

# Professional Master's Degree Professional Handball

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## Professional Master's Degree Professional Handball

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/pk/sports-science/professional-master-degree/master-professional-handball](http://www.techtute.com/pk/sports-science/professional-master-degree/master-professional-handball)

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# 01

# Introduction

Since its inclusion as an Olympic sport, Handball has experienced an exponential growth, the result of the training work done from the base and the great impact obtained with its international broadcasting through different television channels. In this journey, tactics, technique and training planning have progressed in parallel to scientific studies in Sports Science. Therefore, to reach the top in this discipline requires a deep knowledge that goes beyond physical preparation and integrates nutrition, the approach to injuries or psychological aspects. All of this is covered in this 100% online program, taught by renowned elite athletes and professionals in Physical Education.





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*A flexible Professional Master's Degree that will allow you to progress in the world of Professional Handball under the guidance of great personalities of this sport"*

Since the middle of the 19th century, Handball has undergone an important evolution and popularity all over the world. The visibility of the Olympics, international sports broadcasts and the improvement of game tactics have made the sport much more attractive to fans and to the brands that sponsor clubs and competitions.

An increasingly professional environment that has gradually been integrating the latest scientific advances in the improvement of physical preparation, nutrition or the incorporation of new technologies to analyze team tactics and player technique. All this gives a higher level to this sport discipline, where those who wish to develop their career in it must have a deep and updated knowledge. In this sense, TECH has designed this 12-month Professional Master's Degree in Professional Handball.

A program that will lead students to delve into new approaches to training in the stages of initiation, the improvement of individual and group physical work, injury prevention and its approach in various game situations. A comprehensive syllabus that also includes the nutritional care of the athlete and the use of Big Data for the analysis of matches and athletes.

All this, with innovative multimedia didactic material, enriched by complementary readings with which to extend the extensive information provided. Also, thanks to the Relearning method, the graduates will be able to reduce the long hours of study, consolidating the most important concepts in a simple way.

Undoubtedly, a unique opportunity to progress in Handball at the highest level through a flexible and comfortable program. The graduates only need a digital device with Internet connection to be able to visualize, at any time, the content of this program.

The future professionals are faced with a university program that is at the forefront of the academic world.

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

- ♦ The development of practical cases presented by experts in Handball and Sports Sciences
- ♦ The graphic, schematic, and practical contents with which they are created, provide practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where self-assessment can be used to improve learning
- ♦ Its special emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*Enrich your game tactics through the most advanced and practical knowledge provided by the elite professionals of this program"*

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*Enroll in a program that will allow you to access its content, 24 hours a day, from any digital device with an Internet connection”*

The program’s teaching staff includes professionals from the industry who contribute their work experience to this program, as well as renowned specialists from leading societies and prestigious universities.

Its 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 professionals 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.

*Stand out in the professional handball world thanks to the improvement of your defensive and offensive technical-tactical training.*

*Incorporate the latest scientific evidence on Nutrition and Hydration to help your players perform at a higher level.*



# 02 Objectives

The syllabus of this Professional Master's Degree has been designed to provide the professional Sports Science and Handball coach, the most advanced knowledge to integrate in their day to day, the best training planning, attending to the different formative stages of the players and boosting their performance through the incorporation of advances in Nutrition and Hydration. For this, TECH provides the graduates with the most advanced pedagogical tools of the current university academic panorama.







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*The case studies of this Professional Master's Degree will allow you to adapt the tactical variables to the different defensive systems in this sport"*



## General Objectives

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- ◆ Master the design and control of training at different stages
- ◆ Improve the performance of athletes
- ◆ Interpret the analysis of data obtained through new technologies
- ◆ Incorporate the nutritional planning of the athlete according to their characteristics and playing position
- ◆ Know the evolution of the handball game and tactics up to nowadays
- ◆ Analyze the multiple factors involved in the training process and in high performance players



*Delve into the etiology of the main injuries in Handball and act with the utmost rigor for their prevention thanks to this program"*





## Specific Objectives

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### Module 1. Performance factors in Handball

- ♦ Have a deep knowledge of the historical background of Handball
- ♦ Master the current regulations of Handball
- ♦ Know in depth the different modalities of Handball
- ♦ Differentiate the stages of training
- ♦ Understand the role of the teacher and the role of the coach in handball training
- ♦ Learn the importance of anthropometric, technical, tactical, conditional and psychological factors of the handball player

### Module 2. Fundamentals of training in formation

- ♦ Establish a categorization of the individual and collective technical-tactical elements according to the stage of development of the players
- ♦ Know the different aspects that can be modified in the tasks to create adherence to the practice of handball
- ♦ Train educators in the design of sessions for the improvement of motor control according to the development of the players
- ♦ Highlight the general characteristics that a handball player must have
- ♦ Provide theoretical and practical knowledge to both coaches and players for the understanding of the most common situations in Handball

### Module 3. Methodology of training in improvement

- ♦ Know in depth the characteristics of High Performance in Handball
- ♦ Apply individual and collective technical-tactical means of training in specific positions
- ♦ Analyze the offensive and defensive systematics in equality, inferiority and numerical superiority
- ♦ Know how to act in special situations of the game
- ♦ Emphasize the importance of the current offensive and defensive transition phase
- ♦ Design tasks and a game model in High Performance
- ♦ Organize and plan adequately a match or competition

### Module 4. Methodology of training in High Performance

- ♦ Know in depth the characteristics of High Performance in Handball
- ♦ Apply individual and collective technical-tactical means of training in specific positions
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- ♦ Know how to act in special situations of the game
- ♦ Emphasize the importance of the current offensive and defensive transition phase
- ♦ Design tasks and a game model in High Performance
- ♦ Organize and plan adequately a match or competition

#### **Module 5. Training planning in the different stages of training**

- ♦ Know in depth the characteristics of the transitional and competitive period
- ♦ Analyze the programming of training objectives and by competitive objectives
- ♦ Study the different training planning models and analyze the pros and cons of each one of them
- ♦ Know in depth the control and the load for its adjustment and individualization

#### **Module 6. Physical preparation of the handball player**

- ♦ Analyze the demands of the different basic physical qualities of a handball player
- ♦ Approach physical preparation from a neuromuscular paradigm of training
- ♦ Know in depth the nature of muscular strength and power, specific resistance, mobility and coordination
- ♦ Structure physical preparation in training categories
- ♦ Master the planning, warm-up phase and off-season training (off-season period)

#### **Module 7. Handball player injury prevention**

- ♦ Know the concepts of sports injuries, treatment and readaptation
- ♦ Study the etiology and causes of handball injuries
- ♦ Handle injury emergencies produced in training or in competition
- ♦ Analyze the most frequent injuries of all parts of the body of the Handball player





### **Module 8. Nutrition of the Handball player**

- ◆ Study the main concepts of sports nutrition
- ◆ Calculate the MB and the body composition of athletes
- ◆ Know in depth the demands and learn to plan the periodized intake of macro and micronutrients
- ◆ Master the variables of sweating and hydration rates
- ◆ Know about sports supplementation and prohibited supplements
- ◆ Analyze the latest trends in sports nutrition
- ◆ Apply software tools for the planning and control of nutritional intake and hydration of athletes

### **Module 9. Handball team management**

- ◆ Know in depth the structure of the sports club and the professional Handball club
- ◆ Structure the relationships with the players, the board, the media and the sponsors
- ◆ Set up a functional strategy for talent detection
- ◆ Take care of and promote good strategies of sporting life

### **Module 10. Data Analysis**

- ◆ Learn the correct methodology for the collection and analysis of quantitative and qualitative conditional data
- ◆ Study the validation and analysis of descriptive observational data
- ◆ Propose strategies for the collection and analysis of Big Data
- ◆ Study what scientific evidence brings to Handball and the latest trends in research and data analysis

# 03

## Competencies

This university program has been designed so that, throughout its 12-month duration, the graduates will increase their leadership and training team planning skills and will also be able to integrate individual coaching techniques. In addition, the didactic resources, including case studies, will provide a practical vision of the development of the game and the formation of the players, which will increase their abilities for the execution of training sessions in teams at the highest level.





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*A university program that will allow you to successfully lead a handball club and take it to the top"*



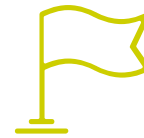
## General Skills

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- ♦ Lead from Handball sport clubs to the management of a team from the bench
- ♦ Be able to plan any training session taking into account the competition and its level
- ♦ Guide the players during the sport development phase
- ♦ Prepare physically with guarantees to the athletes of Handball
- ♦ Act with professionalism when dealing with sports injuries
- ♦ Mastering the technological tools for nutritional analysis
- ♦ Manage the advertising and marketing of a club
- ♦ Detect talent through the implementation of recruitment programs







## Specific Skills

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- ♦ Enhance the technical skills of players throughout the various stages of training
- ♦ Establish the most appropriate game tactics according to the characteristics of the athletes and the opponent
- ♦ Prepare a wide variety of physical training exercises
- ♦ Readapt training to an injured athlete
- ♦ Indicate the appropriateness of the use of certain nutritional supplements and ergonomic aids
- ♦ Successfully managing the sport career and its setbacks
- ♦ Put into practice the latest scientific evidence on the different types of training
- ♦ Use group and individual coaching techniques

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*Raise your skills for the recruitment of new talents through the development of specific programs”*

# 04

# Course Management

One of the elements that distinguishes this Professional Master's Degree is its direction and teaching staff. Consecrated players of the elite of Handball with wide national and international prestige, experts in Physical Activity and Sport Sciences and national technicians will be responsible for the students of this degree to obtain the most advanced knowledge and with the maximum scientific rigor on this sport discipline. An unparalleled opportunity to acquire high-level learning.



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*Historic handball players of national and international prestige lead this Professional Master's Degree with which you will obtain a complete learning of this sport, from the hand of the best"*

## Management



### Dr. Lozano, Demetrio

- ◆ Former professional handball player
- ◆ Professor at the National School of Handball Coaches of the Royal Spanish Handball Federation
- ◆ PhD in Physical Activity and Sport Sciences from the University of Lleida
- ◆ Degree in Physical Activity and Sport Sciences from the University of Barcelona
- ◆ Master's Degree in High Performance by the University of Barcelona
- ◆ World Handball Champion with the Spanish National Team in the 2005 World Cup in Tunisia
- ◆ Triple Olympic Handball Medalist at Atlanta 1996, Sydney 2000 and Beijing 2008

## Professors

### Dr. Martínez, Darío

- ◆ Postdoctoral researcher at the University of Granada
- ◆ Handball coach at grassroots level
- ◆ Physical trainer and assistant coach of the Women's Division of Honor Silver team of the University of Granada

### Dr. Rodríguez, Ángela

- ◆ Researcher at the University of Granada
- ◆ National handball coach for the Royal Spanish Handball Federation
- ◆ Former handball player in Honor Division
- ◆ PhD in Biomedicine
- ◆ Degree in Sports Science

**Dr. Tuquet Higuera, Jaime**

- ◆ Professor at the Coaching School of the Aragonese Handball Federation
- ◆ Technical director and coach of BM. La Jota of Zaragoza
- ◆ Regional Handball Coach at the Aragonese Handball Federation (FARBM)
- ◆ Regional coach of Beach Handball in the Aragonese Federation of Handball (FARBM)
- ◆ National Handball Coach
- ◆ Coach monitor of Beach Handball
- ◆ Former handball player in BM. Aragón
- ◆ PhD in Health Sciences
- ◆ Professional Master's Degree in Teaching
- ◆ Professional Master's Degree in Sports Entities Management and Administration
- ◆ Degree in Physical Activity and Sports Science

**Dr. Sanz López, Fernando**

- ◆ Physiotherapist and readaptor in the Qatar Handball National Team
- ◆ Physiotherapist of the Aragon Handball Club
- ◆ PhD in Health Sciences
- ◆ Graduate in Sports Physiotherapy
- ◆ Graduate in Sciences of Physical Activity and Sport

**Dr. Baena González, Rafael**

- ◆ Professional handball player
- ◆ PhD in Sports Science
- ◆ Degree in Business Administration and Management
- ◆ Silver Medalist at the European Championship in Poland 2016

**Dr. Cartón Llorente, Antonio**

- ◆ National Handball, Triathlon and Weightlifting coach
- ◆ Handball player in the highest Spanish category
- ◆ Professor at the University San Jorge
- ◆ PhD in Health Sciences
- ◆ Degree in Physical Activity and Sports Science
- ◆ Degree in Physiotherapy

# 05

# Structure and Content

The complete syllabus of this Professional Master's Degree covers from sports initiation in the world of handball, the evolution of the athlete until reaching high performance, as well as the latest scientific evidence on the different types of training, nutrition or the effective use of data analysis. In addition, with a first class didactic material based on video summaries of each topic, videos in detail, specialized readings and case studies that bring dynamism and a greater attractiveness to this learning.





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*A syllabus with a theoretical-practical approach for you to apply the most advanced and current knowledge about Handball in your team"*

## Module 1. Performance factors in Handball

- 1.1. Background
  - 1.1.1. Origin of Handball
  - 1.1.2. Modern Handball
- 1.2. Regulations
  - 1.2.1. Fundamental regulatory aspects
  - 1.2.2. Current regulations (Gaming Rules, July 2022-IHF)
  - 1.2.3. Evolution of the regulations
- 1.3. Handball Modalities
  - 1.3.1. Mini-Handball
  - 1.3.2. Beach Handball
  - 1.3.3. Wheelchair Handball
- 1.4. Training stages
  - 1.4.1. Didactics in the training stages
  - 1.4.2. Stages of formation according to J. Antón
  - 1.4.3. Training stages according to Manolo Laguna
- 1.5. Research in Handball
  - 1.5.1. Scientific Research
  - 1.5.2. Scientific research in Handball
  - 1.5.3. From science to training
- 1.6. Anthropometric Factors
  - 1.6.1. Anthropometric factors in training
  - 1.6.2. Anthropometric Factors in High Performance
  - 1.6.3. Talent detection
- 1.7. Technical factors
  - 1.7.1. Technical factors in the scientific literature
  - 1.7.2. Launch analysis
  - 1.7.3. Influence of the step cycle
- 1.8. Tactical factors
  - 1.8.1. Collective tactical factors
  - 1.8.2. Study of decision making
  - 1.8.3. Tactical variations in high performance

- 1.9. Conditional factors
  - 1.9.1. Strength in throwing
  - 1.9.2. Strength in jumping
  - 1.9.3. Physical demands in High Performance
- 1.10. Psychological Factors
  - 1.10.1. Motivation and self-confidence
  - 1.10.2. Activation, stress and anxiety
  - 1.10.3. Leadership

## Module 2. Fundamentals of training in formation

- 2.1. Characteristics of the stage
  - 2.1.1. Educational models
  - 2.1.2. Perceptual-motor skills of the different stages
  - 2.1.3. Physical capacities of the different stages
- 2.2. Defensive technical-tactical
  - 2.2.1. Types of defense
  - 2.2.2. Preventive tactical means
  - 2.2.3. Reactive tactical means
- 2.3. Offensive technical-tactical
  - 2.3.1. Technical-tactical elements in the control, linking and finishing phase
  - 2.3.2. Individual technical-tactical means
  - 2.3.3. Collective technical-tactical means
- 2.4. Technical-tactical transition phase
  - 2.4.1. Offensive Phase
  - 2.4.2. Defensive Phase
  - 2.4.3. Key points
- 2.5. Training of specific defensive positions
  - 2.5.1. General Considerations
  - 2.5.2. Specific front line positions
  - 2.5.3. Specific posts of the second line



- 2.6. Training of specific offensive positions
  - 2.6.1. General Considerations
  - 2.6.2. Specific front line positions
  - 2.6.3. Specific posts of the second line
- 2.7. Goalkeeper
  - 2.7.1. Offensive and defensive actions
  - 2.7.2. Technical Considerations
  - 2.7.3. Tactical considerations
- 2.8. Game Systems
  - 2.8.1. Attacking game systems
  - 2.8.2. Defense game systems
  - 2.8.3. Transition game systems
- 2.9. Task design
  - 2.9.1. Specific symbology
  - 2.9.2. Creating tasks and their variants
  - 2.9.3. Practical Proposals
- 2.10. Sport-recreational proposals in Handball
  - 2.10.1. Adapted games
  - 2.10.2. Mediterranean handball
  - 2.10.3. Street handball

### Module 3. Methodology of training in improvement

- 3.1. Characteristics of the stage
  - 3.1.1. Educational models
  - 3.1.2. Perceptual-motor skills of the different stages
  - 3.1.3. Physical capacities of the different stages
- 3.2. Offensive technical-tactical
  - 3.2.1. Types of defense
  - 3.2.2. Preventive tactical means
  - 3.2.3. Reactive tactical means

- 3.3. Defensive technical-tactical
  - 3.3.1. Technical-tactical elements in the control, linking and finishing phase
  - 3.3.2. Individual technical-tactical means
  - 3.3.3. Collective technical-tactical means
- 3.4. Technical-tactical in the transition phase
  - 3.4.1. Offensive Phase
  - 3.4.2. Defensive Phase
  - 3.4.3. Key points
- 3.5. Training of specific defensive positions
  - 3.5.1. General Considerations
  - 3.5.2. Specific front line positions
  - 3.5.3. Specific posts of the second line
- 3.6. Training of specific offensive positions
  - 3.6.1. General Considerations
  - 3.6.2. Specific front line positions
  - 3.6.3. Specific posts of the second line
- 3.7. Goalkeeper
  - 3.7.1. Offensive and defensive actions
  - 3.7.2. Technical Considerations
  - 3.7.3. Tactical considerations
- 3.8. Game Systems
  - 3.8.1. Attacking game systems
  - 3.8.2. Defense game systems
  - 3.8.3. Transition game systems
- 3.9. Decision making
  - 3.9.1. Types of decision making: classifications
  - 3.9.2. Processes involved in decision making
  - 3.9.3. Practical Examples
- 3.10. Task design
  - 3.10.1. Specific symbology
  - 3.10.2. Creating tasks and their variants
  - 3.10.3. Practical Proposals

#### Module 4. Methodology of training in High Performance

- 4.1. Characteristics of the stage
  - 4.1.1. Conceptualization
  - 4.1.2. Training
  - 4.1.3. The trainer
- 4.2. Offensive technical-tactical
  - 4.2.1. Technical-tactical elements and individual tactical principles
  - 4.2.2. Collective offensive tactical objectives and means
  - 4.2.3. Individual determinants and collective premises
- 4.3. Defensive technical-tactical
  - 4.3.1. Technical-tactical elements and individual tactical principles
  - 4.3.2. Defensive collective tactical objectives and means
  - 4.3.3. Individual determinants and collective premises
- 4.4. Offensive systems of play in numerical equality
  - 4.4.1. Offensive System 3:3 Classic
  - 4.4.2. Offensive system 2:4
  - 4.4.3. Offensive system 3:3 with two pivots
- 4.5. Defensive systems of play in numerical equality
  - 4.5.1. Individual defensive systems
  - 4.5.2. Zonal defensive systems
  - 4.5.3. Mixed or combined defensive systems
- 4.6. Offensive systems of play in numerical superiority and numerical inferiority
  - 4.6.1. Offensive systems 6 against 5
  - 4.6.2. Offensive systems 7 against 6
  - 4.6.3. Special Situations
- 4.7. Defensive systems of play in numerical superiority and numerical inferiority
  - 4.7.1. Defensive systems 6 against 5
  - 4.7.2. Defensive systems 7 against 6
  - 4.7.3. Special Situations
- 4.8. Technique-tactics in the transition phase and special situations
  - 4.8.1. Counterattack
  - 4.8.2. Retreat
  - 4.8.3. Passive play

- 4.9. Task design and game model
  - 4.9.1. Task content and form
  - 4.9.2. Construction of the offensive game model
  - 4.9.3. Construction of the defensive game model
- 4.10. Match or competition preparation
  - 4.10.1. Match preparation
  - 4.10.2. Team management in competition
  - 4.10.3. Post match

#### Module 5. Training planning in the different stages of training

- 5.1. Organization of training structures
  - 5.1.1. The training session
  - 5.1.2. Microcycles
  - 5.1.3. Macrocycles
- 5.2. Characteristics of the transitional period
  - 5.2.1. The preseason
  - 5.2.2. Load distribution
  - 5.2.3. Types of Planning
- 5.3. Characteristics of the competitive period
  - 5.3.1. The season
  - 5.3.2. Load distribution
  - 5.3.3. Contextual settings
- 5.4. Programming of competitive or training objectives
  - 5.4.1. Characteristics of the players and the competition
  - 5.4.2. Distribution of loads and contents
  - 5.4.3. Competitive reality
- 5.5. Training planning models
  - 5.5.1. Principles of Sports Training
  - 5.5.2. Choice of model
  - 5.5.3. Hybridization of Models

- 5.6. ATR Model
  - 5.6.1. Accumulation period
  - 5.6.2. Transformation period
  - 5.6.3. Realization period
- 5.7. Integrated macrocycle model
  - 5.7.1. General phase
  - 5.7.2. Specific phase
  - 5.7.3. Maintenance Phase
- 5.8. Microstructuring model
  - 5.8.1. General contents
  - 5.8.2. Targeted contents
  - 5.8.3. Special and competitive contents
- 5.9. Tactical periodization model
  - 5.9.1. The pattern morphocycle
  - 5.9.2. Operationalization dynamics
  - 5.9.3. Recovery Dynamics
- 5.10. Load control
  - 5.10.1. Control instruments
  - 5.10.2. Adjustment and individualization
  - 5.10.3. Overtraining

## Module 6. Physical preparation of the handball player

- 6.1. Physical demands of Handball
  - 6.1.1. Explosive strength and strength endurance
  - 6.1.2. Distances and intensities of displacements
  - 6.1.3. Mobility, coordination and agility
- 6.2. Neuromuscular training paradigm
  - 6.2.1. Conditional vs. Functional Criteria
  - 6.2.2. Development of useful force
  - 6.2.3. Application of the model to Handball
- 6.3. Muscular strength and power
  - 6.3.1. Throwing, jumping and wrestling
  - 6.3.2. Accelerations, decelerations and change of direction
  - 6.3.3. Load assessment and control
- 6.4. Specific resistance
  - 6.4.1. Ability to repeat power actions
  - 6.4.2. Types of fatigue and metabolic pathways
  - 6.4.3. Load assessment and control
- 6.5. Mobility and coordination
  - 6.5.1. Muscle imbalances in Handball
  - 6.5.2. Muscle chains in specific gestures
  - 6.5.3. Appraisal and compensatory work
- 6.6. Physical preparation in basic categories
  - 6.6.1. Maturative age and peak growth rate
  - 6.6.2. Physical conditioning in early ages
  - 6.6.3. Growth syndromes and their early detection
- 6.7. Practical applications by specific positions
  - 6.7.1. Specific physical preparation for first line and pivots
  - 6.7.2. Specific physical preparation for wingers
  - 6.7.3. Specific physical preparation for goalkeepers
- 6.8. Warming up
  - 6.8.1. Objectives and structure
  - 6.8.2. Strategies for activation and return to calmness
  - 6.8.3. Activation and pre-game potentiation
- 6.9. The off-season training (*off-season* period)
  - 6.9.1. Effects of long duration detraining
  - 6.9.2. Levels of approximation in strength work
  - 6.9.3. Approximation levels in endurance work
- 6.10. Planning
  - 6.10.1. Individualization of the model
  - 6.10.2. Adaptation to the game system
  - 6.10.3. Model of preparation for short competitions

## Module 7. Handball player injury prevention

- 7.1. Sports injuries, treatment and rehabilitation
  - 7.1.1. Acute Injuries
  - 7.1.2. Overuse injuries
  - 7.1.3. Concepts of treatment, rehabilitation and prevention
- 7.2. Etiology and causes of injuries in Handball
  - 7.2.1. Biomechanics of Handball
  - 7.2.2. Frequent injuries in Handball
  - 7.2.3. Injuries by playing position
- 7.3. Acute Management of Injuries and Emergency Situations
  - 7.3.1. Basic Concepts
  - 7.3.2. Action in the event of a sports injury
  - 7.3.3. Regulations on injuries in Handball
- 7.4. Shoulder and shoulder girdle injuries
  - 7.4.1. Etiology
  - 7.4.2. Treatment and rehabilitation
  - 7.4.3. Prevention
- 7.5. Elbow injuries
  - 7.5.1. Etiology
  - 7.5.2. Treatment and rehabilitation
  - 7.5.3. Prevention
- 7.6. Hand and finger injuries
  - 7.6.1. Etiology
  - 7.6.2. Treatment and rehabilitation
  - 7.6.3. Prevention
- 7.7. Back Injuries
  - 7.7.1. Etiology
  - 7.7.2. Treatment and rehabilitation
  - 7.7.3. Prevention
- 7.8. Hip Injuries
  - 7.8.1. Etiology
  - 7.8.2. Treatment and rehabilitation
  - 7.8.3. Prevention





- 7.9. Injuries of the Knee
  - 7.9.1. Etiology
  - 7.9.2. Treatment and rehabilitation
  - 7.9.3. Prevention
- 7.10. Ankle and foot injuries
  - 7.10.1. Etiology
  - 7.10.2. Treatment and rehabilitation
  - 7.10.3. Prevention

## Module 8. Nutrition of the Handball player

- 8.1. Sports Nutrition
  - 8.1.1. Basic concepts and historical background
  - 8.1.2. The Digestive System
  - 8.1.3. Classification of nutrients and foods
- 8.2. Concept of sports nutrition
  - 8.2.1. Sectors where sports nutrition acts
  - 8.2.2. Basic physiology of exercise related to sports nutrition
  - 8.2.3. Reference standards
- 8.3. Energy Requirements
  - 8.3.1. Energy Needs
  - 8.3.2. Basal metabolism, physical activity and thermal effect of food
  - 8.3.3. Basic calculations
- 8.4. Body composition
  - 8.4.1. Methods of Evaluation of Body Composition
  - 8.4.2. Assessment of Body Composition in Sport
  - 8.4.3. Body Composition in Handball
- 8.5. Macronutrients
  - 8.5.1. Carbohydrates in sport
  - 8.5.2. Proteins in sport
  - 8.5.3. Fats in sport

- 8.6. Micronutrients
  - 8.6.1. Vitamins in sport
  - 8.6.2. Minerals in sport
  - 8.6.3. Antioxidants in sport
- 8.7. Hydration
  - 8.7.1. General Recommendations
  - 8.7.2. Sweating rate
  - 8.7.3. Resetting rules and appropriate times
- 8.8. Nutritional supplements and ergogenic aids in sport
  - 8.8.1. Definition of Concepts
  - 8.8.2. How to use them in sport
  - 8.8.3. Scientific Evidence
- 8.9. Improvement of body composition in athletes
  - 8.9.1. Nutritional strategies for the improvement of body composition
  - 8.9.2. Methods for assessing nutritional intake
  - 8.9.3. Common Errors
- 8.10. Nutritional planning
  - 8.10.1. Types of nutritional planning
  - 8.10.2. Dietary planning in athletes
  - 8.10.3. Dietary software and computer tools

## Module 9. Handball team management

- 9.1. Sports club structure
  - 9.1.1. Management of a sports club
  - 9.1.2. Technical teams
  - 9.1.3. Structuring
- 9.2. Professional club structure
  - 9.2.1. Professional Club Management
  - 9.2.2. Management Teams
  - 9.2.3. Technical teams

- 9.3. The template
  - 9.3.1. Composition
  - 9.3.2. Training or competitive needs
  - 9.3.3. Selection Criteria
- 9.4. Relations with players
  - 9.4.1. Individuality at the service of the team
  - 9.4.2. Career management
  - 9.4.3. Individual coaching
- 9.5. Sports management models
  - 9.5.1. Management models
  - 9.5.2. Specific Training
  - 9.5.3. Resources Management
- 9.6. Advertising and Marketing
  - 9.6.1. Management of the advertising plan
  - 9.6.2. Marketing plan management
  - 9.6.3. Use of social networks
- 9.7. Relations with sponsors
  - 9.7.1. Management of small sponsors
  - 9.7.2. Management of medium-sized sponsors
  - 9.7.3. Management of large sponsors
- 9.8. Talent detection
  - 9.8.1. Assessment tests
  - 9.8.2. Recruitment programs
  - 9.8.3. Talent Management
- 9.9. Strategies of sporting life
  - 9.9.1. Sports career management
  - 9.9.2. Short-, medium- and long-term objectives
  - 9.9.3. Setbacks and strategy changes
- 9.10. Future Perspectives
  - 9.10.1. The reality of Handball today
  - 9.10.2. Change Management
  - 9.10.3. Future Perspectives

**Module 10. Data Analysis**

- 10.1. Quantitative conditional data collection
  - 10.1.1. Traditional assessment tests
  - 10.1.2. Current valuation tools and instruments
  - 10.1.3. New Trends
- 10.2. Quantitative conditional data analysis
  - 10.2.1. Descriptive analysis
  - 10.2.2. Inferential analysis
  - 10.2.3. Practical Applications
- 10.3. Qualitative conditional data collection
  - 10.3.1. Traditional assessment tests
  - 10.3.2. Current valuation tools and instruments
  - 10.3.3. New Trends
- 10.4. Qualitative conditional data analysis
  - 10.4.1. Descriptive analysis
  - 10.4.2. Inferential analysis
  - 10.4.3. Practical Applications
- 10.5. Contribution of scientific evidence to strength training
  - 10.5.1. Scientific Evidence
  - 10.5.2. Limitations
  - 10.5.3. Practical Applications
- 10.6. Contribution of scientific evidence to speed training
  - 10.6.1. Scientific Evidence
  - 10.6.2. Limitations
  - 10.6.3. Practical Applications
- 10.7. Contribution of scientific evidence to resistance training
  - 10.7.1. Scientific Evidence
  - 10.7.2. Limitations
  - 10.7.3. Practical Applications

- 10.8. Contribution of scientific evidence to technique training
  - 10.8.1. Scientific Evidence
  - 10.8.2. Limitations
  - 10.8.3. Practical Applications
- 10.9. Contribution of scientific evidence to tactical training
  - 10.9.1. Scientific Evidence
  - 10.9.2. Limitations
  - 10.9.3. Practical Applications
- 10.10. Big Data
  - 10.10.1. Big Data reality
  - 10.10.2. Big Data analysis
  - 10.10.3. Practical Applications



*Do you want to include the latest advances in Big Data Analytics in your training sessions? Incorporate all the advances thanks to this 100% online program"*

06

# 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.



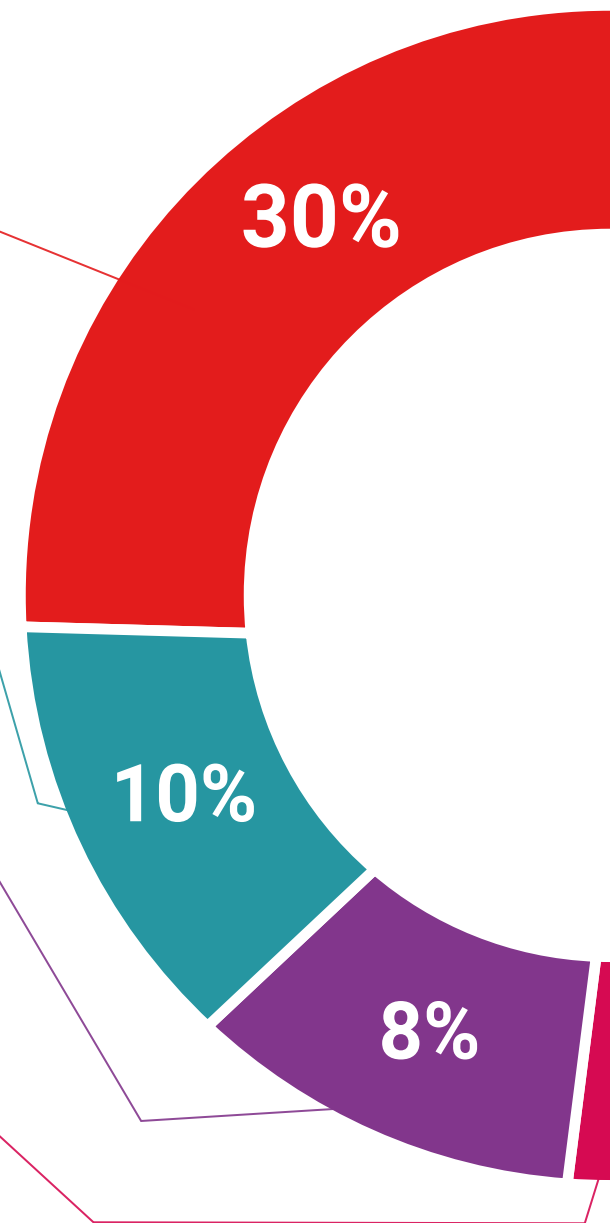
### Practising Skills and Abilities

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.



# 07 Certificate

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





“

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



future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

personalized service innovation

knowledge present quality

online training

development languages

virtual classroom

**tech** technological  
university

## Professional Master's Degree Professional Handball

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Schedule: at your own pace
- » Exams: online

# Professional Master's Degree Professional Handball

Endorsed by the NBA

