. Neuromuscular Fitness Evaluation
- 1.5.1. Submaximal Repetition Test
  - 1.5.1.1. Practical Applications for its Assessment
  - 1.5.1.2. Validated Estimation Formulas for the Different Training Exercises
- 1.5.2. 1-MR Limitations
  - 1.5.2.1. Protocol for its Performance
  - 1.5.2.2. 1MR Valuation Limitations
- 1.5.3. Horizontal Jump Test
  - 1.5.3.1. Assessment Protocols
- 1.5.4. Speed Test (5m,10m,15m, Etc.)
  - 1.5.4.1. Considerations on the Data Obtained in Time/Distance Assessments
- 1.5.5. Maximum/Submaximum Incremental Progressive Tests
  - 1.5.5.1. Validated Protocols
  - 1.5.5.2. Practical Applications

1.5.6. Vertical Jump Test
1.5.6.1. SJ Jump
1.5.6.2. CMJ Jump
1.5.6.3. ABK Jump
1.5.6.4. DJ Test
1.5.6.5. Continuous Jump Test
1.5.7. Strength/Speed, Vertical/Horizontal Profiles
1.5.7.1. Morin and Samozino Assessment Protocols
1.5.7.2. Practical Applications from a Strength/Speed Profile
1.5.8. Isometric Tests With Load Cell
1.5.8.1. Voluntary Isometric Maximal Strength Test (IMS)
1.5.8.2. Bilateral Deficit Isometry Test (%BLD)
1.5.8.3. Lateral Deficit (%LD)
1.5.8.4. Hamstring/Quadriceps Ratio Test
1.6. Assessment and Monitoring Tools
1.6.1. Heart Rate Monitors
1.6.1.1. Device Characteristics
1.6.1.2. Training Areas by Heart Rate
1.6.2. Lactate Analyzers
1.6.2.1. Device Types, Performance and Characteristics
1.6.2.2. Training Zones According to the Lactate Threshold Limit (LT)
1.6.3. Gas Analyzers
1.6.3.1. Laboratory vs Portable Devices
1.6.4. GPS
1.6.4.1. GPS Types, Characteristics, Strengths and Limitations
1.6.4.2. Metrics Established to Interpret the External Load
1.6.5. Accelerometers
1.6.5.1. Types of Accelerometers and Characteristics
1.6.5.2. Practical Applications of Data Obtained From an Accelerometer
1.6.6. Position Transducers
1.6.6.1. Types of Transducers for Vertical and Horizontal Movements
1.6.6.2. Variables Measured and Estimated by of a Position Transducer
1.6.6.3. Data Obtained from a Position Transducer and its Applications to Training Programming

1.6.7. Strength Platforms
1.6.7.1. Types and Characteristics.of Strength Platforms
1.6.7.2. Variables Measured and Estimated by Means of a Strength Platform
1.6.7.3. Practical Approach to Training Programming
1.6.8. Load Cells
1.6.8.1. Cell Types, Characteristics and Performance
1.6.8.2. Uses and Applications for Sports Performance and Health
1.6.9. Photoelectric Cells
1.6.9.1. Characteristics and Limitations of the Devices
1.6.9.2. Practical Uses and Applicability
1.6.10. Movile Applications
1.6.10.1. Description of the Most Used Apps on the Market: My Jump, PowerLift, Runmatic, Nordic
1.7. Internal and External Load
1.7.1. Objective Means of Assessment
1.7.1.1. Speed of Execution
1.7.1.2. Average Mechanical Power
1.7.1.3. GPS Device Metrics
1.7.2. Subjective Means of Assessment
1.7.2.1. PSE
1.7.1.2. sPSE
1.7.1.3. Chronic/Acute Load Ratio
1.8. Fatigue
1.8.1. General Concepts of Fatigue and Recovery
1.8.2. Assessments
1.8.2.1. Laboratory Objectives: CK, Urea, Cortisol, Etc.
1.8.2.2. Field Objectives: CMJ, Isometric Tests, etc.
1.8.2.3. Subjective: Wellnes Scales, TQR, etc.
1.8.3. Recovery Strategies: Cold-Water Immersion, Nutritional Strategies, Self-Massage, Sleep
1.9. Considerations for Practical Applications
1.9.1. Vertical Jump Test Practical Applications
1.9.2. Maximum/Submaximum Incremental Progressive Test Practical Applications
1.9.3. Vertical Strength-Speed Profile. Practical Applications

Module 2 Planning Applied to High Performance in Sports

2.1. Basic Fundamentals
2.1.1. Adaptation Criteria
2.1.1.1. General Adaptation Syndrome
2.1.1.2. Current Performance Capability, Training Requirement
2.1.2. Fatigue, Performance, Conditioning as Tools
2.1.3. Dose-Response Concept and its Application
2.2. Basic Concepts and Applications
2.2.1. Concept and Application of the Plan
2.2.2. Concept and Application of Peridization
2.2.3. Concept and Application of Programming
2.2.4. Concept and Application of Load Control
2.3. Conceptual Development of Planning and its Different Models
2.3.1. First Historical Planning Records
2.3.2. First Proposals, Analyzing the Bases
2.3.3. Classic Models:
2.3.3.1. Traditional
2.3.3.2. Pendulum
2.3.3.3. High Loads
2.4. Models Focused on Individuality and/or Load Concentration
2.4.1. Blocks
2.4.2. Integrated Macrocycle
2.4.3. Integrated Model
2.4.4. ATR

2.4.5. Keeping in Shape,
2.4.6. By Objectives
2.4.7. Structural Bells
2.4.8. Self-Regulation (APRE)
2.5. Models Focused on Specificity and/or Movement Capacity
2.5.1. Cognitive (or Structured Microcycle),
2.5.2. Tactical Periodization
2.5.3. Conditional Development by Movement Capacity
2.6. Criteria for Correct Programming and Periodization
2.6.1. Criteria for Programming and Periodization in Strength Training
2.6.2. Criteria for Programming and Periodization in Endurance Training
2.6.3. Criteria for Programming and Periodization in Speed Training
2.6.4. "Interference" Criteria in Scheduling and Periodization in Concurrent Training
2.7. Planning Through Load Control With a GNSS Device (GPS)
2.7.1. Basis of Session Saving for Appropriate Control
2.7.1.1. Calculation of the Average Group Session for a Correct Load Analysis
2.7.1.2. Common Errors in Saving and Their Impact on Plannning
2.7.2. Relativization of the Load, a Function of Competence
2.7.3. Load Control by Volume or Density, Range and Limitations
2.8. Integrating Thematic Unit 1 (Practical Application)
2.8.1. Construction of a Real Model of Short-Term Planning
2.8.1.1. Selecting and Applying the Periodization Model
2.8.1.2. Designing the Corresponding Planning
2.9. Integrating Thematic Unit 2 (Practical Application)
2.9.1. Producing a Pluriannual Planification
2.9.2. Producing an Annual Planification

Module 3 Biomechanics Applied to High Performance in Sports

3.1. Introduction to Biomechanics
3.1.1. Biomechanics, Concept, Introduction and Purpose of Biomechanics
3.1.1.1. Its Connection to Functional Anatomy
3.1.2. Biomechanics and Performance
3.1.2.1. Its Application to Physical Education and Sport
3.1.2.2. Parts of Biomechanics, Generalities
3.1.2.3. Measuring Tools
3.1.3. Kinematics: Basic Concepts and Practical Applications
3.2. Movement in One Dimension
3.2.1. Speed
3.2.1.1. Concept of Speed
3.2.1.2. Average speed
3.2.1.3. Instant Speed
3.2.1.4. Constant Speed
3.2.1.5. Variable Speed
3.2.1.6. Equations and Units
3.2.1.7. Interpretation of Space-Time and Speed-Distance Graphs
3.2.1.8. Examples in Sport
3.2.2. Acceleration
3.2.2.1. Concept of Acceleration
3.2.2.2. Average Acceleration
3.2.2.3. Instant Acceleration
3.2.2.4. Constant Acceleration
3.2.2.5. Variable Acceleration
3.2.2.6. Connection With the Speed at Constant Acceleration
3.2.2.7. Equations and Units
3.2.2.8. Interpretation of Acceleration-Distance Graphs, Connection With Speed-Time Graphs
3.2.2.9. Examples in Sport

3.2.3. Free Fall
3.2.3.1. Acceleration of Gravity
3.2.3.2. Ideal Conditions
3.2.3.3. Variations of Gravity
3.2.3.4. Equations
3.2.4. Graphical Surroundings
3.2.4.1. Accelerations and Speeds in Free Fall
3.3. Movement in a Plane
3.3.1. Speed
3.3.1.1. Concept Through its Vectorial Components
3.3.1.2. Interpreting Graphs Examples in Sport
3.3.2. Acceleration
3.3.2.1. Concept Through its Vectorial Components
3.3.2.2. Interpreting Graphs
3.3.2.3. Examples in Sport
3.3.3. Projectile Movement
3.3.3.1. Fundamental Components
3.3.3.2. Initial Speed
3.3.3.3. Initial Angle
3.3.3.4. Ideal Conditions Initial Angle for Maximum Reach
3.3.3.5. Equations Interpreting Graphs
3.3.3.6. Examples Applied to Jumps and Throws
3.4. Kinematics of Rotations
3.4.1. Angular Speed
3.4.1.1. Angular Movement
3.4.1.2. Average Angular Speed
3.4.1.3. Instant Angular Speed
3.4.1.4. Equations and Units
3.4.1.5. Interpretation and Examples in Sport
3.4.2. Angular Acceleration
3.4.2.1. Average and Instantaneous Angular Acceleration
3.4.2.2. Equations and Units
3.4.2.3. Interpretation and Examples in Sport Constant Angular Acceleration
3.5. Dynamics
3.5.1. First Law of Newton
3.5.1.1. Interpretation
3.5.1.2. Concept of Mass
3.5.1.3. Equations and Units
3.5.1.4. Examples in Sport
3.5.2. Second Law of Newton
3.5.2.1. Interpretation
3.5.2.2. Concept of Weight and Deference to Mass
3.5.2.3. Equations and Units Examples in Sport
3.5.3. Third Law of Newton
3.5.3.1. Interpretation
3.5.3.2. Equations
3.5.3.3. Centripetal and Centrifugal Force
3.5.3.4. Examples in Sport
3.5.4. Work, Power and Energy
3.5.4.1. Concept of Work
3.5.4.2. Equations, Units, Interpretation and Examples
3.5.5. Power
3.5.5.1. Equations, Units, Interpretation and Examples
3.5.6. Generalities on the Concept of Energy
3.5.6.1. Types of Energy, Units and Conversion
3.5.7. Kinetic Energy
3.5.7.1. Concept and Equations

3.5.8. Potential Elastic Energy
3.5.8.1. Concept and Equations
3.5.8.2. The Work and Energy Theorem
3.5.8.3. Interpretation from Examples in Sport
3.5.9. Amount of Movement and Collisions Interpretation
3.5.9.1. Equations Center of Mass and Movement of the Center of Mass
3.5.9.2. Collisions, Types, Equations and Graphs
3.5.9.3. Examples in Athletics
3.5.9.4. Impulsive Forces Calculation of the Initial Speed in a Jump That is Considered as a Collision
3.6. Dynamics of Rotations
3.6.1. Moment of Inertia
3.6.1.1. Moment of a Force, Concept and Units
3.6.1.2. Lever Arm
3.6.2. Kinetic Energy of Rotation
3.6.2.1. Moment of Inertia, Concept and Units
3.6.2.2. Summary of Equations
3.6.2.3. Interpretation. Examples in Sport
3.7. Statics – Mechanical Equilibrium
3.7.1. Vectorial Algebra
3.7.1.1. Operations Between Vectors Using Graphical Methods
3.7.1.2. Addition and Substraction
3.7.1.3. Calculating Momentum
3.7.2. Center of Gravity: Concept, Properties, Interpretation of Equations
3.7.2.1. Examples in Sport Rigid Bodies Human Body Model
3.8. Biomechanical Analysis
3.8.1. Analysis of Normal Gait and Running
3.8.1.1. Center of Mass Phases and Fundamental Equations
3.8.1.2. Types of Kinematic and Dynamometric Records
3.8.1.3. Related Graphs
3.8.1.4. Connections of Graphs With Speed
3.8.2. Jumps in Sport
3.8.2.1. Decomposing Movement
3.8.2.2. Center of Gravity
3.8.2.3. Phases
3.8.2.4. Distances and Component Heights
3.9. Video Analysis
3.9.1. Different Variables Measured Through Video Analysis
3.9.2. Technological Options for Video Analysis
3.9.3. Practical Examples
3.10. Case Studies
3.10.1. Biomechanical Analysis of Acceleration
3.10. 2 Biomechanical Analysis of Sprinting
3.10. 3 Biomechanical Analysis of Deceleration

A unique, key and decisive training 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.

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

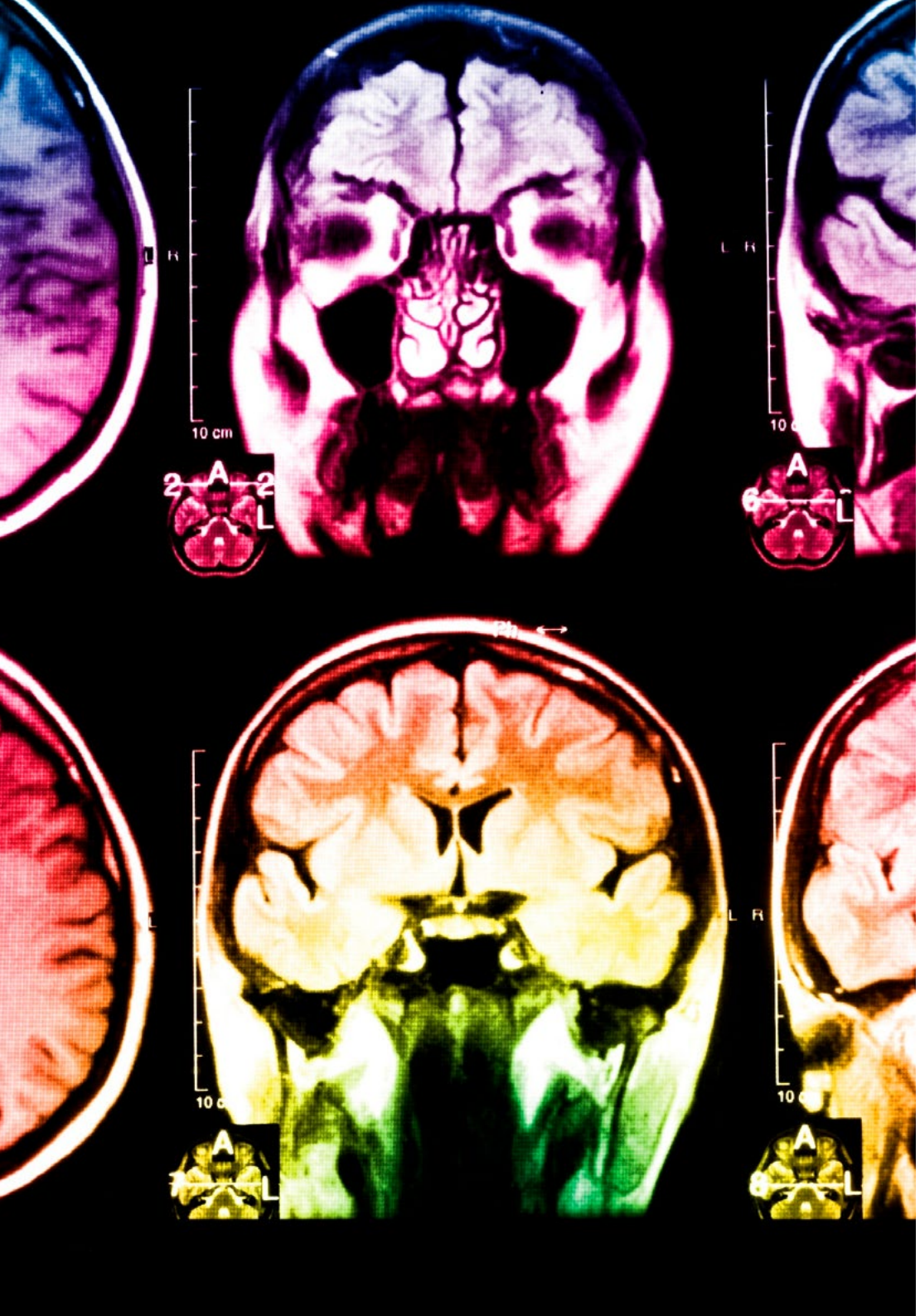
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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.

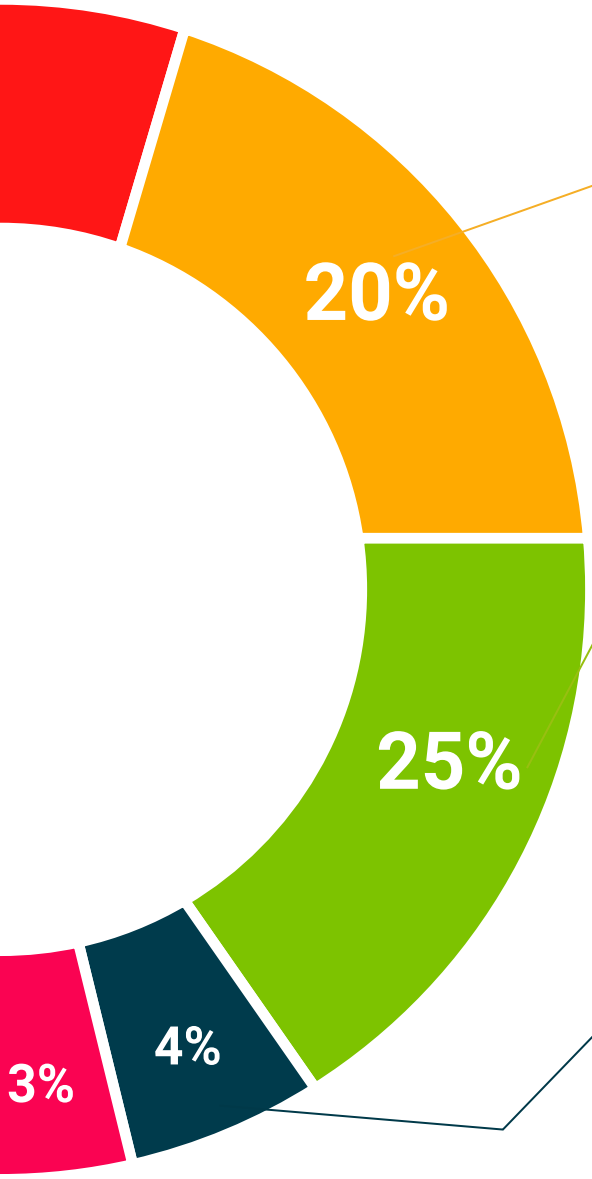
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

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

This Postgraduate Diploma in High Performance in Sports: Assessment, Planning and Biomechanics guarantees you, in addition to the most rigorous and updated training, access to a Postgraduate Diploma issued by TECH Technological University.

Successfully complete this program and receive your university degree without travel or laborious paperwork

This **Postgraduate Diploma in High Performance in Sports: Assessment, Planning and Biomechanics** contains the most complete and updated scientific program on the market.

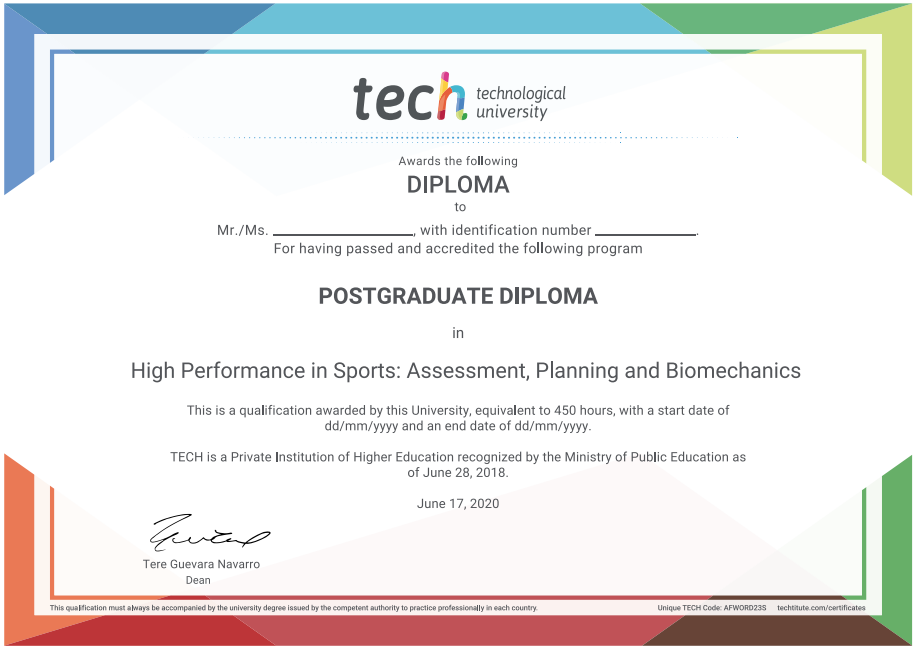
After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** via tracked delivery*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Diploma in High Performance in Sports: Assessment, Planning and Biomechanics**

Official Nº of hours: **450 h.**

Endorsed by the NBA


tech technological university

Awards the following

DIPLOMA

to

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

For having passed and accredited the following program

POSTGRADUATE DIPLOMA

in

High Performance in Sports: Assessment, Planning and Biomechanics

This is a qualification awarded by this University, equivalent to 450 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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

June 17, 2020

Tere Guevara Navarro

Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

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

tech technological university

Postgraduate Diploma

High Performance in Sports: Assessment, Planning and Biomechanics

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

Postgraduate Diploma

High Performance in Sports: Assessment, Planning and Biomechanics

Endorsed by the NBA

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