# Postgraduate Diploma Nutrition in Aquatic Sports



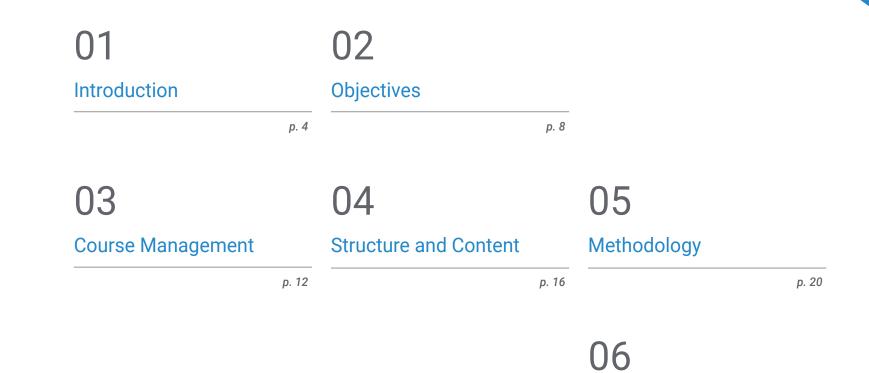


# **Postgraduate Diploma** Nutrition Aquatic Sports

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

Website: www.techtitute.com/pk/physiotherapy/postgraduate-diploma/postgraduate-diploma-nutrition-aquatic-sports

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Certificate

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# 01 Introduction

Aquatic sports are more demanding than other sports, due to the need for very specific facilities and characteristics, both for training and competition. Therefore, physiotherapists dedicated to nutrition for this sector must have very specific and specialized knowledge and skills. This is the reason why TECH has developed a qualification that seeks to provide students with these skills, with which they can perform their work and treat patients who are specifically dedicated to the field of aquatic sports. And this, through a 100% online program that delves into topics such as history of water sports, ergogenic aids, energy intake or body composition.

Become an expert in Nutrition in Aquatic Sports, thanks to TECH and a complete program in 100% online mode"

# tech 06 | Introduction

Aquatic sports are subjected to many very demanding and peculiar conditions. One of them is the different temperature range to which swimmers and aquatic athletes are exposed, which is between 16 and 31 °C. This can pose a huge challenge to the health, safety and performance of athletes. It is therefore of vital importance that the physiotherapist has specific and advanced knowledge in this area, in order to prevent possible injuries, through nutrition and physical therapy.

This is the reason why TECH has developed a Postgraduate Diploma in Nutrition in Aquatic Sports, with which it seeks to provide students with knowledge and skills with which they can carry out their work in this area, with the highest possible quality and with total efficiency. And this, through a syllabus that delves into aspects such as pre-competition, season programming, injury prevention and sports supplementation, among others.

All this, through a comfortable 100% online modality that allows the student to carry out his studies without interfering with his other daily obligations. In addition, with the total availability of very complete, up-to-date and dynamic theoretical and practical materials, which can be accessed through any device with Internet connection, whether *Tablet*, mobile or computer.

This **Postgraduate Diploma in Nutrition in Aquatic Sports** contains the most complete and up-to-date Scientific program on the market. Its most outstanding features are:

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



Acquire new knowledge in basic characteristics of water sports in a comfortable 100% online modality"

## Introduction | 07 tech



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

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

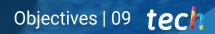
This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Stand out in the workplace in just a few months and achieve the successful job you've always wanted.

Improve your skills and competencies in energy metabolism and history of water sports.

# 02 **Objectives**

The objective of this Postgraduate Diploma in Nutrition in Aquatic Sports is to provide students with the necessary skills and competencies to be able to face a promising future in one of the areas of Physiotherapy and Nutrition with the greatest potential. All this, thanks to a complete, up-to-date and dynamic content that tests the knowledge acquired and that represents a unique opportunity for professional growth.



TECH's goal is to give you the tools to become the Nutrition and Physical Therapy professional you've always wanted to be"

# tech 10 | Objectives



## **General Objectives**

- Handle advanced knowledge on nutritional planning in professional and non-professional athletes for the healthy performance of physical exercise
- Manage advanced knowledge on nutritional planning in professional athletes of various fields in order to achieve maximum sports performance
- Learn advanced knowledge about nutritional planning in professional athletes from team sports to achieve the highest sports performance
- Manage and consolidate the initiative, entrepreneurial spirit to implement projects related to nutrition in physical activity and sport
- Know how to incorporate the different scientific advances into one's own professional field
- Acquire the skills to work in a multidisciplinary environment
- Gain an advanced understanding of the context in which the area of their specialty is developed
- Manage advanced skills in the detection of possible signs of nutritional changes associated with sports activities
- Manage the necessary skills through the teaching-learning process that will allow them to continue ways and learning in the field of sports nutrition, both through the contacts established with professors and professionals in the Postgraduate Diploma as well as on their own
- Specialize in the structure of muscle tissue and its role in sports
- Gain knowledge about the energetic and nutritional needs of athletes in different pathophysiological situations

- Specialize in the energetic and nutritional needs of athletes in the different situations specific to age and gender
- Become a specialist in the dietary strategies for the prevention and treatment of injured athletes
- Specialize in the energetic and nutritional needs of child athletes
- Specialize in the energetic and nutritional needs of Paralympic athletes

Reach your most demanding professional goals, thanks to TECH and without having to travel"



# Objectives | 11 tech



#### Module 1. Watersports

- Delve into the most important characteristics of the main water sports
- Understand the demands and requirements associated with sports activities in aquatic environments
- Distinguish between the nutritional needs of different watersports

#### Module 2. Sports by Weight Category

- Establish the different characteristics and needs within sports by weight category
- Understand in depth the different nutritional strategies for preparing the athlete for competition
- Optimize the improvement of body composition through nutritional approach

#### Module 3. The Injury Period

- Determine the different phases of the injury
- Help in the prevention of injuries
- Improve the prognosis of the injury
- Develop a nutritional strategy to meet the changing nutritional requirements during the injury period

# 03 Course Management

The management and teaching staff of this Postgraduate Diploma in Nutrition in Aquatic Sports is made up of leading professionals who are part of the TECH team of experts and who have poured their experience into the contents, to generate a unique and complete syllabus. In this way, the program offers comprehensive teaching materials, up-to-date information and the latest teaching technologies.

Course Management | 13 tech

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Succeed with the best and acquire the knowledge and skills you need to embark on the Nutrition in Aquatic Sports industry"

# tech 14 | Course Management

#### Management



#### Dr. Marhuenda Hernández, Javier

- Nutritionist in Professional Football Clubs
- Responsible for the Sports Nutrition Area. Albacete Balompié Club SAD
- Responsible for the Sports Nutrition Area. Catholic University of Murcia, UCAM Murcia Football Club
- Scientific Advisor. Nutrium
- Nutritional Advisor. Impulse Center
- Professor and Coordinator of Postgraduate Studies
- · PhD in Nutrition and Food Safety. San Antonio Catholic University of Murcia
- Graduate in Human Nutrition and Dietetics. San Antonio Catholic University of Murcia
- Master's Degree in Clinical Nutrition. San Antonio Catholic University of Murcia
- Academic Spanish Academy of Nutrition and Dietetics (AEND)



## Course Management | 15 tech

#### Professors

#### Dr. Ramírez Munuera, Marta

- Sports Nutritionist expert in Strength Sports
- Nutritionist. M10 Health and Fitness. Health and Sports Center
- Nutritionist. Mario Ortiz Nutrition
- Trainer in courses and workshops on Sports Nutrition
- Speaker at conferences and seminars on Sports Nutrition
- Degree in Human Nutrition and Dietetics. San Antonio Catholic University of Murcia
- Master in Nutrition in Physical Activity and Sport. San Antonio Catholic University of Murcia

666 Make the most of this opportunity to learn about the latest advances in this field in order to apply it to your daily practice"

# 04 Structure and Content

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The structure and content of this Postgraduate Diploma in Nutrition in Aquatic Sports have been designed by The working professionals, who are part of the team of experts in Physiotherapy of TECH. These specialists have a very outstanding and extensive experience and knowledge, which they have overturned in the contents to shape a study plan that lives up to the most demanding expectations.

A syllabus developed by experts and with the most complete and up-to-date theoretical and practical material on the academic market"

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# tech 18 | Structure and Content

#### Module 1. Watersports

- 1.1. History of Watersports
  - 1.1.1. Olympics and Major Tournaments
  - 1.1.2. Watersports Today
- 1.2. Performance Limitations
  - 1.2.1. Aquatic Sports in the Water (Swimming, Water Polo, etc.)
  - 1.2.2. Aquatic Sports on the Water (Surfing, Sailing, Canoeing, etc.)
- 1.3. The Basic Characteristics of Water Sports
  - 1.3.1. Aquatic Sports in the Water (Swimming, Water polo, etc.)
  - 1.3.2. Aquatic Sports on the Water (Surfing, Sailing, Canoeing, etc.)
- 1.4. Aquatic Sports Physiology
  - 1.4.1. Energy Metabolism
  - 1.4.2. Athlete Biotype
- 1.5. Education
  - 1.5.1. Strength
  - 1.5.2. Resistance
- 1.6. Body composition
  - 1.6.1. Swimming
  - 1.6.2. Water polo
- 1.7. Precompetition
  - 1.7.1. 3 Hours Before
  - 1.7.2. 1 Hour Before
- 1.8. Per Competition
  - 1.8.1. Carbohydrates
  - 1.8.2. Hydration
- 1.9. Post-Competition
  - 1.9.1. Hydration
  - 1.9.2. Protein
- 1.10. Ergogenic Aids
  - 1.10.1. Creatine
  - 1.10.2. Caffeine



## Structure and Content | 19 tech

#### Module 2. Sports by Weight Category

- 2.1. Characteristics of the Main Sports by Weight Category
  - 2.1.1. Regulation
  - 2.1.2. Categories
- 2.2. Programming of the Season
  - 2.2.1. Competitions
  - 2.2.2. Macrocycle
- 2.3. Body composition
  - 2.3.1. Combat Sports
  - 2.3.2. Weightlifting
- 2.4. Stages of Muscle Mass Gain
  - 2.4.1. % Body Fat
  - 2.4.2. Programming
- 2.5. Definition Stages
  - 2.5.1. Carbohydrates
  - 2.5.2. Protein
- 2.6. Precompetition
  - 2.6.1. Peak Week
  - 2.6.2. Before Weighing
- 2.7. Per Competition
  - 2.7.1. Practical Applications
  - 2.7.2. Timing
- 2.8. Post-Competition
  - 2.8.1. Hydration
  - 2.8.2. Protein
- 2.9. Ergogenic Aids
  - 2.9.1. Creatine
  - 2.9.2. Whey Protein

#### Module 3. The Injury Period

- 3.1. Introduction
- 3.2. Prevention of Injuries in Athletes
  - 3.2.1. Relative Energy Availability in Sport
  - 3.2.2. Oral Health and Injury Implications
  - 3.2.3. Fatigue, Nutrition and Injuries
  - 3.2.4. Sleep, Nutrition and Injuries
- 3.3. Phases of Injury
  - 3.3.1. Immobilization Phase. Inflammation and Changes Occurring during this Phase
  - 3.3.2. Return of Activity Phase
- 3.4. Energy Intake during the Period of Injury
- 3.5. Macronutrient Intake during the Period of Injury
  - 3.5.1. Carbohydrate Intake
  - 3.5.2. Fat Intake
  - 3.5.3. Protein Intake
- 3.6. Intake of Micronutrients of Special Interest during Injury
- 3.7. Sports Supplements with Evidence during the Period of Injury
  - 3.7.1. Creatine
  - 3.7.2. Omega 3
  - 3.7.3. Others
- 3.8. Tendon and Ligament Injuries
  - 3.8.1. Introduction to Tendon and Ligament Injuries. Tendon Structure
  - 3.8.2. Collagen, Gelatin and Vitamin C. Can they Help?
  - 3.8.3. Other Nutrients Involved in Collagen Synthesis
- 3.9. The Return to Competition
  - 3.9.1. Nutritional Considerations in the Return to Competition
- 3.10. Interesting Case Studies in Scientific Injury Literature

# 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"

# tech 22 | Methodology

#### At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Physiotherapists/kinesiologists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions of professional physiotherapy practice.

Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

#### The effectiveness of the method is justified by four fundamental achievements:

1. Physiotherapists/kinesiologists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.

2. The learning process has a clear focus on practical skills that allow the physiotherapist/kinesiologist to better integrate into the real world.

3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.

 Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



# tech 24 | Methodology

#### **Relearning Methodology**

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

The physiotherapist/kinesiologist will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



## Methodology | 25 tech

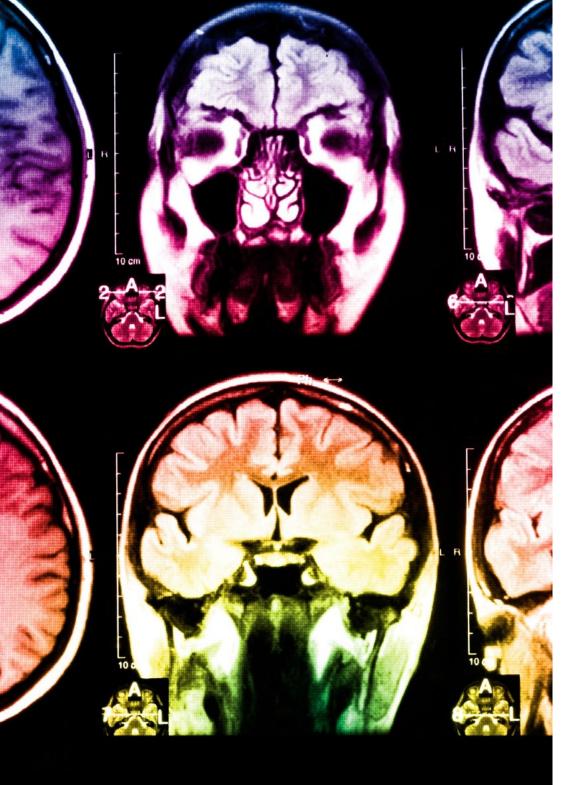
At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology we trained more than 65,000 physiotherapists/kinesiologists with unprecedented success in all clinical specialties, regardless of the workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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.

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.

The overall score obtained by our learning system is 8.01, according to the highest international standards.



# tech 26 | Methodology

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 really specific and precise.

20%

15%

15%

3%

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.



#### **Physiotherapy Techniques and Procedures on Video**

TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current Physiotherapy techniques and procedures. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **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 unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



#### 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.

# Methodology | 27 tech



#### **Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

20%

7%

3%

17%



#### **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.



### Classes

There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.

# 06 **Certificate**

The Postgraduate Diploma in Nutrition in Aquatic Sports guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.



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

# tech 30 | Certificate

This **Postgraduate Diploma in Nutrition in Aquatic** contains the most complete and upto-date 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 certificate 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 Nutrition in Aquatic** Official N° of Hours: **450 h**.



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

# technological university Postgraduate Diploma

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