

Postgraduate Certificate

Data Processing in Different
Formats and Different Sources



Postgraduate Certificate Data Processing in Different Formats and Different Sources

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Schedule: at your own pace
- » Exams: online
- » Target Group: Graduates or professionals of any specialty who want to be qualified in the application of data visualization technologies, Big Data and artificial intelligence for the development, boost or change of direction of their professional career

Website: www.techtute.com/us/school-of-business/postgraduate-certificate/data-processing-different-formats-different-sources

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01 Welcome

In this high-level program, professionals will assimilate new concepts, techniques and knowledge of languages that can be applied to mining large volumes of data.

Further study Artificial Intelligence algorithms and techniques such as decision trees, classification and association rules, neural networks or Deep Learning.

Likewise, you will learn about 'Data Mining' tools for resolving learning problems, interpreting the results obtained, among other issues of interest.



Postgraduate Certificate in Data Processing in Different Formats and Different Sources. TECH Technological University



“

You will learn concepts, techniques, methodologies and language knowledge to apply them in big data mining, from professionals with years of experience in the field”

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 centre for intensive managerial skills training.



“

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 Technological University



Innovation

The university offers an online learning model that combines 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.

100,000+
executives trained 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:



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 studies in the academic community"



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 (a postgraduate learning methodology with the highest international rating) with the Case Study. A complex balance between tradition and state-of-the-art, within the context of the most demanding academic 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.

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 training of the highest academic level"

This program will provide students with a multitude of professional and personal advantages, particularly the following:

01

A significant career boost

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 participants achieve positive career development in less than 2 years.

02

Develop a strategic and global vision of companies

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

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

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 areas 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

Be part of an exclusive community

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

We give you the opportunity to train with a team of world renowned teachers.

04 Objectives

TECH prepares professionals for a changing, globalized society, characterized by the constant growth of business-relevant data and information. The objectives of this Postgraduate Certificate have been established based on realistic and necessary goals for professionals in the sector who wish to specialize in data analysis in companies.



“

Handling large volumes of data was, until recently, a mere fantasy. Learn how artificial intelligence is the answer to that demand in this interesting, highly specialized Postgraduate Certificate"

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

This Postgraduate Certificate in Data Processing in Different Formats and Different Sources enables students to:

01

Know the environments most used by Data Scientists

02

Know how to process data in different formats from different sources

03

Learn the need to ensure data accuracy prior to data processing





04

Identify new technologies as pedagogical tools in the communication of the different business realities

05

Know the latest trends in the creation of intelligent entities based on Deep learning and neural networks

06

Be able to correctly process data in different formats and from different sources

05

Structure and Content

This Postgraduate Certificate in Data Processing in Different Formats and Different Sources is an online program tailored to students so they can choose the time and place that best suits their availability, schedules and interests. It is a high-level program, meticulously designed by professionals with extensive experience in the sector, which takes place over 6 weeks and is intended to be a unique and stimulating experience that lays the foundations for professional success.



“

Learn with the best and acquire the knowledge and skills you need to intervene in this area of development with total success"

Syllabus

This Postgraduate Certificate in Data Processing in Different Formats and Different Sources by TECH Technological University is an intensive program that prepares students to face challenges and business decisions in the field of Data Processing in Different Formats and Different Sources.

The content of the course is designed to promote the development of managerial skills that enable more thorough decision-making in uncertain environments.

Over the course of 150 hours, the student analyzes a plethora of practical cases through individual practice and teamwork. It is, therefore, an authentic immersion in real business situations.

This Postgraduate Certificate deals, in-depth, with the world of information technology in the business environment, and is designed to educate professionals who understand different formats and from different sources from a strategic, international and innovative perspective.

A plan designed for the professional, focused on their professional improvement and that will prepare them to achieve excellence in the field of management and business management. A program that understands your needs and those of your company through innovative content based on the latest trends, and supported by the best educational methodology and an exceptional faculty, which will provide you with the competencies to solve critical situations in a creative and efficient way.

This Postgraduate Certificate is developed over 6 weeks and is divided into 1 module:

Module 1.

Data Analysis Tools



Where, When and How is it Taught?

TECH offers the possibility of developing this Postgraduate Certificate in Data Processing in Different Formats and Different Sources entirely online. Over the 6 weeks that the specialization program lasts, the student will be able to access all the contents of this program at any time, which will allow them to manage their own study time.

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

Module 1. Data Analysis Tools

1.1. Data Science R Environment	1.2. Data Science Python Environment	1.3. Static and Statistical Graphs	1.4. Data Processing in Different Formats and Different Sources
1.5. Data Cleaning and Preparation	1.6. Exploratory Studies	1.7. Decision Trees	1.8. Classification and Association Rules
1.9. Neural Networks	1.10. Deep Learning		



Understand data mining tools for solving learning problems and interpret the results obtained"



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.



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”

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 must integrate all their knowledge, research, argue and defend their ideas and decisions.

Relearning Methodology

TECH effectively balances 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 prepare 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 balance each of these elements concentrically. With this methodology, we have 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, 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 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.



Management Skills Exercises

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



07

Our Students' Profiles

This Postgraduate Certificate is aimed at professionals who want to become qualified in the application of data visualization technologies, Big Data and artificial intelligence for the development, promotion or change of direction of their professional career.

This program uses a multidisciplinary approach as the students have a diverse set of academic profiles and represent multiple nationalities.

This Postgraduate Certificate is also open to professionals who, being university graduates in any field, have two years of work experience in the field of data in different formats and from different sources treatment





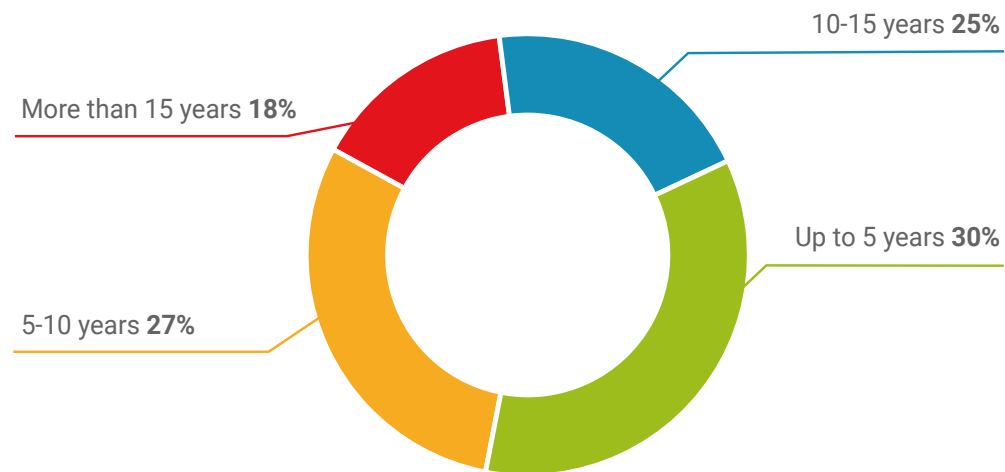
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With this program you will understand artificial intelligence algorithms and techniques such as decision trees, classification and association rules, neural networks and deep learning”

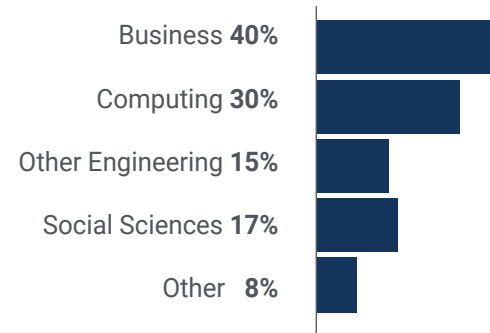
Average Age

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

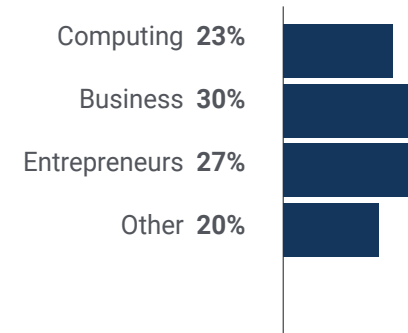
Years of Experience



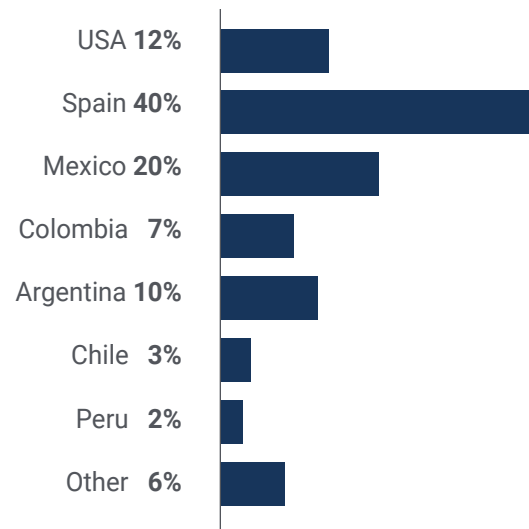
Training



Educational Profile



Geographical Distribution



Marta Pérez Sicilia

Visual Analytics Expert

"Specializing with TECH in Data Processing in Different Formats and Different Sources has been a wonderful experience due to the program's teaching staff, composed of professionals in the sector, and the innovative and quality syllabus that has allowed me to update my resources and apply them in the day-to-day of my profession"

08

Course Management

This Postgraduate Certificate has a highly qualified team with extensive experience in the sector, which will offer the best tools for students to develop their skills during the program. A teaching staff of industry professionals will invest their theoretical and practical knowledge to lead you to the highest level of expertise. In this way, students have the guarantees they need to specialise at an international level in a booming sector that will catapult them to professional success.



“

Learn with the best and acquire the knowledge and skills you need to intervene in this area of development with total success"

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

“

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

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



09

Impact on Your Career

TECH is aware that studying a program like this entails great economic, professional and, of course, personal investment. The ultimate goal of carrying out this great effort should be to achieve professional growth. And, with us, students will find great possibilities to achieve it. For this, we have the perfect equation for a quality specialization: a highly up-to-date syllabus and internationally renowned teachers. Undoubtedly, a unique opportunity that will help professional to you give a boost to your career in a short time.





“

*A stimulating professional growth journey
designed to keep you interested and motivated
throughout the program”*

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

With this program, alumni will be able to advance drastically in their profession, although there is no doubt that, in order to do so, they will have to make an investment in different aspects, such as economic, professional and personal areas.

However, the goal is to improve in your professional life and, to do so, it is necessary to fight.

Excellent professional development awaits.

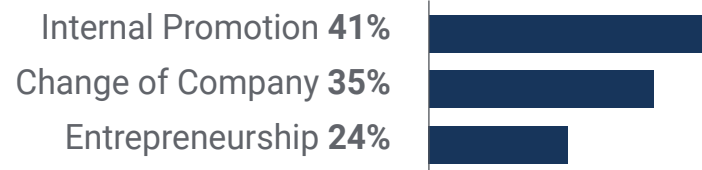
Thanks to this program, you will receive a large number of job offers with which you will be able to start your professional growth.

The best way to achieve professional change is to increase your skills. So don't stop studying at TECH.

Time of Change



Type of Change



Salary Increase

This program represents a salary increase of more than **25.22%** for our students



10

Benefits for Your Company

The Postgraduate Certificate in Data Processing in Different Formats and Different Sources contributes to elevate the organization's talent to its maximum potential by specializing high-level leaders.

Participating in this program is a unique opportunity to access a powerful network of contacts in which to find future professional partners, customers or suppliers.





“

All the subjects and areas of knowledge have been compiled in a complete and absolutely up-to-date syllabus, in order to bring the student to the highest theoretical and practical level"

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

01

Intellectual Capital and Talent Growth

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

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

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

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.

06

Increased Competitiveness

This Postgraduate Certificate will equip professionals with the skills to take on new challenges and therefore drive the organization forward.

11

Certificate

The Postgraduate Certificate in Data Processing in Different Formats and Different Sources guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



“

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

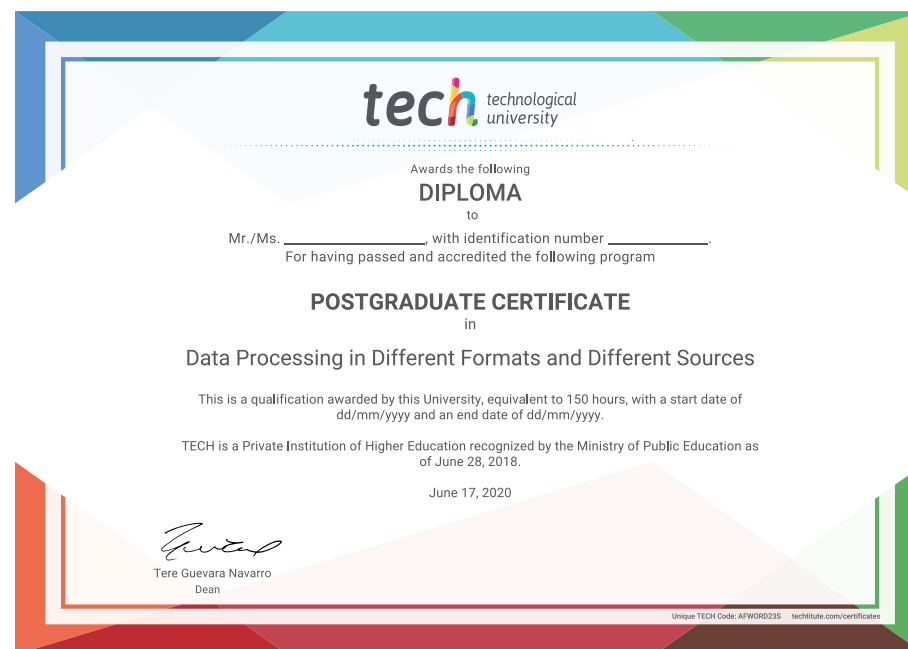
This **Postgraduate Certificate in Data Processing in Different Formats and Different Sources** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Certificate in Data Processing in Different Formats and Different Sources**

Official N° of Hours: **150 h.**



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



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- » Duration: **6 weeks**
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- » Schedule: **at your own pace**
- » Exams: **online**

Postgraduate Certificate Data Processing in Different Formats and Different Sources

