

Postgraduate Diploma Big Data in Companies



Postgraduate Diploma Big Data in Companies

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 24 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/information-technology/postgraduate-diploma/postgraduate-diploma-big-data-companies

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01

Introduction

TECH presents a training course designed to guide students in one of the most specific and interesting fields for the business world: this program in Big Data in Companies is designed to provide the necessary skills to incorporate the capabilities of this form of analysis to their work. With TECH's exceptional quality, the largest in the online teaching market.





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A complete update that will provide you with the working capacity of a specialist in the field”

This Postgraduate Diploma will give you a comprehensive vision of the latest technologies used with Big Data. A very complete compilation of advances, novelties and work tools that will take students through the most intensive path, to prepare them for the current star profile.

Throughout this program the student will learn everything necessary to analyze data, with the development of the different existing techniques. In addition, TECH will show how to capture the information and how to store it properly in each case.

Learn from the best with the most innovative information system and with the security and solvency of the best online university right now

This **Postgraduate Diploma in Big Data in Companies** contains the most complete and up-to-date educational program on the market. The most outstanding characteristics of this program are:

- ◆ Practical case studies presented by experts
- ◆ 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 the self-assessment process can be carried out 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



All the necessary aspects to intervene in data analytics, in a high quality training course"

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This training has the best teaching material available online or downloadable, to facilitate your study and effort management”

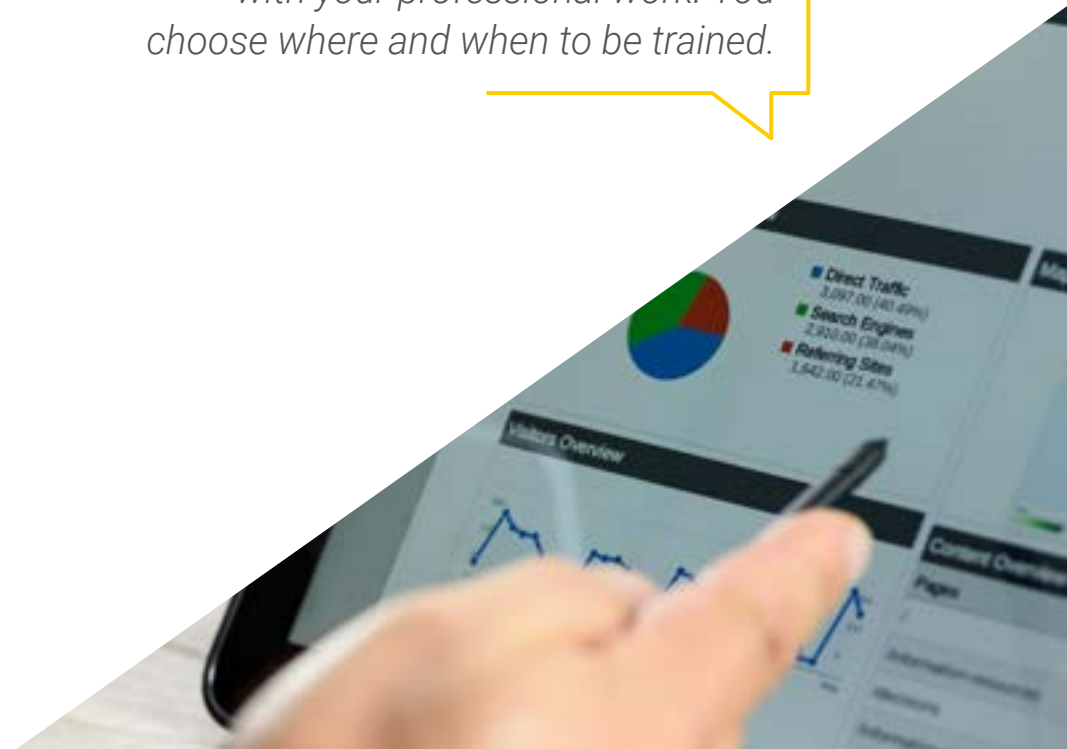
The program's teaching staff includes professionals from the sector who contribute their work experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

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 training programmed to train in real situations.

The design of this Program focuses on Problem-Based Learning, by means of which the professional will have to try to solve the different situations of Professional Practice, which will be posed throughout the Program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts.

A very complete training, created with a strong focus on quality and bringing our students to the highest level of skill.

This 100% online Postgraduate Diploma will allow you to combine your studies with your professional work. You choose where and when to be trained.



02 Objectives

The objectives of this Postgraduate Diploma were established with a basis on realistic and necessary goals for a professional in the sector. Gradually, students will be able to verify their learning and progress in the mastery of the contents so that, at the end, they will have finished a complete process of professional growth.





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Realistic, achievable and high-impact goals for your professional training”



General Objectives

- ◆ Acquire the skills for strategic project management through the contribution of best practices collected under the PMI, methodologies such as Kimball or a unique methodology in the world: SQuID, developed by a Spanish company who are experts in Big Data
- ◆ Know the legal aspects related to user privacy and their right to protect their data, aspects to be complied with by any system that makes effective use of third party data
- ◆ Understand the need for security in data storage, management and access and know the pillars of information security: integrity, confidentiality, availability and traceability
- ◆ Explore the ethics of data and the possible uses in today's societies
- ◆ Acquire basic knowledge to obtain a vision on the relevance of Marketing in the strategy of any company and how the effective management of data analysis techniques contributes to the definition of more successful strategies to reach the market
- ◆ Learn to accurately define the consumer by learning specific skills and finding and analyzing the necessary information
- ◆ Obtain information based on data from searches performed by web users, in order to define a strategy based on realities, i.e. existing data
- ◆ Know how to differentiate the supply, thus providing the ability to think in the same way as the consumer, detecting the attributes he/she wants
- ◆ Expand your scope of knowledge in the use of open sources to combine with other existing data within the organization
- ◆ Learn how a real case of application of the world of Big Data to Marketing works with MasterLead, which provides a tool to assess the probability of a lead to become a customer
- ◆ Offer students a 360° management vision, providing them with a balance between technical and managerial training





- ◆ Enhance management and leadership skills to successfully manage teams and projects
- ◆ Turn the student into a resilient leader through the management of emotions, conflict and crisis, fundamental skills in the current context; but also other skills oriented to decision making, negotiation and change management will be fostered
- ◆ Learn how to use IBM's Many Eyes tool that allows you to create different types of data visualizations such as infographics, maps, word count visualization, bar charts, etc
- ◆ Obtain capabilities in three popular libraries such as Google Charts, JQuery plug-ins for visualizations and Data-Driven, also known as D3, one of the most powerful libraries currently on the market
- ◆ Know in depth another set of tools that are widely used in various industries such as Matlab, Tableau, SAS Visual Analytics or Microsoft Power BI, where you will be able to explain the history of a dataset through visualizations



Specific Objectives

Module 1. Strategic Management of Visual Analytics and Big Data Projects

- ◆ Know the best practices in PMI applied to the world of Big Data
- ◆ Know Kimbal's methodology
- ◆ Know the SQuID methodology and its applicability in the development of Postgraduate Diploma projects
- ◆ Identify the applicable legal issues related to the capture, storage and use of user data
- ◆ Know how privacy can be provided in Big Data
- ◆ Anticipate the ethical risks and benefits derived from the application of big data techniques that may occur in a real situation

Module 2. Client Analysis. Applying Data Intelligence to Marketing

- ◆ Know the different types of marketing and how they are applied in organizations and their influence on business strategies
- ◆ Be able to design a central intelligence system (CRM) for decision support based on data analysis and visualization and focused on the company's own context
- ◆ Provide an introduction to the web as a massive source of real data based on user searches that can be used in decision making
- ◆ Analyze the technologies underlying the various web systems
- ◆ Develop open source intelligence solutions, exploiting available data sources
- ◆ Learn about data application to improve marketing and sales in business organizations

Module 3. Data-Driven Soft Skills in Strategic Management in Visual Analytics

- ◆ Know and develop the Drive profile applied to mass data environments
- ◆ Understand what they are and why advanced management skills generate differential





value in the data scientist

- ◆ Develop strategic communication and presentation techniques
- ◆ Know the role of emotional intelligence in the Visual Analytics context
- ◆ Identify key concepts in Agile Team Management
- ◆ Develop and empower the Postgraduate Diploma in data-driven organizations
- ◆ Develop emotional management skills as a key to performance-focused organizations

Module 4. Visualization Tools

- ◆ Know how to generate diagrams that visually represent the chosen situation from a set of data
- ◆ Be able to combine the different techniques studied for the design of original visualizations
- ◆ Know how, starting from a design and a set of previous data, an implementation of a visualization that meets the defined requirements can be carried out
- ◆ Identify the usability and interactivity needs of a data visualization method and be able to develop a new version of the visualization that improves these aspects
- ◆ Design a system that combines data capture and storage techniques, as well as data analysis and visualization, to represent existing patterns in that data set

03

Course Management

Within the quality criteria that we apply in all our programs, this program offers you the opportunity to learn from the best, with a teaching staff of industry professionals who will invest their theoretical and practical knowledge to take you to the highest level of training. With the latest and most effective teaching methods on the online teaching market.

STATEMENT

REVENUES	6,554,224.00
NET SALES	3,420,563.00
Investment	6,764,984.00

EXPENSES	6,550,452.00
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· BALANCE SHEET

· ASSETS
· Current Assets: 238,700.00
· Non-Current Assets: 899,776.00

· Liabilities
· Current Liabilities: 238,700.00
· Non-Current Liabilities: 2,000.00

· EQUITY
· Current Equity: 0.00
· Non-Current Equity: 0.00

· CAP

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Our university employs the best professionals in all areas who share their knowledge in order to facilitate your learning"

Management



Mr. Galindo, Luis Ángel

- ◆ Senior High Performance Consultant with 16 years of experience
- ◆ Definition, development and implementation of a successful open innovation model, with +10% year-on-year revenue growth leveraged on innovative assets
- ◆ Definition, development and implementation of successful Digital Transformation Programs for more than 8 years and 700+ people leading a pioneering role in the industry
- ◆ Implementation of 20+ complex consulting projects worldwide for large companies in artificial intelligence, economic intelligence, cybersecurity, business development, digital transformation, risk assessment, process optimization and people management
- ◆ Expert in understanding customers and translating their needs into actual sales

Professors

Mr. Almansa, Antonio

- ◆ Senior Technician: operation, engineering and architecture of the Data Center (DC) networks located in Independencia and Orduña, as well as the transport network at national level for tariffs and discharges
- ◆ Level 2 Expert: design and implementation of the networks (with technological change) of the DC of Fco. Sancha and later Manuel Tovar
- ◆ Design, implementation and integration of the Julian Camarillo DC contingency center

Ms. Álvarez de las Cuevas, Mónica

- ◆ Computer engineer with an entrepreneurial profile and a vocation for project management with direct experience in the field of technical training and digital marketing solutions
- ◆ Coordination and management of both technical and business teams, for the analysis of the status and improvement of business procedures and implementation of new digital solutions

Dr. Lominchar, José

- ◆ MBA: Master of Business Administration (MBA)
- ◆ PhD in Law (Labor Law Program) (UCJC)
- ◆ Degree in Law (UCM) Spain
- ◆ Honorary PhD from the Legal Studies University Center in Mexico, 2018



International Guest Director

Recognized as one of the best experts in Data Science by Forbes magazine, Robert Morgan is a distinguished mathematician highly specialized in the field of Computational Statistics. His extensive knowledge in this field has allowed him to be part of international reference institutions, such as the multinational Unilever.

In this way, he has led the Data Science strategy at a global level. In this sense, he has supervised multiple projects that use advanced analysis to optimize the strategic operations of companies. Among his major achievements, he has improved the shopping experience of multiple customers by offering them personalized product recommendations based on their preferences. As a result, it has enabled users to establish loyal relationships with brands. It has also employed Digital Twins in the manufacturing network, managing to monitor soap production in real time and significantly improving its quality.

Moreover, his philosophy focuses on the use of data systems to solve complex problems in the business environment and drive innovation. In the same vein, in his spare time he develops software and participates in open source projects. As such, he stays at the forefront of the latest trends in subjects such as Bayesian Statistics, Big Data or Artificial Intelligence, among others.

In addition, his work has been rewarded on multiple occasions in the form of awards. For example, he recently received the "Business Achievement" award from Unilever for his contribution to the digital transformation of the company. In this regard, it is worth noting that the integration of technologies has enabled companies to improve their operational efficiency by automating repetitive tasks. This has considerably reduced human errors in the logistics chain, resulting in both time and cost savings.



Mr. Morgan, Robert

- Global Director of Data Science at Unilever in New York, United States
- Head of Analytics and Data Science at Dunnhumby, New York
- Statistician at Unilever, New York
- M.Sc. in Computational Statistics from Bath University
- M.Sc. in Statistical Research from Bristol University
- B.Sc. in Mathematics, Cardiff University
- Certificate in Statistical Learning from Stanford University
- Certificate in Programming from Johns Hopkins University

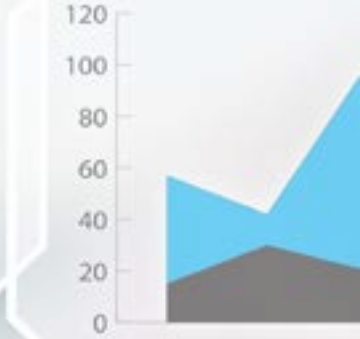
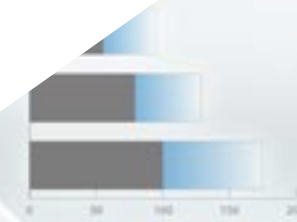
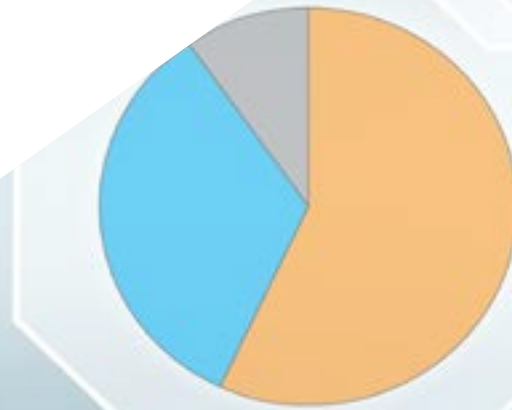
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Thanks to TECH, you will be able to learn with the best professionals in the world”

04

Structure and Content

The structure of the contents has been designed by the best professionals, with extensive experience and recognized prestige in the profession, and who are aware of the benefits that the latest educational technology can bring to higher education.





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We have the most complete and up-to-date academic program in the market. We strive for excellence and for you to achieve it too"

Module 1. Strategic Management of Visual Analytics and Big Data Projects

- 1.1. Introduction to Strategic Project Management
- 1.2. *Best practices* in the Description of Big Data Processes
- 1.3. Kimball Methodology
- 1.4. SQuID Methodology
 - 1.4.1. Introduction to SQuID Methodology to Approach Big Data Projects
 - 1.4.2. Phase I. *Sources*
 - 1.4.3. Phase II. *Data Quality*
 - 1.4.4. Phase III. *Impossible Questions*
 - 1.4.5. Phase IV. *Discovering*
 - 1.4.6. *Best Practices* in the Application of SQuID in Big Data Projects
- 1.5. Legal Aspects in the World of Data
- 1.6. Big Data Privacy
- 1.7. Cyber Security in Big Data
- 1.8. Identification and De-identification with Large Volumes of Data
- 1.9. Data Ethics I
- 1.10. Data Ethics II

Module 2. Client Analysis. Applying Data Intelligence to Marketing

- 2.1. Concepts of Marketing. Strategic Marketing
- 2.2. Relationship Marketing
- 2.3. CRM as an Organizational Hub for Customer Analysis
- 2.4. Web Technologies
- 2.5. Web Data Sources
- 2.6. Acquisition of Web Data
- 2.7. Tools for the Extraction of Data from the Web
- 2.8. Semantic Web
- 2.9. OSINT: Open Source Intelligence
- 2.10. *Master Lead* or How to Improve Sales Conversion Using Big Data

Module 3. *Data-Driven Soft Skills* in Strategic Management in Visual Analytics

- 3.1. *Drive Profile for Data-Driven*
- 3.2. Advanced Management Skills in *Data-Driven* Organizations
- 3.3. Using Data to Improve Strategic Communication Performance
- 3.4. Emotional Intelligence Applied to Management in Visual Analytics
- 3.5. Effective Presentations
- 3.6. Improving Performance Through Motivational Management
- 3.7. Leadership in *Data-Driven* Organizations
- 3.8. Digital Talent in *Data-Driven* Organizations
- 3.9. *Data-driven Agile Organization I*
- 3.10. *Data-driven Agile Organization II*

Module 4. Visualization Tools

- 4.1. Introduction to Data Visualization Tools
- 4.2. Many Eyes
- 4.3. Google Charts
- 4.4. jQuery
- 4.5. *Data-Driven Documents I*
- 4.6. *Data-Driven Documents II*
- 4.7. Matlab
- 4.8. Tableau
- 4.9. SAS Visual Analytics
- 4.10. Microsoft Power BI



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This program is the key to advancing your career, don't miss this opportunity”

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"

Case Study to contextualize all content

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

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At TECH, you will experience a learning methodology that is shaking the foundations of traditional universities around the world”



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



A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, 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 student will learn to solve complex situations in real business environments through collaborative activities and real cases.

The case method has been the most widely used learning system among the world's leading Information Technology 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 that you are presented with in the case method, an action-oriented learning method. Throughout the course, students 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.

Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 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 train 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.



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.

This methodology has trained 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 training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for 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 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.



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.



Practising Skills and Abilities

They will carry out activities to develop specific skills and abilities in each subject area. 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.





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".



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.



06

Certificate

The Postgraduate Diploma in Big Data in Companies guarantees, in addition to the most rigorous and up-to-date training, access to a Postgraduate Degree issued by TECH Global University.



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*Successfully complete this program
and receive your university certificate
without travel or laborious paperwork”*

This program will allow you to obtain your **Postgraduate Diploma in Big Data in Companies** endorsed by **TECH Global University**, the world's largest online university.

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 training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

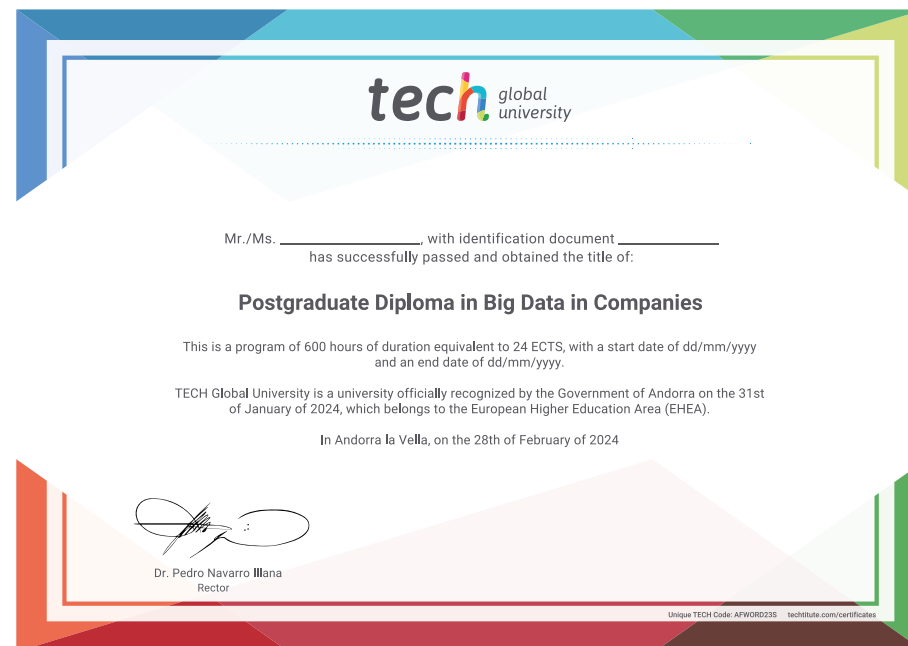
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Big Data in Companies**

Modality: **online**

Duration: **6 months**

Accreditation: **24 ECTS**



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

future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present quality
development languages
virtual classroom



Postgraduate Diploma Big Data in Companies

- » Modality: online
- » Duration: 6 months
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- » Credits: 24 ECTS
- » Schedule: at your own pace
- » Exams: online

Postgraduate Diploma Big Data in Companies

