

# Postgraduate Diploma

## Treatment and Extraction of Knowledge from the Data





## Postgraduate Diploma Treatment and Extraction of Knowledge from the Data

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 18 ECTS
- » Schedule: at your own pace
- » Exams: online
- » Target Group: Computer engineers who wish to reorient their work towards the world of business intelligence, or established professionals in the field of BI who need to update, deepen and improve their skills and knowledge

Website: [www.techtute.com/us/school-of-business/postgraduate-diploma/postgraduate-diploma-stockage-recuperation-traitement-donnees](http://www.techtute.com/us/school-of-business/postgraduate-diploma/postgraduate-diploma-stockage-recuperation-traitement-donnees)

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# 01

# Welcome

Data analysis is the great business vector of the new millennium. Thanks to the growing digitization of markets of all kinds, it is possible to know in detail what are the tastes and preferences of consumers, their ways of acting and even predict how they will respond to certain campaigns or communication messages. Therefore, experts in the correct processing and extraction of knowledge from data have an advantageous position in any business organization. TECH orients its students towards these management positions with this complete program, offering a high quality education that raises their professional status and career aspirations.



Postgraduate Diploma in Data Processing and Knowledge Extraction.  
TECH Global University



“

*You will find suitable solutions that will allow you to address problems from the right perspective in each situation and become a key member of your team"*

02

# Why Study at TECH?

TECH is the world's largest 100% online business school. It is an elite business school, with a model based on the highest academic standards. A world-class center for intensive managerial skills education.



“

*TECH is a university at the forefront of technology, and puts all its resources at the student's disposal to help them achieve entrepreneurial success"*

## At TECH Global University



### Innovation

The university offers an online learning model that balances the latest educational technology with the most rigorous teaching methods. A unique method with the highest international recognition that will provide students with the keys to develop in a rapidly-evolving world, where innovation must be every entrepreneur's focus.

"*Microsoft Europe Success Story*", for integrating the innovative, interactive multi-video system.



### The Highest Standards

Admissions criteria at TECH are not economic. Students don't need to make a large investment to study at this university. However, in order to obtain a qualification from TECH, the student's intelligence and ability will be tested to their limits. The institution's academic standards are exceptionally high...

**95%** | of TECH students successfully complete their studies



### Networking

Professionals from countries all over the world attend TECH, allowing students to establish a large network of contacts that may prove useful to them in the future.

**+100000**

executives prepared each year

**+200**

different nationalities



### Empowerment

Students will grow hand in hand with the best companies and highly regarded and influential professionals. TECH has developed strategic partnerships and a valuable network of contacts with major economic players in 7 continents.

**+500**

collaborative agreements with leading companies



### Talent

This program is a unique initiative to allow students to showcase their talent in the business world. An opportunity that will allow them to voice their concerns and share their business vision.

After completing this program, TECH helps students show the world their talent.



### Multicultural Context

While studying at TECH, students will enjoy a unique experience. Study in a multicultural context. In a program with a global vision, through which students can learn about the operating methods in different parts of the world, and gather the latest information that best adapts to their business idea.

TECH students represent more than 200 different nationalities.



TECH strives for excellence and, to this end, boasts a series of characteristics that make this university unique:



### Analysis

---

TECH explores the student's critical side, their ability to question things, their problem-solving skills, as well as their interpersonal skills.



### Academic Excellence

---

TECH offers students the best online learning methodology. The university combines the Relearning method (postgraduate learning methodology with the best international valuation) with the Case Study. Tradition and vanguard in a difficult balance, and in the context of the most demanding educational itinerary.



### Economy of Scale

---

TECH is the world's largest online university. It currently boasts a portfolio of more than 10,000 university postgraduate programs. And in today's new economy, **volume + technology = a groundbreaking price**. This way, TECH ensures that studying is not as expensive for students as it would be at another university.



### Learn with the best

---

In the classroom, TECH's teaching staff discuss how they have achieved success in their companies, working in a real, lively, and dynamic context. Teachers who are fully committed to offering a quality specialization that will allow students to advance in their career and stand out in the business world.

Teachers representing 20 different nationalities.



*At TECH, you will have access to the most rigorous and up-to-date case analyses in academia"*

03

# Why Our Program?

Studying this TECH program means increasing the chances of achieving professional success in senior business management.

It is a challenge that demands effort and dedication, but it opens the door to a promising future. Students will learn from the best teaching staff and with the most flexible and innovative educational methodology.



“

*We have highly qualified teachers and the most complete syllabus on the market, which allows us to offer you education of the highest academic level”*

This program will provide you with a multitude of professional and personal advantages, among which we highlight the following:

**01**

### A Strong Boost to Your Career

By studying at TECH, students will be able to take control of their future and develop their full potential. By completing this program, students will acquire the skills required to make a positive change in their career in a short period of time.

*70% of students achieve positive career development in less than 2 years.*

**02**

### Develop a strategic and global vision of the company

TECH offers an in-depth overview of general management to understand how each decision affects each of the company's different functional fields.

*Our global vision of companies will improve your strategic vision.*

**03**

### Consolidate the student's senior management skills

Studying at TECH means opening the doors to a wide range of professional opportunities for students to position themselves as senior executives, with a broad vision of the international environment.

*You will work on more than 100 real senior management cases.*

**04**

### You will take on new responsibilities

The program will cover the latest trends, advances and strategies, so that students can carry out their professional work in a changing environment.

*45% of graduates are promoted internally.*

05

### Access to a powerful network of contacts

TECH connects its students to maximize opportunities. Students with the same concerns and desire to grow. Therefore, partnerships, customers or suppliers can be shared.

*You will find a network of contacts that will be instrumental for professional development.*

06

### Thoroughly develop business projects.

Students will acquire a deep strategic vision that will help them develop their own project, taking into account the different fields in companies.

*20% of our students develop their own business idea.*

07

### Improve soft skills and management skills

TECH helps students apply and develop the knowledge they have acquired, while improving their interpersonal skills in order to become leaders who make a difference.

*Improve your communication and leadership skills and enhance your career.*

08

### You will be part of an exclusive community

Students will be part of a community of elite executives, large companies, renowned institutions, and qualified teachers from the most prestigious universities in the world: the TECH Global University community.

*We give you the opportunity to study with a team of world-renowned teachers.*

# 04 Objectives

Meeting today's demanding labor standards is fundamental for TECH. For this reason, a program has been created that focuses on providing the opportunity for its students to improve their skills and knowledge in a dynamic and comfortable way. With the Postgraduate Diploma program in Treatment and Extraction of Knowledge from Data, special emphasis will be placed on those models that represent greater versatility and adaptability for the study of data in a company.



“

*Become an essential expert for companies by applying the fundamentals of real time series modeling and forecasting methodology”*

TECH makes the goals of their students their own goals too.  
Working together to achieve them.

The Postgraduate Diploma in Treatment and Extraction of Knowledge from Data will enable the student to:

01

Develop specialized knowledge on Time Series

04

Analyze univariate models including outliers

02

Develop the formulation and basic properties of univariate time series models

03

Apply the fundamentals of real time series modeling and forecasting methodology

05

Apply dynamic regression models, as well as the methodology for the construction of such models from observed series



06

Establish the theoretical foundations of spectral analysis of univariate time series well as the fundamental aspects related to inference based on the eriodogram and its interpretation

08

Acquire the statistical knowledge necessary for any data analysis and evaluation

09

Develop skills for data identification, preparation and transformation

07

Estimate the probability and trend in time series for a given time horizon

10

Evaluate the various algorithms presented and identify their advantages and disadvantages



11

Specify the appropriate method of data reduction for a given learning process

12

Examine the different implementations of data preprocessing algorithms

13

Demonstrate the ability to interpret graphs for data description and knowledge of the different existing data preprocessing techniques for data cleaning, normalization and data transformation

14

Evaluate the skills acquired in the process of obtaining value and knowledge from data and the problems of classification, regression and clustering



15

Analyze metrics and validation methods for machine learning algorithms

16

Examine the different implementations of machine learning algorithms

17

Establish the fundamentals of probabilistic reasoning

18

Analyze the evolution of neural networks to deep learning



05

# Structure and Content

A program that promotes the professional development of students is fundamental in any institution, and TECH is no exception. A program has been designed with the full support of a highly qualified and qualified teaching staff to provide security and the guarantee that students will learn first-hand all the knowledge they need to analyze time series, apply data mining techniques to extract the maximum value from them and approach the process of studying them using different techniques.



“

*Make expert data analysis your  
greatest ally to achieve the salary and  
professional improvement you crave”*

## Syllabus

For an in-depth review of this Postgraduate Diploma in Processing and Extracting Knowledge from Data, a syllabus has been designed that addresses all the important points of this field. In order to analyze stochastic phenomena that evolve over time, it is necessary to know the Time Series models, so that a pattern and characteristics can be identified and acted upon.

On the other hand, it is then necessary to start a process that helps to extract the most value and knowledge from the collected information. The person in charge of this task must "clean" and transform each piece of data in an optimal way to ensure its quality. Finally, it will be time to apply and make decisions that generate satisfactory results for the company.

Throughout 6 months of learning, the student will understand, through case studies, the process described above, ensuring an immersive experience in situations that may occur in a real business environment. In this way, data analytics scenarios will be identified using the appropriate techniques for each type of problem.

In conclusion, the syllabus is designed for the student, focusing on the future graduate and preparing them to achieve excellence within a business team. By understanding the needs of the student and the companies, it is possible to present valuable content, based on the latest technological trends and supported by an excellent teaching staff. In this way, it provides the necessary competencies to solve critical situations in a creative and efficient way.

This Postgraduate Diploma takes place over 6 months and is divided into 3 modules:

### Module 1

Time Series and Forecast for Data Analysis

### Module 2

Data Processing. Exploratory analysis and preprocessing

### Module 3

Data Mining: From Machine Learning to Deep Learning



### Where, When and How is it Taught?

TECH offers the possibility of developing this Postgraduate Diploma in Treatment and Extraction of Knowledge from Data completely online. Throughout the 6 months of the educational program, you will be able to access all the contents of this program at any time, allowing you to self-manage your study time.

*A unique, key, and decisive educational experience to boost your professional development and make the definitive leap.*

**Module 1. Time Series and Forecast for Data Analysis**

<p><b>1.1. Time Series</b></p> <ul style="list-style-type: none"> <li>1.1.1 Objectives</li> <li>1.1.2 Application</li> </ul>	<p><b>1.2. Components of a time series</b></p> <ul style="list-style-type: none"> <li>1.2.1 Trend component - Seasonal</li> <li>1.2.2 Cycle</li> <li>1.2.3 Waste</li> </ul>	<p><b>1.3. Types of time series</b></p> <ul style="list-style-type: none"> <li>1.3.1 Stationary time series</li> <li>1.3.2 Stationary time series</li> <li>1.3.3 Box-Cox Transformation</li> </ul>	<p><b>1.4. Basic Forecasting Methods</b></p> <ul style="list-style-type: none"> <li>1.4.1 Media</li> <li>1.4.2 Naive</li> <li>1.4.3 Seasonal Naive</li> <li>1.4.4 Method Comparison</li> </ul>
<p><b>1.5. Waste Analysis</b></p> <ul style="list-style-type: none"> <li>1.5.1 Autocorrelation</li> <li>1.5.2 ACF of Waste</li> <li>1.5.3 Correlation Test</li> </ul>	<p><b>1.6. Predictive Methods of Time Series</b></p> <ul style="list-style-type: none"> <li>1.6.1 ARIMA</li> <li>1.6.2 RMA</li> <li>1.6.3 Exponential Smoothing</li> </ul>	<p><b>1.7. Measures of forecast accuracy</b></p> <ul style="list-style-type: none"> <li>1.7.1 MAE</li> <li>1.7.2 MSE</li> <li>1.7.3 RMSE</li> <li>1.7.4 MAPE</li> </ul>	<p><b>1.8. Forecasting Stages</b></p> <ul style="list-style-type: none"> <li>1.8.1 Model identification</li> <li>1.8.2 Estimate</li> <li>1.8.3 Verification-Prediction</li> </ul>
<p><b>1.9. Manipulation and Analysis of Time Series with R</b></p> <ul style="list-style-type: none"> <li>1.9.1 Data Preparation</li> <li>1.9.2 Identification of Patterns</li> <li>1.9.3 Model Analysis</li> <li>1.9.4 Prediction</li> </ul>	<p><b>1.10. Combined Graphical Analysis with R</b></p> <ul style="list-style-type: none"> <li>1.10.1 Application of graphical analysis combined with R</li> </ul>		

**Module 2. Data Processing. Exploratory Analysis and Preprocessing**

<p><b>2.1. Statistics</b></p> <ul style="list-style-type: none"> <li>2.1.1 Descriptive Statistics</li> <li>2.1.2 Statistical Inference</li> <li>2.1.3 Parametric tests</li> <li>2.1.4 Non-parametric tests</li> </ul>	<p><b>2.2. Exploratory Data Analysis</b></p> <ul style="list-style-type: none"> <li>2.2.1 Exploratory Data Analysis. Descriptive Analysis</li> <li>2.2.2 Data Visualization</li> <li>2.2.3 Data Manipulation</li> </ul>	<p><b>2.3. Data Preparation</b></p> <ul style="list-style-type: none"> <li>2.3.1 Data integration</li> <li>2.3.2 Data Cleaning</li> <li>2.3.3 Standardization</li> <li>2.3.4 Transformation</li> </ul>	<p><b>2.4. Missing and empty values</b></p> <ul style="list-style-type: none"> <li>2.4.1 Eliminating missing values</li> <li>2.4.2 Maximum likelihood procedures</li> <li>2.4.3 Imputation of Missing Values</li> </ul>
<p><b>2.5. Noise in the Data</b></p> <ul style="list-style-type: none"> <li>2.5.1 Types of Noise</li> <li>2.5.2 Noise detection and elimination</li> <li>2.5.3 Learning with noise</li> </ul>	<p><b>2.6. The dimensionality problem</b></p> <ul style="list-style-type: none"> <li>2.6.1 Oversampling</li> <li>2.6.2 Subsampling</li> <li>2.6.3 Principal Component Analysis (PCA)</li> </ul>	<p><b>2.7. Discretization</b></p> <ul style="list-style-type: none"> <li>2.7.1 Discretization Process</li> <li>2.7.2 Discretization methods</li> <li>2.7.3 Characteristics and properties of discretization methods</li> </ul>	<p><b>2.8. Feature selection</b></p> <ul style="list-style-type: none"> <li>2.8.1 Selection Criteria</li> <li>2.8.2 Characteristics Selection Methods</li> </ul>
<p><b>2.9. Instance Selection</b></p> <ul style="list-style-type: none"> <li>2.9.1 Classification of instance selection methods</li> <li>2.9.2 Prototype Selection</li> <li>2.9.3 Other methods for instance selection</li> </ul>	<p><b>2.10. Data Pre-Processing in Big Data Environments</b></p> <ul style="list-style-type: none"> <li>2.10.1 Big Data</li> <li>2.10.2 Data Pre-Processing in Big Data Environments</li> <li>2.10.3 Smart Data</li> </ul>		

**Module 3. Data Mining: from Machine Learning to Deep Learning****3.1. Knowledge from Data (KDD)**

- 3.1.1 Selection
- 3.1.2 Pre-processing
- 3.1.3 Transformation
- 3.1.4 Data Mining
- 3.1.5 Interpretation and evaluation

**3.2. Machine Learning**

- 3.2.1 Supervised Learning
- 3.2.2 Unsupervised Learning
- 3.2.3 Reinforcement Learning
- 3.2.4 Other Learning Paradigms

**3.3. Classification of Supervised Learning**

- 3.3.1 Decision Trees
- 3.3.2 Rules-Based Learning
- 3.3.3 Support Vector Machines(SVM)
- 3.3.4 Nearest neighbor algorithms
- 3.3.5 Metrics

**3.4. Regression in Supervised Learning**

- 3.4.1 Linear Regression
- 3.4.2 Logistic Regression
- 3.4.3 Non-linear models.
- 3.4.4 Time Series
- 3.4.5 Metrics

**3.5. Clustering in Supervised Learning**

- 3.5.1 Hierarchical Clustering
- 3.5.2 Distance-based clustering. Partitional
- 3.5.3 Density-based clustering. Partitional
- 3.5.4 Metrics

**3.6. Association Rules in Supervised Learning**

- 3.6.1 Rules of Association. Measurements
- 3.6.2 Rule Extraction Methods
- 3.6.3 Metrics

**3.7. Assemblies**

- 3.7.1 Bagging
- 3.7.2 Random Forests
- 3.7.3 Boosting

**3.8. Probabilistic reasoning**

- 3.8.1 Probabilistic reasoning
- 3.8.2 Bayesian Networks.
- 3.8.3 Hidden Markov Models

**3.9. Artificial Neural Networks**

- 3.9.1 Multilayer Perceptron
- 3.9.2 Regression and Classification
- 3.9.3 Gradient Descent
- 3.9.4 Backpropagation
- 3.9.5 Activation Functions
- 3.9.6 Example of feedforward type neural network

**3.10. Deep Learning**

- 3.10.1 Feedforward type Deep Neural Networks
- 3.10.2 Convolutional Neural Networks
- 3.10.3 Recurrent and Recursive Neural Networks
- 3.10.4 Tools for programming Deep Neural Networks

# 06

# 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"*

## TECH Business School uses the 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.

“

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



*This program prepares you to face business challenges in uncertain environments and achieve business success.*



*Our program prepares you to face new challenges in uncertain environments and achieve success in your career.*

### A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch to present executives with challenges and business decisions at the highest level, whether at the national or international level. 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 business reality is taken into account.

“

*You will learn, through collaborative activities and real cases, how to solve complex situations in real business environments”*

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 must integrate all their knowledge, research, 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.

*Our online system will allow you to organize your time and learning pace, adapting it to your schedule. You will be able to access the contents from any device with an internet connection.*

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 online business school is the only one in the world licensed to incorporate 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.

With this methodology we have 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, markets, and financial 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.

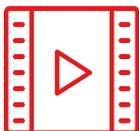
*Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.*

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 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.



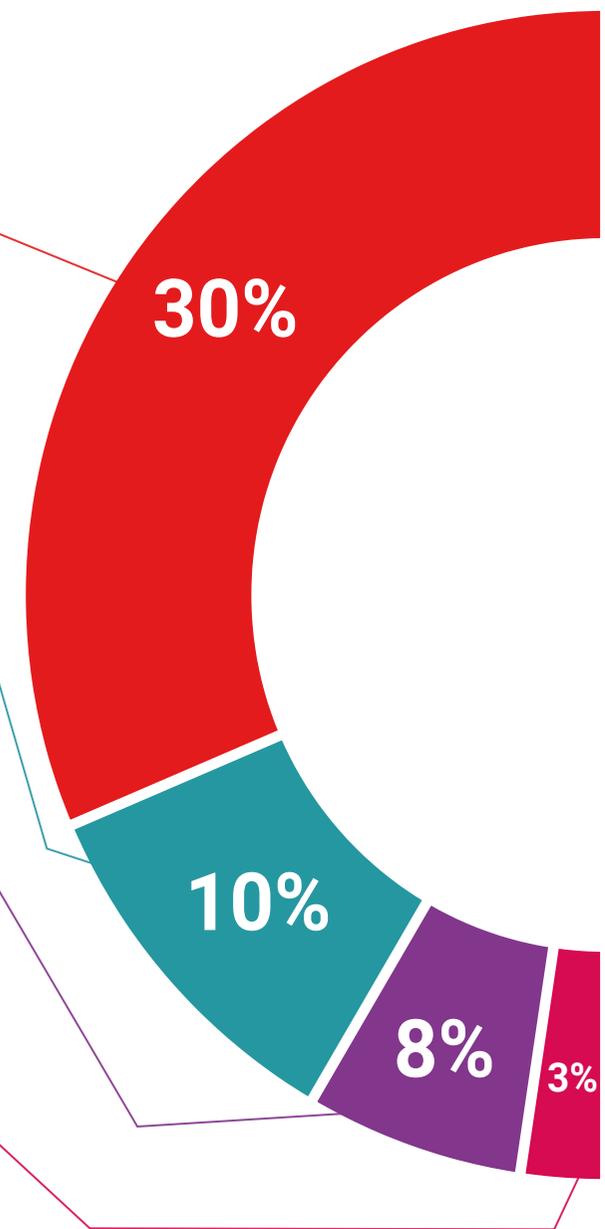
### Management Skills Exercises

They will carry out activities to develop specific executive competencies in each thematic area. Practices and dynamics to acquire and develop the skills and abilities that a high-level manager needs to develop in the context of the globalization we live in.



### 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 senior management 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.



07

# Our Students' Profiles

The Postgraduate Diploma is aimed at all professionals in technological areas who are looking for a substantial improvement in their professional careers thanks to deep data analytics. With knowledge in data mining and correct treatment of information, the graduate will soon stand out in their field and be a model analyst for all their peers.





“

*If you are passionate about extracting and analyzing data, count on this updated university program backed by the extensive experience of a teaching team of excellence"*

### Average Age

Between **35** and **45** years old

### Years of Experience

+14 years **6.2%**

12-13 years **12.7%**

10-11 years **20.5%**

8-9 years **27.7%**

5 years **7.8%**

6-7 years **23.9%**



### Training

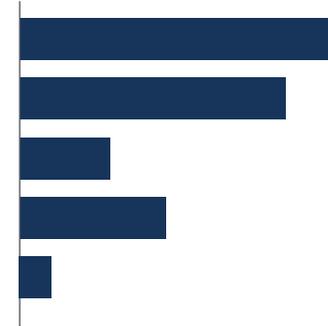
Business **40%**

Informatics **30%**

Other Engineering **15%**

Social Sciences **17%**

Others **8%**



### Educational Profile

Business **23%**

Informatics **30%**

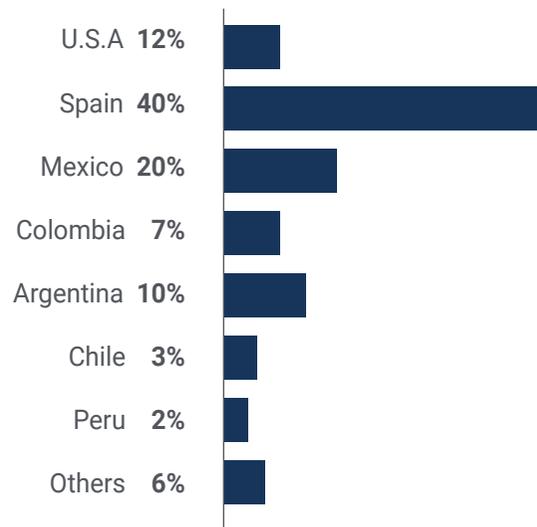
Entrepreneurs **27%**

Others **20%**



## Geographical Distribution

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## Flor Alejandra Torre

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Consultant Business Intelligence

*"In short, TECH has become the perfect option to continue my studies in a sector that is my passion. In just six months it can improve my proposals in my work team, having the best results in the quarter of the year"*

08

# Course Management

To guarantee excellence and an elite education, TECH has a large and experienced faculty, who have joined this program to boost the professional careers of its students. Thanks to their dense experience, the student will have the best of theory and practice, being able to be part of the academic transformation from anywhere in the world. In this way, they will have the certainty and confidence of receiving the most complete and effective knowledge in the market, being able to put it into practice in their professional environment.



“

*A group of experts specially chosen to guarantee the quality of the contents taught, ensuring the excellence of the student"*

## Management



### **Dr. Peralta Martín-Palomino, Arturo**

- ♦ CEO and CTO at Prometheus Global Solutions
- ♦ CTO en Corporate Technologies in Corporate Technologies
- ♦ CTO in AI Shephers GmbH
- ♦ Doctorate in Psychology from the University of CastillaLa
- ♦ PhD in Economics, Business and Finance from the Camilo José Cela University. Outstanding Award in her PhD
- ♦ Master's Degree in Advanced Information Technologies from the University of Castilla la Mancha
- ♦ Master MBA+E (Master's Degree in Business Administration and Organisational Engineering) from the University of Castilla la Mancha
- ♦ Associate lecturer, teaching undergraduate and master's degrees in Computer Engineering at the University of Castilla la Mancha
- ♦ Professor of the Master in Big Data and Data Science at the International University of Valencia
- ♦ Lecturer of the Master's Degree in Industry 4.0 and the Master's Degree in Industrial Design and Product Development
- ♦ Member of the SMILe Research Group of the University of Castilla la Mancha

## Professors

### Mr. Montoro Montarroso, Andrés

- » Researcher in the SMILe Group at the University of Castilla-La Mancha.
- » Data Scientist at Prometheus Global Solutions
- » Graduate in Computer Engineering from the University of Castilla-La Mancha.
- » Master's Degree in Data Science and Computer Engineering from the University of Granada.

“

*In addition to its up-to-date contents and its flexible and 100% online methodology, this qualification is taught by experts of great prestige in this professional area”*

09

# Impact on Your Career

TECH is aware of the great effort made by the student when facing a program of these characteristics, so all efforts are focused on getting the most out of all the capabilities and leadership skills of the student, making him/her an efficient manager of data processing and extraction.





“

*Become a data analytics professional  
and a key player in the definition and  
oversight of business strategies”*

## Are you ready to take the leap? Excellent professional development awaits you

The Postgraduate Diploma in Processing and Extraction of Knowledge from TECH Data prepares students for the main business and personal challenges that the graduate will face after completing the program. This requires an exceptional effort from everyone, including the student himself, who must give his best to reach the top of the business world.

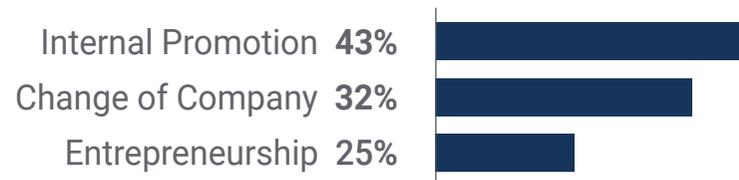
*Do not miss the opportunity to train with us and you will find the improvement you were looking for.*

*If you want to make a positive change in your profession, the Postgraduate Diploma in Processing and Extracting Knowledge from Data will help you achieve it.*

### Time of Change



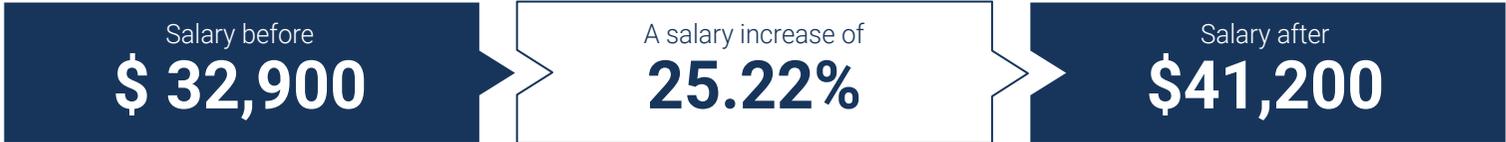
### Type of change



### Salary increase

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This program represents a salary increase of more than **25%** for our students.



10

# Benefits for Your Company

The Postgraduate Diploma in Treatment and Extraction of Knowledge from Data is a great opportunity for all companies that want to incorporate into their ranks professionals with a high degree of skills, both in leadership and data management, ready to solve all analytical problems present in the business organization.



“

*After completing this training you will have the key to change that will propel you into your future as a leader and manager of teams dedicated to data analytics”*

Developing and retaining talent in companies is the best long-term investment.

01

### **Growth of talent and intellectual capital**

The professional will introduce the company to new concepts, strategies, and perspectives that can bring about significant changes in the organization.

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02

### **Retaining high-potential executives to avoid talent drain**

This program strengthens the link between the company and the professional and opens new avenues for professional growth within the company.

03

### **Building agents of change**

You will be able to make decisions in times of uncertainty and crisis, helping the organization overcome obstacles.

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04

### **Increased international expansion possibilities**

Thanks to this program, the company will come into contact with the main markets in the world economy.



05

### **Project Development**

The professional can work on a real project or develop new projects in the field of R & D or business development of your company.

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06

### **Increased competitiveness**

This program will equip students with the skills to take on new challenges and drive the organization forward.

11

# Certificate

The Postgraduate Diploma in Treatment and Extraction of Knowledge from the Data guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.



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*Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”*

This program will allow you to obtain your **Postgraduate Diploma in Treatment and Extraction of Knowledge from the Data** 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.

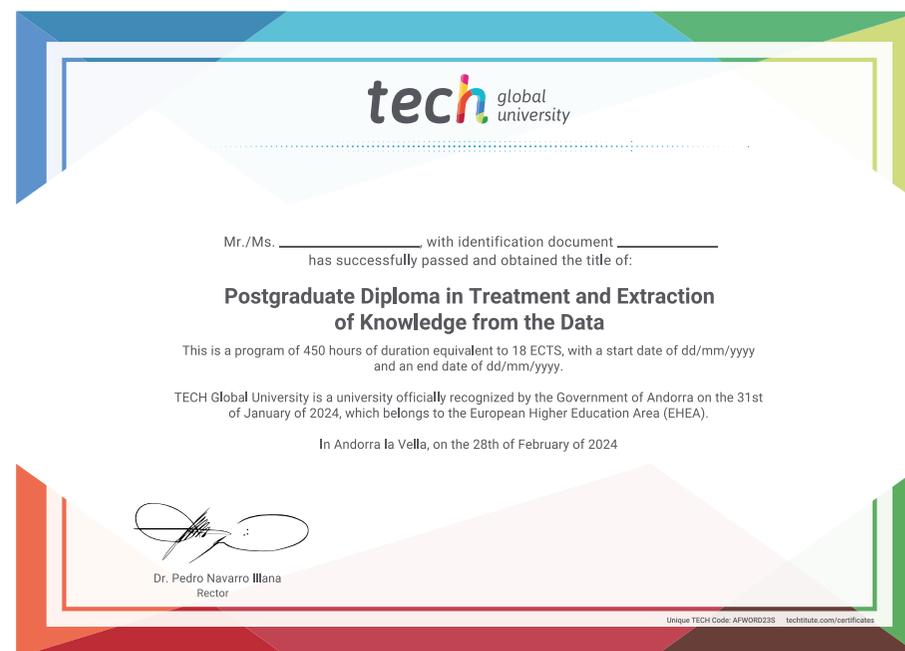
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Treatment and Extraction of Knowledge from the Data**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**





## Postgraduate Diploma Treatment and Extraction of Knowledge from the Data

- » Modality: **online**
- » Duration: **6 months**
- » Certificate: **TECH Global University**
- » Credits: **18 ECTS**
- » Schedule: **at your own pace**
- » Exams: **online**

# Postgraduate Diploma

## Treatment and Extraction of Knowledge from the Data

