

# PROFESSIONAL DIPLOMA TRAINING FOR TEAM SPORTS

100% ONLINE
9 MONTHS

# INFORMATION

# **LEARN TO:**

Create assessment plans, analyzing diverse motor skills and obtaining measurements that can be taken into context in future training processes.

Develop and analyze strength training programs for team sports.

Propose efficient prevention strategies based on a process founded on scientific evidence.

Develop training processes for team sports, applying the proposed methodologies, and basing them on the chosen sport's physical and physiological demands.

Manage the different tools and variables for monitoring training.

Acquire a holistic view of the sports world to focus on the prevention of risky situations, through knowledge of the context and the actors in the different sports environments.

Utilize your knowledge of sports nutrition, based on the demands and needs of different forms of physical activity.

Analyze workload monitoring data to orientate the training process towards preventing injuries and consequently successfully optimize sports performance.

Improve critical analysis by completing a training program on the different professional roles of sports science and health.



DELIVERY MODE ONLINE

DURATION 9 MONTHS

ACADEMIC DEGREE EXECUTIVE EDUCATION

DELIVERED IN ENGLISH AND SPANISH

# **PROFESSORS**



Paco Seirul·lo Vargas
Head of FC Barcelona's Methodology area.



**Joan Ramon Tarrago**Head of FC Barcelona's Sports Performance area.



**David Casamichana Gómez**Doctor in Physical Activity and Sports Science. Physical trainer in football. University Professor and Researcher.



**Ana Merayo García**Sports Psychologist. Instructor. Coordinator of the SAIE (Service for Comprehensive Athlete Care) at Masia 360, FC Barcelona.



**Antonia Lizarraga**Responsable del área de nutrición deportiva en FC Barcelona.



**Tim Gabbett**High Performance Consultant. 20 years experience working as an applied sport scientist with athletes and coaches from a wide range of sports.



**Daniel Romero Rodriguez**Physiotherapist. Physical trainer and rehabilitator of competitive high performance athletes. Performance, prevention and post-injury rehabilitation advisor for various professional football players.



Francesc Cos

Former Head of Strength Training for FC Barcelona's first team football squad (2004-2016). Former Director of the Performance area of Barça Innovation Hub (2016-2018). Currently Director of Performance of the New York City (MLS).

# **PROGRAM**

### 1. Sports Assessment

#### **MODULE 1: STRENGTH EVALUATION IN TEAM SPORTS**

Unit 1: Strength Evaluation in Team Sports

Unit 2: Assessing Strength in Different Manifestations

#### **MODULE 2: SPEED AND AGILITY ASSESSMENTS**

Unit 1: Generalities about the Evaluation of Change of Direction Speed and Agility

Unit 2: Evaluation of Change of Direction Speed (Closed Skill Agility) and Agility (Open Skill Agility)

#### **MODULE 3: ENDURANCE ASSESSMENT IN TEAM SPORTS**

Unit 1: Assessment of Aerobic and Anaerobic Physical Condition in Athletes

Unit 2: Field Endurance Tests in the Context of Sports

**MODULE 4: INTEGRATIVE READING** 

### 2. Strength Training in Team Sports

#### MODULE 1: INTRODUCTION TO STRENGTH IN COLLECTIVE SPORTS. OUR PARADIGM

Unit 1: Basic Notions about Strength in Team Sports

Unit 2: The Role of Strength: from Theory to Practice

#### **MODULE 2: PERIODIZATION AND TRAINING MEANS.**

Unit 1: The Training Process

Unit 2: Training Means

#### **MODULE 3: SESSION PROGRAMMING**

Unit 1: Analyzing the Variables Involved in Session Programming

Unit 2: Training Control

**MODULE 4: INTEGRATIVE MODULE** 

# **3. Injury Prevention**

#### MODULE 1: BASIC CONCEPTS IN EPIDEMIOLOGY AND INJURY PREVENTION

Unit 1: Basic Concepts in Injury Prevention

Unit 2: Epidemiology in Team Sports

#### **MODULE 2: MUSCLE INJURY PREVENTION**

Unit 1: Prevention of the Most Frequent Muscle Injuries

Unit 2: The Preventive Approach to Muscle Injury Prevention

#### **MODULE 3: PREVENTION OF JOINT INJURIES**

Unit 1: Prevention of the Most Frequent Lower Limb Joint Injuries ACL (Anterior Cruciate Ligament) Injury

Unit 2: Prevention of the Most Frequent Upper Limb Joint Injuries (Shoulder Injuries)

**Module 4: INTEGRATIVE READING** 

# **PROGRAM**

# 4. Training Programs and Physiological Profiles in Team Sports

MODULE 1: PERIODIZATION, PLANNING AND METHODOLOGIES. THEORIES AND NEW PARADIGMS

Unit 1: Theoretical Framework and Traditional Methodologies

Unit 2: New Methodologies for Programming Training

**MODULE 2: SPORTS SEASON** 

Unit 1: Season Stages

Unit 2: Development of Skills and Physical Qualities

MODULE 3: CHARACTERIZATION OF TEAM SPORTS WITH A FOCUS ON SOCCER. ANALYSIS OF PHYSICAL DEMAND

Unit 1: Analysis of Acyclic Sports

Unit 2: Analysis of Physical Demands in Competition and Training

**MODULE 4: INTEGRATIVE MODULE** 

# 5. Tools and Variables for Monitoring Training Loads

**MODULE 1: Introduction to the Monitoring of Training Loads** 

MODULE 2: The Planning, Intervention, and Evaluation Cycle in the Training Process

**MODULE 3: Internal Load Monitoring Tools and Their Variables** 

**MODULE 4: External Load Monitoring Tools and Their Variables** 

#### 6. The Life of an Elite Athlete

**MODULE 1: Systemic model** 

MODULE 2: Sports career model I and II

**MODULE 3: Dual career** 

MODULE 4: Examples of intervention in different transition stages of an athlete's life

# 7. Supplementation and Ergogenic Aids in Sports

#### **MODULE 1: INTRODUCTORY CONCEPTS**

Unit 1: Classification of Nutritional Supplements

**Unit 2: Nutrients** 

#### **MODULE 2: SPORTS FOODS**

Unit 1: Sports Foods for Acute Use

Unit 2: Sports Foods for Chronic Use

#### **MODULE 3: ERGOGENIC AIDS**

Unit 1: Ergogenic Aids of Acute or Instant Effects

Unit 2: Ergogenic Aids of Chronic Effect

**MODULE 4: INTEGRATIVE READING** 

# **PROGRAM**

# 8. A Best Practice Approach to Workload Monitoring

MODULE 1: Why do injuries occur? MODULE 2: Fitness-fatigue model

MODULE 3: Acute:chronic workload ratio and injury

MODULE 4: Recent controversies, and practical applications of the data

### 9. Neuromuscular Basis for Strength Training

MODULE 1: Characteristics of the musculoskeletal system.

MODULE 2: Muscle action and its relationship to sports.

Unit 1: Types of muscle action.

MODULE 3: Systemic changes in detraining and immobilisation.

MODULE 4: Assessment of muscular properties in relation to sport.

# **EXPERIENCE**

All your learning experience will take place in an online platform where you will find all the resources you need to study:

# **LECTURES**

which address the main topics.

# **ACTIVITIES**

to apply the content addressed in each module.

# **VIDEOS**

that deepen some subjects of the readings.

# **RUBRICS**

that will evaluate you in each module.

# **ONLINE EXPERT**

In every course, you will have the support and virtual follow-up of a subject-matter expert. This online expert will perform interventions throughout the different modules to ensure your learning, as well as the interaction with the rest of your peers.

In addition, he will be available in the forum and by internal messaging so that you can appeal to him as many times as you need.

# **FORUMS**

where you can interact with your colleagues.

# **SELF-ASSESSMENTS**

which will help you measure your learning progress.

# **BENEFITS**

World-class content, designed by experts and sports-industry oriented for an immediate impact.

Round-the-clock access to study material, wherever you want and from any device.

Custom feedback for every individual and teamwork activity.

Spaces of discussion and interaction with industry professionals from all over the world.

Certificate of participation for each course, issued by Barça Innovation
Hub - Universitas. If you pass each of the courses that make up the program, and
complete and pass the comprehensive final exam, you will also receive a verified
certificate of completion for the entire program, with confirmation of identity, issued
by Barça Innovation Hub - Universitas.

