



**BARÇA  
INNOVATION HUB**  
Universitas

**PROFESSIONAL DIPLOMA**  
**WORKLOAD  
MANAGEMENT**

**100% ONLINE**  
**9 MONTHS**

LEARN FROM THE BEST | ENJOY A UNIQUE EDUCATIONAL EXPERIENCE | BECOME PART OF A GLOBAL NETWORK

# INFORMATION

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## LEARN TO:

Manage the different tools and variables for monitoring training.

Select the appropriate variables depending on the different objectives for training and competition load control.

Use data generated by load control to evaluate and manage the process.

Detect and appropriately utilize the most relevant training load indicators.

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

Improve sports performance and injury prevention through a deepened understanding of the methodology to use in strength training and muscle power programs.

Apply the appropriate methodology to the design of the post-injury rehabilitation process in situations where strength development plays a significant role.

Understand the theoretical basis for nutrition periodization.



**DELIVERY MODE ONLINE**

**DURATION 9 MONTHS**

**ACADEMIC DEGREE EXECUTIVE EDUCATION**

**DELIVERED IN ENGLISH AND SPANISH**

# PROFESSORS



## **David Casamichana Gómez**

Doctor in Physical Activity and Sports Science. Physical trainer in soccer. University Professor and Researcher.



## **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).



## **Asker Jeukendrup**

Sports nutrition scientist. Professor of Exercise Metabolism. Performance consultant in elite sport. Entrepreneur. Ironman triathlete.

# PROGRAM

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## **1. 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

## **2. Selecting Variables: Are we repeating information or providing additional information?**

MODULE 1: Relationship between internal load variables, and between external load variables

MODULE 2: Relationship between external load variables

MODULE 3: Integrating measurements. Efficiency index

MODULE 4: Selecting variables

## **3. Assessing Training and Training Load Management**

MODULE 1: Analysis of the training task

MODULE 2: Analysis of the training session

MODULE 3: Analysis of the training microcycle

MODULE 4: Analysis of the training mesocycle and of broad temporary training phases

## **4. Indicators for Training Load Management**

MODULE 1: Weekly changes

MODULE 2: Acute chronic load ratio: concept and calculation method

MODULE 3: Acute chronic load ratio: application and limitations

MODULE 4: Training load moderators and mediators

## **5. Training Smarter and Harder**

MODULE 1: It's not all about the ratio!

MODULE 2: Not all training carries the same risk

MODULE 3: Pathways for understanding pain. Fatigue in athletes

MODULE 4: Optimal loading involves consideration of factors other than load

# PROGRAM

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## **6. Strength training methodology: its application in the improvement of sports performance and post-injury rehabilitation for competition**

MODULE 1: Contextualization: how can we adapt strength training to team sports?

MODULE 2: Strength workload methodology in situation sports.

MODULE 3: Integrating strength workload into planning and programming of situation sports.

MODULE 4: Strength in the design of sports specific tasks. Examples based on football.

## **7. Strength and muscle power as a key feature of rehabilitation from sports injuries**

MODULE 1: Analysis of injury in sports: injury mechanisms and associated risk factors.

MODULE 2: Sports injuries and their relationship with the quality of strength.

MODULE 3: Strength manifestations and muscle power in the post-injury rehabilitation process.

MODULE 4: New paradigms in strength training: muscle building through vascular occlusion.

## **8. Periodized Nutrition**

MODULE 1: The theory

MODULE 2: Training the gut

MODULE 3: Training low

MODULE 4: From theory to practice

## **9. What Are We Training For?**

MODULE 1: Physical demands of competition

MODULE 2: Worst case scenarios

MODULE 3: Small-sided games and competition

MODULE 4: The fatiguing effect of contact. Winning teams look for the “arm wrestle”

# EXPERIENCE

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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.

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## VIDEOS

that deepen some subjects of the readings.

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## ACTIVITIES

to apply the content addressed in each module.

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## RUBRICS

that will evaluate you in each module.

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## 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.

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## FORUMS

where you can interact with your colleagues.

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## SELF-ASSESSMENTS

which will help you measure your learning progress.

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# BENEFITS

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**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.**



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# **CREATING A NEW GENERATION OF SPORTS PROFESSIONALS**

