

# Postgraduate Certificate Predictive Analytics





## Postgraduate Certificate Predictive Analytics

- » 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/predictive-analytics](http://www.techtute.com/us/school-of-business/postgraduate-certificate/predictive-analytics)

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# 01

# Welcome

With the huge amount of data that must be handled nowadays, a cutting-edge analytical technique that helps in the management of *Big Data* is predictive analytics, through which professionals in this field can achieve better business results and save a great deal of time for their work teams. TECH has included many advanced concepts in Machine Learning and specific Text Mining techniques in this program, among other useful skills in this field, with which students can stand out among their peers and qualify for better jobs.



Postgraduate Certificate in Predictive Analytics  
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:



### Analysis

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



### Academic Excellence

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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

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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

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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"*

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

This program has been designed with the latest available knowledge in predictive analytics, provided by a highly experienced teaching staff that has made every effort to ensure that students get the most out of this course. So, the objective is for professionals to finish the program as experts in Predictive Analytics with ample room for improvement in their work and salaries.



“

*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 program”*

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

This Postgraduate Certificate in Predictive Analytics qualifies students to:

01

Understand the different techniques for data analysis

02

Design joint strategies of statistical and artificial intelligence techniques for the development of descriptive and predictive systems applied to the reality of a dataset







03

Understand the operation and characteristics of common mass data processing techniques

04

Identify techniques oriented to statistical analysis, artificial intelligence and mass data processing

05

# Structure and Content

The syllabus of this Postgraduate Certificate in Predictive Analytics includes all the latest market developments in this field. Therefore, students will learn to analyze a multitude of scenarios, optimize their own analysis techniques, as well as the specific methodology of social network analysis. All this while taking advantage of TECH's educational methodology, which provides students with a much more immersive and useful experience.



“

*Enroll in this Postgraduate Certificate today and do not miss the opportunity to become a leader in predictive analytics”*

## Syllabus

This Postgraduate Certificate in Predictive Analytics from TECH Technological University is an intensive program that prepares students to face challenges and business decisions in the field of predictive analytics.

The content is taught completely online, which is a great advantage for students, as they can combine their work and professional responsibilities with their studies.

Throughout these 150-hour program, students will analyze real case studies to see, in a contextual way, how to apply all the contents learned throughout the syllabus.

Therefore, this program represents an excellent opportunity for improvement for all data analytics professionals looking to make a qualitative leap and interest in the branches of data and its management through artificial intelligence.

This Postgraduate Certificate is spread out over 6 weeks and is divided into 1 teaching module:

### Module 1

### Data Analysis Techniques and AI



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

TECH offers the possibility of developing this Postgraduate Certificate in Predictive Analytics completely online. Over the course of 6 weeks, 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. Data Analysis Techniques and AI**

1.1. Predictive Analytics	1.2. Evaluation Techniques and Model Selection	1.3. Lineal Optimization Techniques	1.4. Monte Carlo Simulations
1.5. Scenario Analysis	1.6. Machine Learning Techniques	1.7. Web Analytics	1.8. Text Mining Techniques
1.9. Methods of Natural Language Processing (NLP)	1.10. Social Media Analytics		



*You will obtain better results for your projects through Datamining techniques with the latest technology"*



# 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 profile of the students who decide to pursue this program is varied, coming from both IT and business backgrounds. This is due to the versatility of the knowledge taught, as it is useful in all types of jobs that require an analyst with good qualifications and job performance.







“

*This specialization will take your career  
in the business world to the next level.  
Don't hesitate and enroll now”*

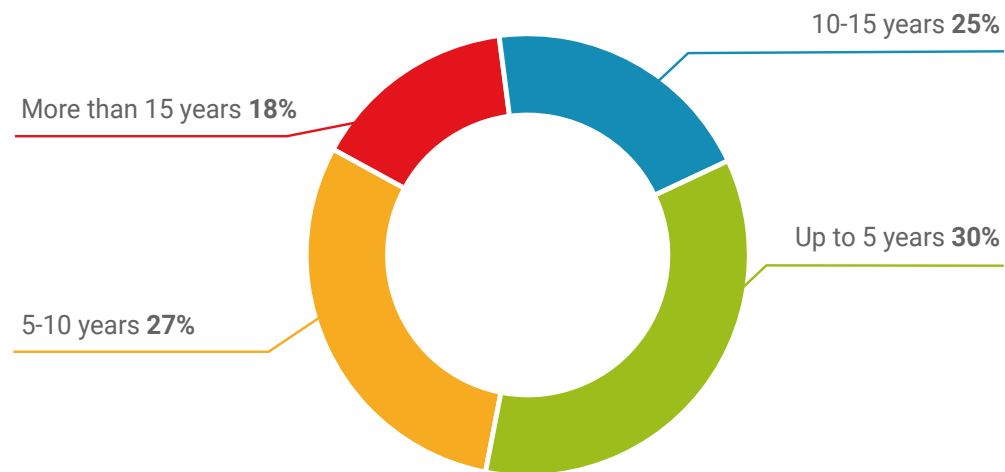
### Average Age

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

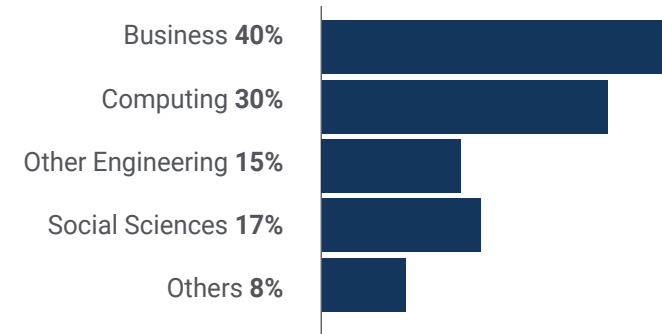
### Years of Experience

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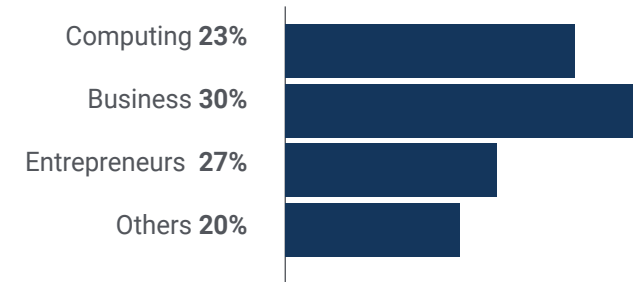
### Training

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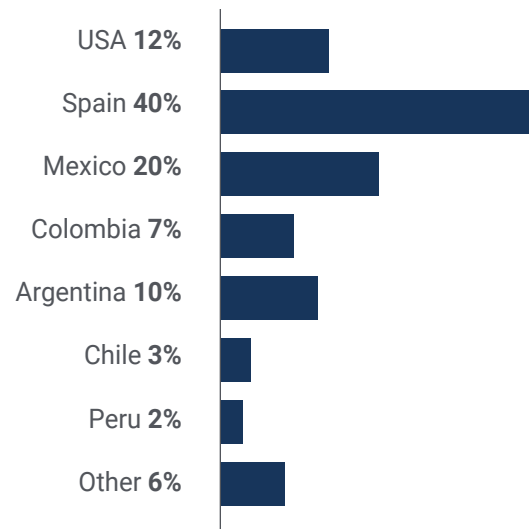
### Academic Profile

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## Geographical Distribution

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## Lucía Martín Negrín

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Visual Analytics Expert

*"Thanks to TECH's specialization in Predictive Analytics I have been able to advance my career and incorporate the latest developments in the industry into my daily practice. Undoubtedly, the contents and resources are of high quality, and the teaching staff is exceptional. I will continue my specialization with them"*

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 course. 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 specialize 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

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- 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. García, Felipe

- ◆ Degree in IT from the Polytechnic University of Madrid
- ◆ Doctoral Thesis on "Wisdom Collective Intelligence"
- ◆ Founding Partner and President of KNOWDLE AI TECHNOLOGIES GROUP
- ◆ President promoter of the KNOWDLE CONSORTIUM GROUP ASSOCIATION
- ◆ Promoter and president of the KNOWDLE FOUNDATION & RESEARCH INSTITUTE with an ecosystem of start-ups in acceleration under the same technology of Collective Artificial Intelligence





09

# Impact on Your Career

TECH is aware of the difficulties that its students may face when pursuing this type of program, so in addition to offering facilities such as fully online learning, it also ensures that such economic and personal investment has a noticeable reward in their career. Students will be supported at all times by both the teaching staff of their program and the TECH educational team.





“

*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

This program is an unrepeatable opportunity to squeeze the maximum managerial and business potential out of students in the field of predictive analytics. With the effort and dedication that the program requires, students will bring out the best version of themselves, preparing them for the future challenges that await them.

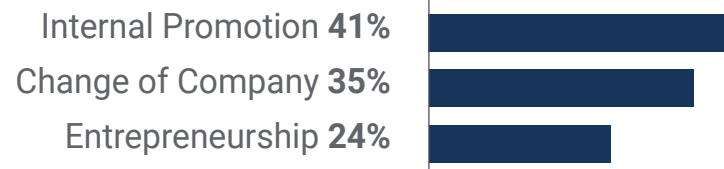
*The best way to achieve professional change is to increase your skills. So don't stop studying at TECH.*

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

#### When the change occurs



#### Type of change



## Salary increase

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



10

# Benefits for Your Company

The benefits of pursuing this program not only affect students, but also help companies to improve the results of their own departments. Therefore, by incorporating students with this qualification, the company's data analysis will be faster and more efficient, using state-of-the-art *Machine Learning* and Artificial Intelligence technologies.



“

*This program is the opportunity you've been waiting for to specialize and reach the management position you've been longing for. Don't wait any longer and enroll today to become part of TECH's educational family"*

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.

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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

Students will be able to make decisions in times of uncertainty and crisis, helping the organization to 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**

Professionals 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 Postgraduate Certificate will equip your professionals with the skills to take on new challenges and thus drive the organization forward.

11

# Certificate

This Postgraduate Certificate in Predictive Analytics guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by La 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 Predictive Analytics** 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 Predictive Analytics**

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.



## Postgraduate Certificate Predictive Analytics

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Schedule: at your own pace
- » Exams: online

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