Postgraduate Certificate

Big Data Applied in Sport

Endorsed by the NBA



estadísticas por la

de futbol

Golden State

Warriors instala un sistema de

Selección Mexicana

Federación Alemana de Futbol contrata

SAP y gana el Mundial de Brasil

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otipo antal de co wearable

2006

Nike y Apple

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aplicación

Nike+ para entrenamiento

personal

2013



Postgraduate Certificate Big Data Applied in Sport

» Modality:Online

» Duration: 6 weeks

» Certificate: TECH Global University

» Accreditation: 6 ECTS

» Schedule: at your own pace

» Exams: online

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tech 06 | Introduction

Data Journalism is a specialty that has developed a great relevance in the media, due to the need to collect, analyze and interpret large amounts of data, through the use and management of specialized applications and software New technologies are having an impact on the processes of news production, presentation and quality, although they are also beginning to play a decisive role in the productivity and efficiency of content production, to the point that some media are using *bots* to generate information or reports automatically

In order to produce more understandable, attractive, relevant and accurate information, the communication professional will be introduced to the techniques for processing large volumes of data and to become familiar with the terminology related to Big Data, Artificial Intelligence or *Machine Learning* In this sports specialization, specifically, this module addresses the importance of statistics, the most relevant sources of data information and how to use them to dissect the game and interpret it in order to provide the basis for quality journalistic content. Finally, it analyzes the usual sources of sports journalists and reveals the particularities, dangers and difficulties of their relationship with them.

This way, in this program, students will find the innovative *Relearning* method, which allows them to advance in a much more natural way in the acquisition of concepts throughout the duration of the program, eliminating the tedious task of memorizing used in obsolete methodologies. You only need an electronic device with an Internet connection to access the syllabus of this program. In addition, this methodology gives you the freedom to distribute your course load, making it even easier to combine this specialization with work and/or personal responsibilities

In addition, as a finishing touch to an unparalleled academic experience of the highest level, the teaching team that will accompany the graduate during the course of the Postgraduate Certificate will be headed by several professionals of distinguished international prestige in the field of Sports Journalism. These experts have prepared more than an hour and a half of *Masterclasses* in which they will not only share the most effective communication strategies, but also their own experience to serve as a guide for future specialists to achieve an unparalleled journalistic praxis.

This **Postgraduate Certificate in Big Data Applied in Sports** contains the most complete and up-to-date program on the market. Its most notable features are:

- The latest technology in online teaching software
- A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- Practical cases presented by practicing experts
- State-of-the-art interactive video systems.
- Teaching supported by telepractice
- · Continuous updating and recycling systems
- Autonomous learning: full compatibility with other occupations
- Practical exercises for self-assessment and learning verification
- Support groups and educational synergies: program questions, discussion and knowledge forums
- Communication with the teacher and individual reflection work
- Content that is accessible from any fixed or portable device with an Internet connection
- Supplementary documentation databases are permanently available, even after the program.





The syllabus of this program includes more than one and a half hours of master classes prepared by internationally renowned sports journalists"

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.

Learn all the aspects that successful political communication professionals must master.

With professors who are experts in this area of work, this program is a unique opportunity for professional development.







tech 10 | Objectives



General Objectives

- Compile, manage and interpret relevant data through specific digital tools
- Master tools and resources to visualize data in a clear and attractive way
- Analyze sports events in-depth
- Establish relationships with the main sources of investigative Sports Journalism



Our goal is simple: to offer you a high quality program, with the most developed teaching resources so that you achieve the best results with little effort."





Objectives | 11 tech



Specific Objectives

- Analyze sports from a Data Journalism perspective
- Select appropriate data sources for specific statistical news items
- Support information or opinions with relevant data
- Compile, process, manage, filter and compare statistics
- Access, discriminate and publish confidential information and leaks





tech 14 | Course Management

International Guest Director

Born in Puerto Rico, Alvaro Martin received his **undergraduate degree** from Harvard University and an **MBA** in **Business Administration** from Harvard Business School.

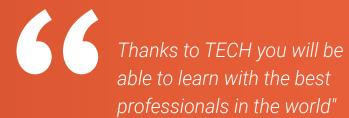
Martin is the only original Spanish-language ESPN network broadcaster who has remained with the network ever since, covering all NBA events.

In addition, he holds the distinction of being the first talent to serve as a dual-language sports broadcaster in ESPN's history, is ESPN's most experienced NBA broadcaster in either English or Spanish, has informed and entertained Spanish-speaking NBA basketball fans around the world for more than two decades, has been nominated for a Spanish-language Emmy Award as a sports broadcaster, and has also hosted 20 NBA Finals for ESPN, and ABC in their Spanish-language versions.



Mr. Martín, Álvaro

- NBA Sportscaster and Sports Analyst for ESPN, Connecticut, United States
- Spanish-language Emmy Award nominee as sports broadcaster
- Harvard University graduate
- Professional Master's Degree in Business Administration at Harvard Business School



International Guest Director

Born and raised in Bayamon, Puerto Rico, "El Coach" played basketball and was a middle distance runner in his youth. After earning his **Bachelor's Degree** in **Business Administration** and **Physical Education**, he began his coaching career in youth programs, eventually coaching at all levels in Puerto Rico.

After an outstanding career as a Basketball Coach in Puerto Rico, Carlos Morales came to ESPN in February 2000 to serve as a Basketball Analyst in Spanish, bringing all his experience in NBA events.

He is currently Assistant Coach of the Puerto Rico Women's National Team and is a member of the National Association of Basketball Coaches and the World Association of Basketball Coaches.



Mr. Morales, Carlos

- Assistant coach of the Puerto Rican women's basketball team
- ESPN basketball analyst
- Graduate in Business Administration and Physical Education
- Member of: National Association of Basketball Coaches and World Association of Basketball Coaches



A unique, key, and decisive aducational experience to boost your professional development"

Management



Mr. Pérez Zorrilla, Carlos

- Specialized Sports Journalism
- Head of Department at Estadio Deportivo Newspaper
- Head of Digital Content at Estadio Deportivo Newspaper
- Website Editor for Tourism and Sports in Andalucía
- Collaborator of Onda Cero Sevilla
- Collaborator of Canal Sur Radio
- Graduate in Journalism from the Andalusian Center for Business Studies (CEADE)

Professors

Mr. Palomo Armesto, Álvaro

- Website Content Writer at Medina Media Consulting
- Multimedia Writer at Estadio Deportivo
- Head of Press at CD Patin Macarena
- Editor at El Correo de Andalucía
- Editor at El Diario de Sevilla
- Degree in Journalism from the University of Sevilla.

Mr. García Collado, José Enrique

- Editor at Estadio Deportivo
- Degree in Journalism from the University of Sevilla.
- Journalist and Expert in Sports Big Data from the University of Valladolid
- Postgraduate Diploma in Big Data in Sports by the University of Valladolid
- Professional Master's Degree in Community Management at CEDECO school
- Specialization course in Programmatic Advertising at Skiller Academy





Mr. Adorna León, Joaquín

- Professor of Sports Journalism at the University of Sevilla
- Journalist and analyst at Besoccer
- Editorial Director. Estadio Deportivo
- Degree in Journalism from the University of Sevilla.
- Degree in Information Sciences from the University of Sevilla.

Ms. Chávez González, Luisa María

- Contributor to the Decibelios AM website
- Contributor to the program Aún no es viernes "It's not Friday yet", Sevilla FC Radio
- Editor at Ooh! Jerez
- Trainee Editor at Estadio Deportivo
- Trainee Editor at Diario de Sevilla
- Degree in Journalism, University of Sevilla
- Co-author of the book Por si nunca eres



Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"





tech 22 | Structure and Content

Module 1. Data and Investigative Journalism

- 1.1. Data Journalism
 - 1.1.1. Journalistic Documentation
 - 1.1.2. Infographics
 - 1.1.3. Fact Checking
 - 1.1.4. Graphic Representation
 - 1.1.5. The Importance of Data Journalism Today
 - 1.1.5.1. Milestones in the Field in Recent Years
- 1.2. Statistics
 - 1.2.1. Concept and Uses
 - 1.2.2. Statistical Objectives
 - 1.2.3. Types of Statistics
 - 1.2.4. Application to Journalism
 - 1.2.4.1. Application to Sports Journalism
- 1.3. Smart Data Analysis
 - 1.3.1. Smart Data Classification
 - 1.3.2. Data Mining
- 1.4. Data Journalism Formats
 - 1.4.1. Internet, Press, TV, Radio
 - 1.4.2. Main Tools for Each Media
 - 1.4.3. How to Prepare an Online and Print Data Report
- 1.5. Introduction to Big Data
 - 151 Definition
 - 1.5.1.1. The Vs of Big Data
 - 1.5.1.2. Predictive Analysis
 - 1.5.1.3. Moneyball
 - 1.5.1.4. Big Data in Sport
- 1.6. Data Analysis and Interpretation Tools
 - 1.6.1. Excel
 - 1.6.2. SAP Predictive Analytics
 - 1.6.3. SAS Analytics
 - 1.6.4. Olik View

- 1.6.5. Tableau Public
- 1.6.6. Penatho
- 1.6.7. Klipfolio
- 1.6.8. Sisense
- 1.6.9. Cyfe
- 1.6.10 Power BI
- .7. Artificial Intelligence
 - 1.7.1. The importance of Artificial Intelligence
 - 1.7.2. Artificial Intelligence in Sport
 - 1.7.3. Artificial Intelligence in Sports Journalism
- 1.8. Machine Learning
 - 1.8.1. Machine Learning in Sport
 - 1.8.2. Machine Learning in Journalism
 - 1.8.3. Artificial Neuronal Networks
 - 1.8.4. Deep Learning
 - 1.8.5. Glossary of Related Terms
- 9. Sources of Data Information in Sport
 - 1.9.1. Sources of Data Information in Soccer
 - 1.9.1.1. Transfermarkt
 - 1.9.1.2. SofaScore
 - 1.9.1.3. WhoScored
 - 1.9.1.4. Stats Zone
 - 1.9.1.5. Football-line ups
 - 1.9.1.6. Soccer Association
 - 1.9.1.7. World Referee
 - 1.9.1.8. WyScout
 - 1.9.1.9. InStat Scout
 - 1.9.1.10. ProFootball DB
 - 1.9.2. Sources of Data Information in Other Sports
- 1.10. Investigative Journalism
 - 1.10.1. Characteristics of Investigative Journalists
 - 1.10.2. Qualities of The Investigative Journalist



Structure and Content | 23 tech

1.10.3. The Relationship with Sources

1.10.3.1. Clubs

1.10.3.2. Athletes

1.10.3.3. Institutions

1.10.3.4. Sports Managers

1.10.3.5. Athletes' Agents

1.10.3.6. The Exchange Market

1.10.4. Filtration



A program that will take you through the necessary knowledge to compete with the best in your profession"





tech 26 | Methodology

Case Study to contextualize all content

Our program offers a revolutionary method of skills and knowledge development. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.





You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.

Methodology | 27 tech

This TECH program is an intensive educational program, created from scratch,

A learning method that is different and innovative.

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 has been the most widely used learning system among the world's leading business schools for as long as they have existed. 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.



The student will learn, through collaborative activities and real cases, how to solve complex situations in real business environments.

tech 28 | Methodology

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.

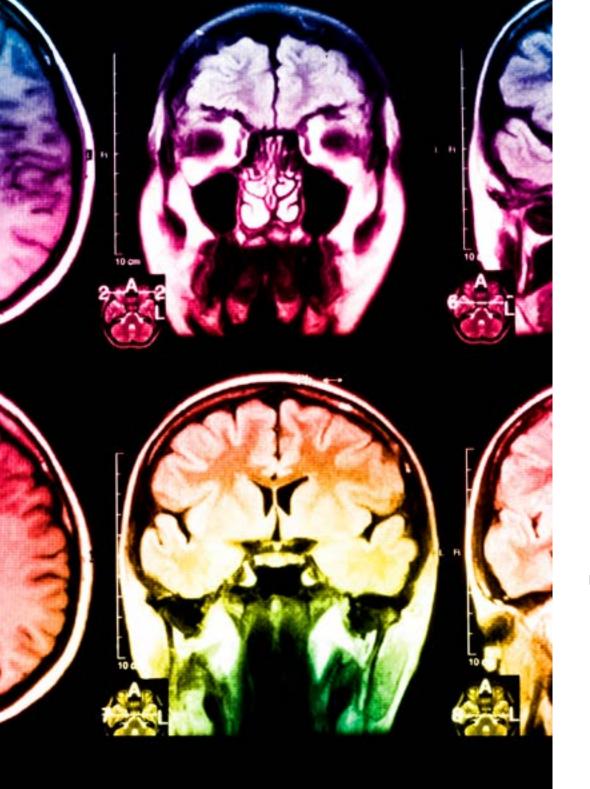
We enhance the Case Study with the best 100% online teaching method: Relearning.

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 prepare 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.





Methodology | 29 tech

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we balance each of these elements concentrically. This methodology has prepared 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, and financial markets and 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 specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to 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 adapted in 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.



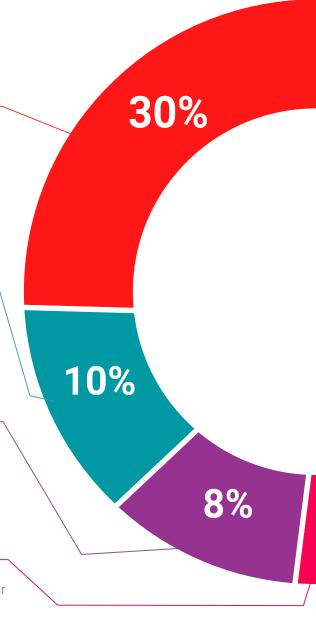
Practicing Skills and Abilities

They will carry out activities to develop specific competencies and skills in each thematic field. 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.



20%

25%

Case Studies

Students will complete a selection of the best case studies chosen specifically for this program. 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".



We periodically assess and re-assess students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



4%





tech 34 | Certificate

This program will allow you to obtain the title of **Postgraduate Certificate in Big Data Applied in Sport endorsed by** TECH Global University, the largest digital university in the world.

TECH Global University is an official European University publicly recognized by the Government of Andorra (official bulletin). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international educational framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of joint tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University's** own diploma is a European program of continuous education and professional updating that guarantees the acquisition of competencies in its area of knowledge, conferring a high curricular value to the student who completes the program.

Title: Postgraduate Certificate in Big Data Applied in Sport

ECTS: 6

Official No of Hours: 150 hours.



Mr./Ms. _____, with identification document _____ has successfully passed and obtained the title of:

Postgraduate Certificate in Big Data Applied in Sport

This is a private qualification of 150 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



^{*}Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University make the necessary arrangements to obtain it, at an additional cost.

tech global university

Postgraduate Certificate Big Data Applied in Sport

- » Modality:Online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

