

# Postgraduate Diploma Nursing Assessment and Approach in High Performance Sports

Endorsed by the NBA





## Postgraduate Diploma Nursing Assessment and Approach in High Sports Performance

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Technological University
- » Dedication: 8h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/in/nursing/postgraduate-diploma/postgraduate-diploma-nursing-assessment-approach-high-sports-performance](http://www.techtute.com/in/nursing/postgraduate-diploma/postgraduate-diploma-nursing-assessment-approach-high-sports-performance)

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# 01

# Introduction

Every day, numerous medical and anti-doping controls are performed, as well as medication guidelines that may be needed by any subject, always under the vision of a team of health professionals. Therefore, this program was created with the aim of updating the role of nursing in high-performance sport, its functions and cares that should be used before, during and after sports practice. Thanks to this high level degree, the nurse will deepen in the physical preparation for high performance sports, being able to evaluate, plan and treat the different parameters that help the prevention and recovery of sports injuries.







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*This Postgraduate Diploma offers an innovative vision of the evaluation of nutritional status and body composition in high-performance athletes"*

The anatomophysiological fundamentals of physical activity, biomechanics, assessment of the athlete at different times of the season and nutrition applied to high performance sports are topics in which the nursing staff must master. Thus, this Postgraduate Degree deepens in the approach of Sports Nursing as a branch of science in constant growth that studies and helps the complex injuries and pathologies of the athlete.

The Nursing staff who complete this program will acquire the necessary knowledge to offer their patients a more effective and quality treatment, through numerous up-to-date techniques. The syllabus covers the main current topics in Sports Nursing in the field of high performance, so that whoever masters them will be prepared to work in this field almost immediately.

Additionally, as it is an online training, Nursing Staff are not conditioned by fixed schedules or the need to move to another physical location. They will be able to access the contents at any time of the day, being able to balance their professional or personal life with their academic life.

The **Postgraduate Diploma in Nursing Assessment and Approach in High Sports Performance** 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 Sports Nursing
- ♦ 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

“*This qualification is a real updating tool to approach the topics in this specialty in a modern, objective and judicious way*”

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*Have access to multimedia content developed with the latest educational technology that will allow you to get up-to-date in a dynamic way”*

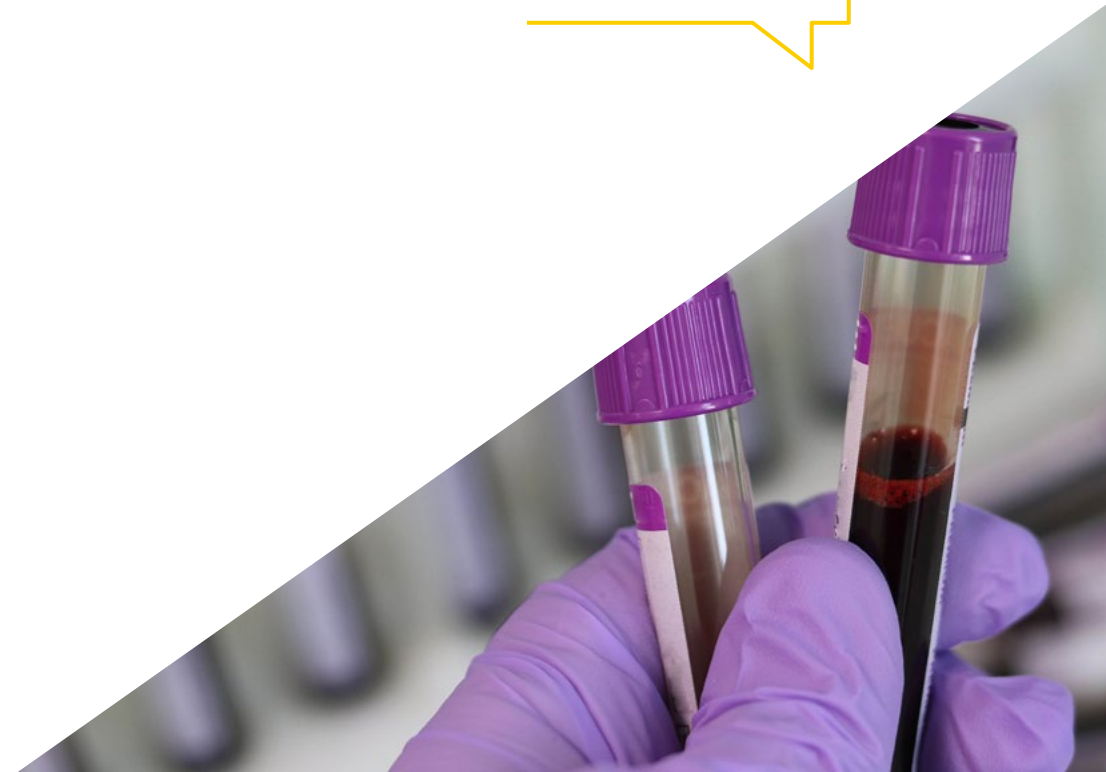
The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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 an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. This will be done with the help of an innovative system of interactive videos made by renowned experts.

*Expand your knowledge in biochemical and anthropometric assessment by training in real situations.*

*This is a unique opportunity to update your skills in a sector with a high demand for professionals.*



# 02 Objectives

The main objective of this program is to instruct the nursing staff so that they can define the limits of the use of the assessment and the nursing approach in order to be able to safely manage high performance athletes. This Postgraduate Diploma develops a theoretical-practical deepening, so that the professional can master all the content in a rigorous manner.







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*This updated program will generate a sense of security in the nursing practice performance, which will help you continue to grow professionally”*



## General Objectives

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- ♦ Review the main fundamentals of sports nutrition and anatomo-physiology of physical activity
- ♦ Study the current legislation regarding sports activities and nursing
- ♦ Update the approach to the main sports pathologies
- ♦ Delve into sports psychology and assessment of the athlete at different times of the season
- ♦ Deepen in the use and study of biomechanics in high performance sports environments
- ♦ Develop the concept of sports nutrition in High Performance Sports contexts

“ *A unique degree that will allow students to acquire the latest advances in biomechanics applied to high performance sports* ”







## Specific Objectives

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### **Module 1. Anatomico-physiological Fundamentals of Physical Activity**

- ◆ In-depth study of exercise physiology and energy systems
- ◆ Know the main cardiovascular, respiratory, endocrine, digestive and musculoskeletal adaptations to physical sports activity
- ◆ Study the role of nursing intervention in assessing the physical and sporting condition of the player
- ◆ Deepen in the importance of controlling fatigue and overtraining sports

### **Module 2. Biomechanics Applied to High Performance in Sports**

- ◆ Study the basic biomechanics of sports exercise
- ◆ Differentiate movements in one dimension and one plane, as well as kinematics of rotations
- ◆ Deepening the dynamics of rotations
- ◆ Analyze biomechanics applied to High Performance Sports in practical cases

### **Module 3. Evaluation of the Athlete at Different Times of the Season**

- ◆ Distinguish the nurse's intervention in competitive season and transition periods
- ◆ Delve into the importance of athlete monitoring
- ◆ Analyze the multidisciplinary work of nurses in high competition environments
- ◆ Study the different assessments applicable by the nurse

### **Module 4. Nutrition Applied to High Performance in Sports**

- ◆ Examine energy metabolism within the athlete's physical effort
- ◆ Expand methods for assessing nutritional status and energy expenditure
- ◆ Delve into nutrition in strength, endurance and team sports
- ◆ Highlighting the role of the sports nurse in injuries and eating disorders

03

# Structure and Content

The structure and content of the present program has been developed with the aim of ensuring that the Nursing personnel keep updated each and every one of the necessary skills to become true experts in this subject. It offers a complete and well-structured program that will lead you to the highest standards of quality and success.







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*You will have access to real clinical cases from group sessions and exercises to bring the program development closer to your clinical practice as a nurse”*



### Module 1. Anatomic-physiological Fundamentals of Physical Activity

- 1.1. Concepts and History of Physical Activity and Sports Medicine and Nursing
- 1.2. Functional Anatomy and Biomechanics Applied to Physical Activity and Sports (AFD)
- 1.3. Physiology of Exercise Energy Systems
- 1.4. Cardiovascular Adaptations to AFD
- 1.5. Respiratory Adaptations to AFD
- 1.6. Adaptations of the Musculoskeletal System to AFD
- 1.7. Endocrine, Renal and Digestive Adaptations to AFD
- 1.8. Assessing Athletes' Physical Ability Ergometry, Spirometry and Somatometry Nursing Interventions
- 1.9. Physical Activity in Environmental Stress Altitude and Depth
- 1.10. Thermoregulation During Physical Activity Nursing Interventions
- 1.11. Fatigue and Overtraining

### Module 2. Biomechanics Applied to High Performance in Sports

- 2.1. Introduction to Biomechanics
- 2.2. Movement in One Dimension
- 2.3. Movement in a Plane
- 2.4. Kinematics of Rotations
- 2.5. Dynamics
- 2.6. Dynamics of Rotations
- 2.7. Statics-Mechanical Balance
- 2.8. Biomechanical Analysis
- 2.9. Video Analysis
- 2.10. Case Studies





### Module 3. Evaluation of the Athlete at Different Times of the Season

- 3.1. Biochemical Evaluation
- 3.2. Anthropometric Assessment
- 3.3. Preseason
- 3.4. Competitive Season
- 3.5. Transition Period
- 3.6. Travel
- 3.7. Athlete Monitoring
- 3.8. Sweat Rate Calculation
- 3.9. Multidisciplinary Work
- 3.10. Doping

### Module 4. Nutrition Applied to High Performance in Sports

- 4.1. Energy Metabolism of Physical Effort
- 4.2. Assessing Nutritional Status and Body Composition
- 4.3. Assessing Energy Expenditure
- 4.4. Bodybuilding Nutrition and Body Recomposition
- 4.5. Nutrition in Strength-Based Sports
- 4.6. Nutrition in Team Sports
- 4.7. Nutrition in Endurance-Based Sports
- 4.8. Nutritional Ergogenic Aids
- 4.9. Eating Disorders and Sports Injuries
- 4.10. Advances and Research in Sports Nutrition

# 04

# Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.



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*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*



## At TECH Nursing School we use the Case Method

In a given situation, what should a professional do? 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. Nurses learn better, faster, and more sustainably over time.

*With TECH, nurses can experience a learning methodology 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, in an attempt to recreate the real conditions in professional nursing practice.



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*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. Nurses 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 nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. 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.



## 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 case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.



*The nurse 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.*



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 have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical 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 specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to 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 TECH's learning system is 8.01, according to the highest international standards.



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.

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.



### Nursing Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. 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 exclusive educational system for presenting multimedia content 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.





#### 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.



#### 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 suggesting that observing third-party experts can be useful.

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.





05

# Certificate

The Postgraduate Diploma in Nursing Assessment and Approach in High Sports Performance 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”*

The **Postgraduate Diploma in Nursing Assessment and Approach in High Sports Performance** contains the most complete and up-to-date scientific program on the market.

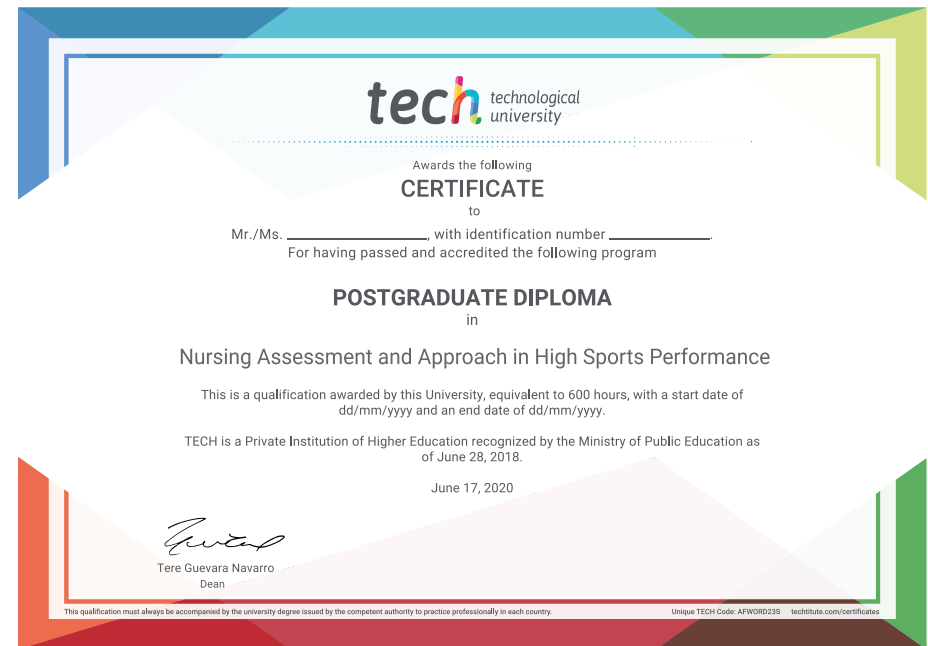
After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** via tracked delivery\*.

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 Nursing Assessment and Approach in High Sports Performance**

Official N° of Hours: **600 h.**

**Endorsed by the NBA**



\*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.



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