

Postgraduate Certificate Introduction to Statistics





Postgraduate Certificate Introduction to Statistics

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » 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/introduction-statistics

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01 Welcome

Due to the growing demand for professionals specialized in Data Statistics, this prestigious program is born to train students to enter the world of Big Data and Visual Analytics as a professional capable of handling rational analysis, supported by a visual and interactive interface.

Nowadays, data provides us with the value to define the most appropriate strategy. Statistics is the basic science for learning from data. Analyze the data produced and draw conclusions using statistical tools will allow students to make the most appropriate decisions at all times.



Postgraduate Certificate in Introduction to Statistics
TECH Global University



“

Delve into the principles of probability that are the basis for inferential statistics, which will help you test conjectures about what a given population is like”

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:



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"



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.

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

This Postgraduate Certificate is designed to strengthen skills in Introduction to Statistics, as well as to develop new competencies and skills that will be essential in the student's professional development. After the program, the professional will be able to make global decisions with an innovative perspective and an international vision.



“

Learn how regression analysis is one of the most widely used techniques for pattern detection in large volumes of data”

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

The Postgraduate Postgraduate Certificate in Introduction to Statistics enables students to:

01

Know the different theories for data analysis and interpretation

02

Identify the most common descriptors for a dataset

03

Understand and assess the applicability of different descriptors to an existing dataset





04

Know how to carry out hypothesis testing and its applicability to the world of data analysis

05

Learn how to interpret the different existing regression techniques

06

Analyze the data produced and draw conclusions using statistical tools to make the most appropriate decisions at all times

05

Structure and Content

This Postgraduate Certificate in Introduction to Statistics is a high-level, entirely online program, which aims to enable students to learn quickly and efficiently, choosing the time and place that best suits their availability, schedules and interests. A program that takes place over 6 weeks and is intended to be a unique and stimulating experience that lays the foundation for your 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 Course Certificate in Introduction to Statistics from TECH Global University is an intensive program that prepares students to face challenges and business decisions in the field of Introduction to Statistics.

The content of the Postgraduate Certificate in Introduction to Statistics 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 and team work. It is, therefore, an authentic immersion in real business situations.

This Postgraduate Course deals, in-depth, with the world of information technology in the business environment, and is designed to prepare professionals who understand Introduction to Statistics from a strategic, international and innovative perspective.

A plan designed for you, focused on improving your career and preparing you to achieve excellence in leadership and business management. A program that understands both yours and your company's needs 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 skills to solve critical situations, creatively and efficiently.

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

Module 1

Data Analysis and Interpretation



Where, When and How is it Taught?

TECH offers students the opportunity to take this Postgraduate Certificate in Introduction to Statistics, completely online. During 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 and Interpretation

1.1. Introduction to Statistics	1.2. Measures Applicable to the Processing of Information	1.3. Statistical Correlation	1.4. Theory of Conditional Probability
1.5. Random Variable and Probability Distribution	1.6. Bayesian Inference	1.7. Sample Theory	1.8. Confidence Intervals
1.9. Hypothesis Testing	1.10. Regression Analysis		



Analyze produced data and learn how to draw conclusions from it using statistical tools"



CONTRACT



CEO
marketing
production
finance



MARKETING PLAN

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”*

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.

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

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.



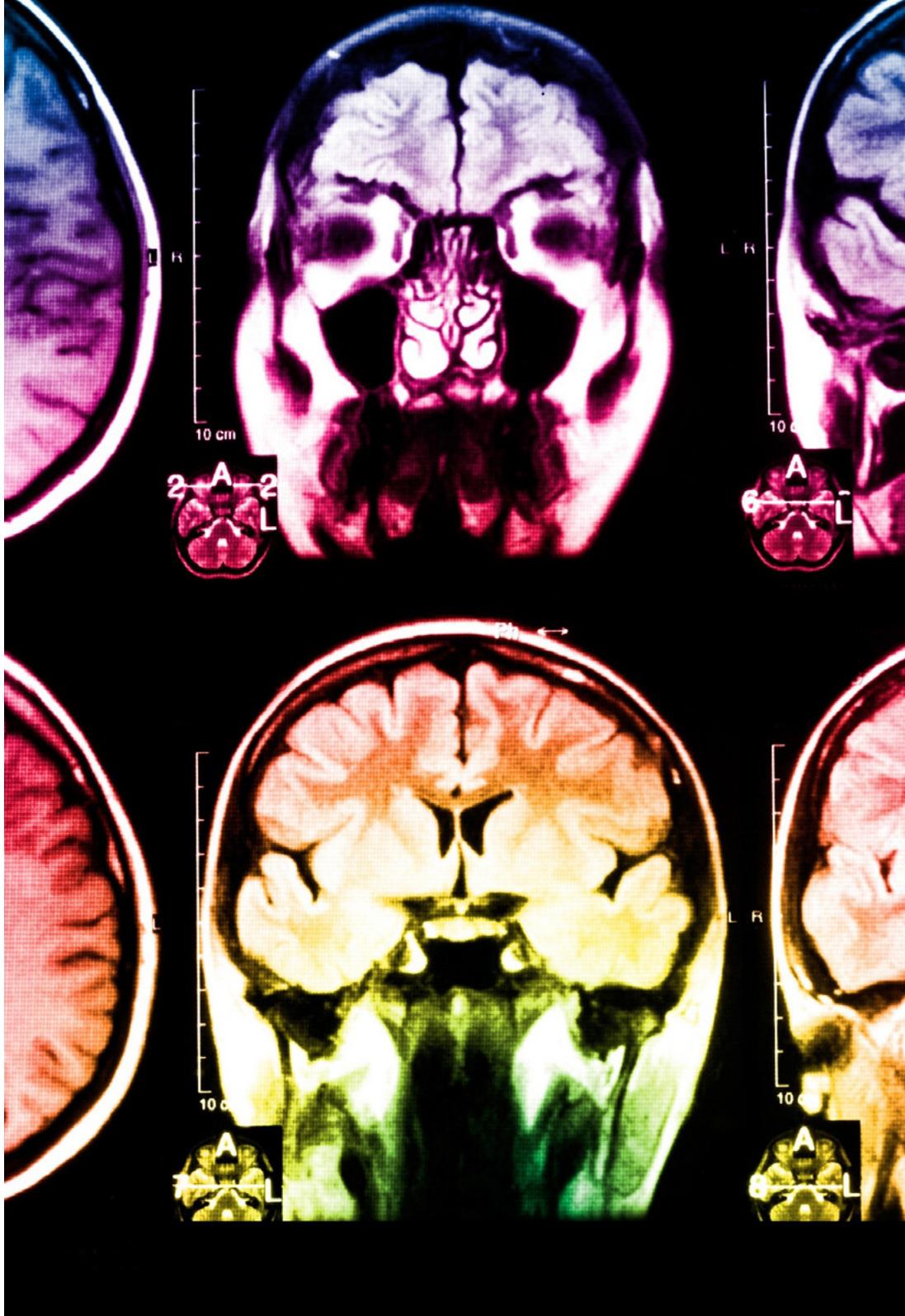
In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

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.



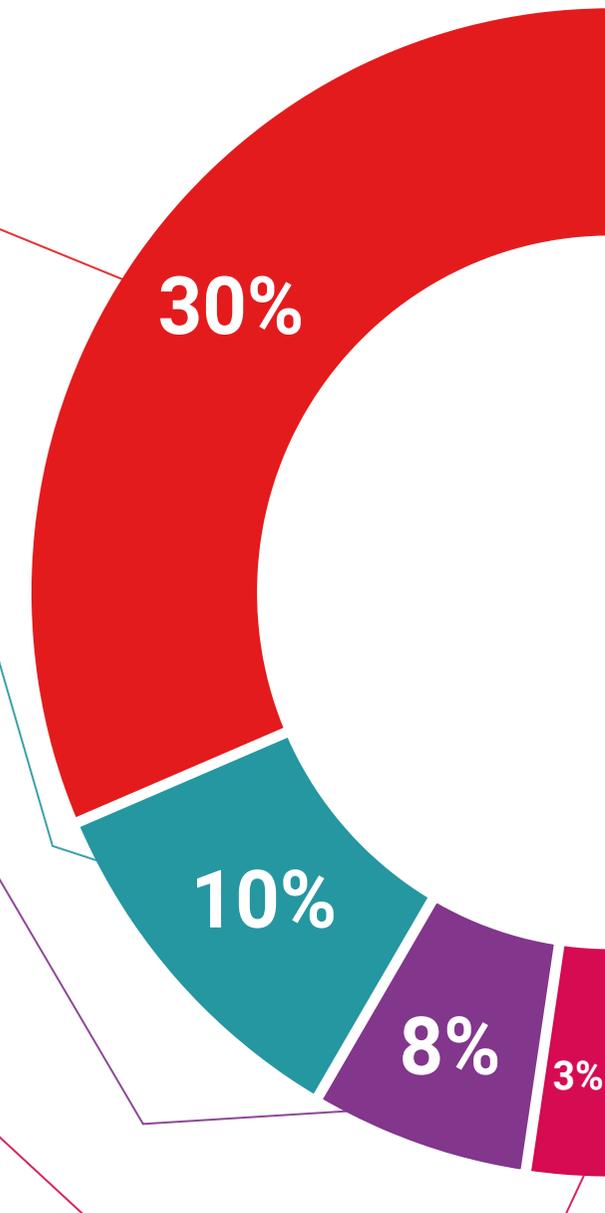
Management Skills Exercises

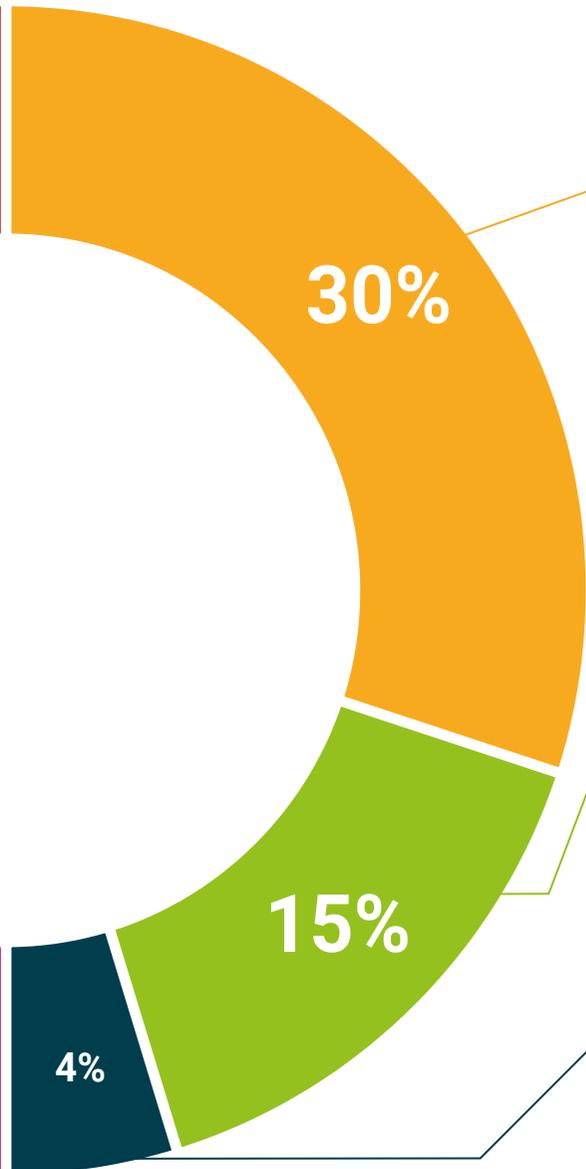
They will carry out activities to develop specific executive competencies in each thematic area. Practices and dynamics to acquire and develop the skills and abilities that a high-level manager needs to develop in the context of the globalization we live in.



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.



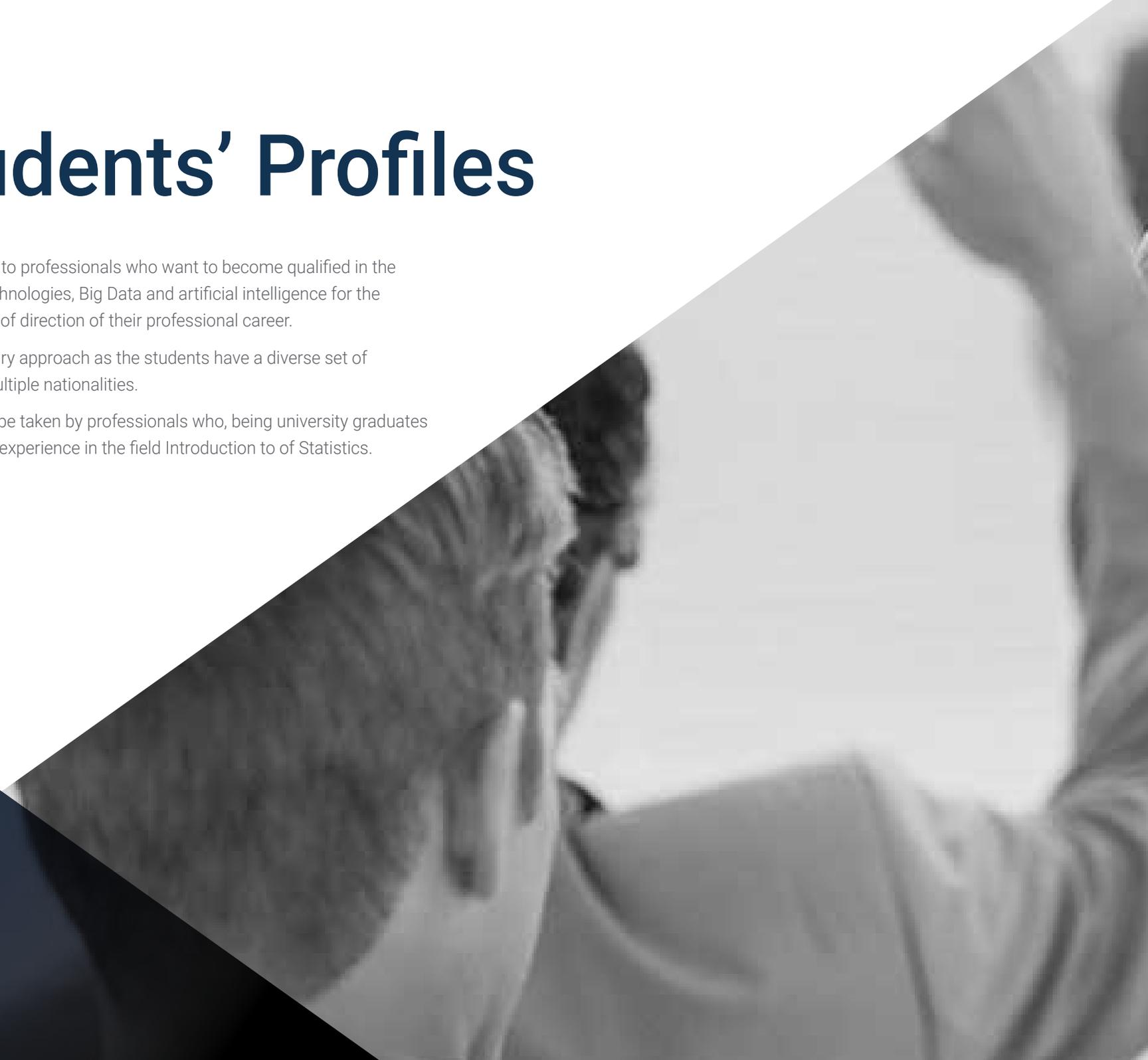
07

Our Students' Profiles

This Postgraduate Course is aimed to 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.

The Postgraduate Course can also be taken by professionals who, being university graduates in any field, have two years of work experience in the field Introduction to of Statistics.





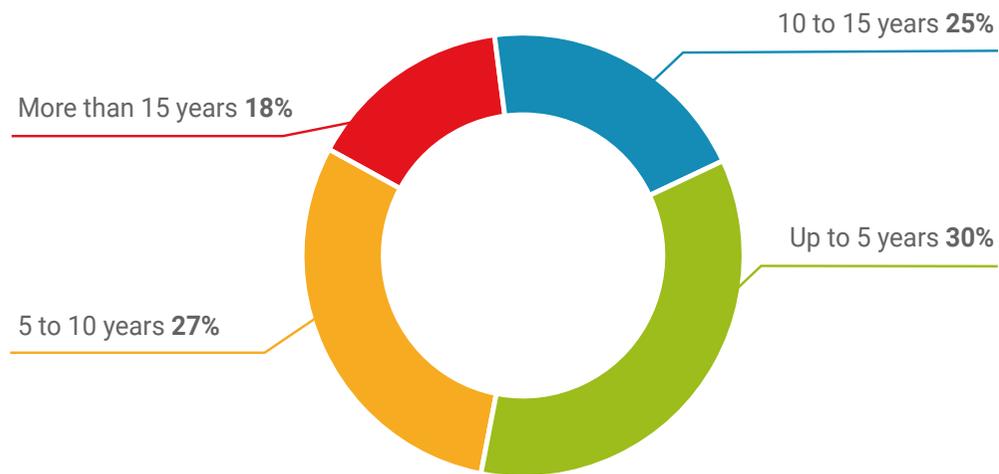
“

A comprehensive and multidisciplinary program that will allow you to excel in your career”

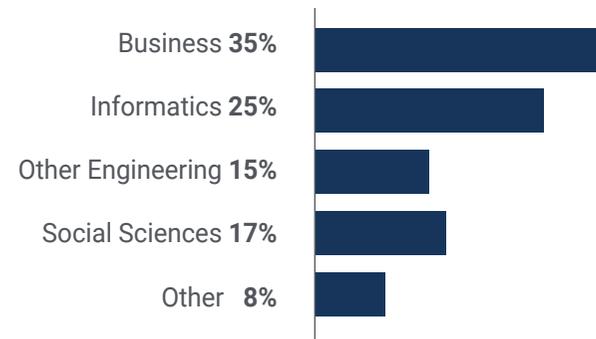
Average Age

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

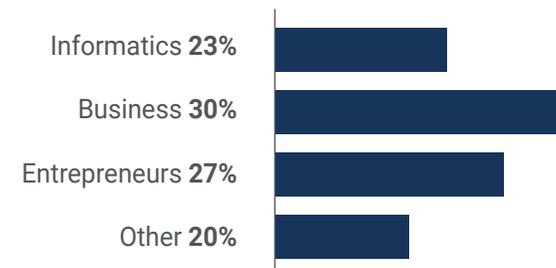
Years of Experience



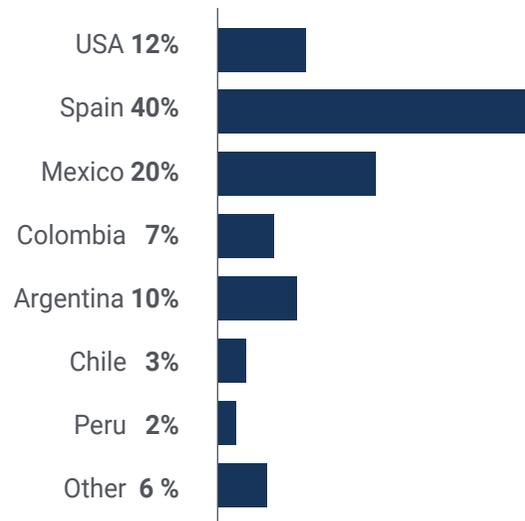
Training



Educational Profile



Geographical Distribution



María González Negrín

Visual Analytics Expert

"With this TECH specialization course, I have achieved a better position in my workplace. Thanks to their teaching methodology I have learned in an easy and simple way, incorporating the latest developments in the sector in my daily practice"

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"*

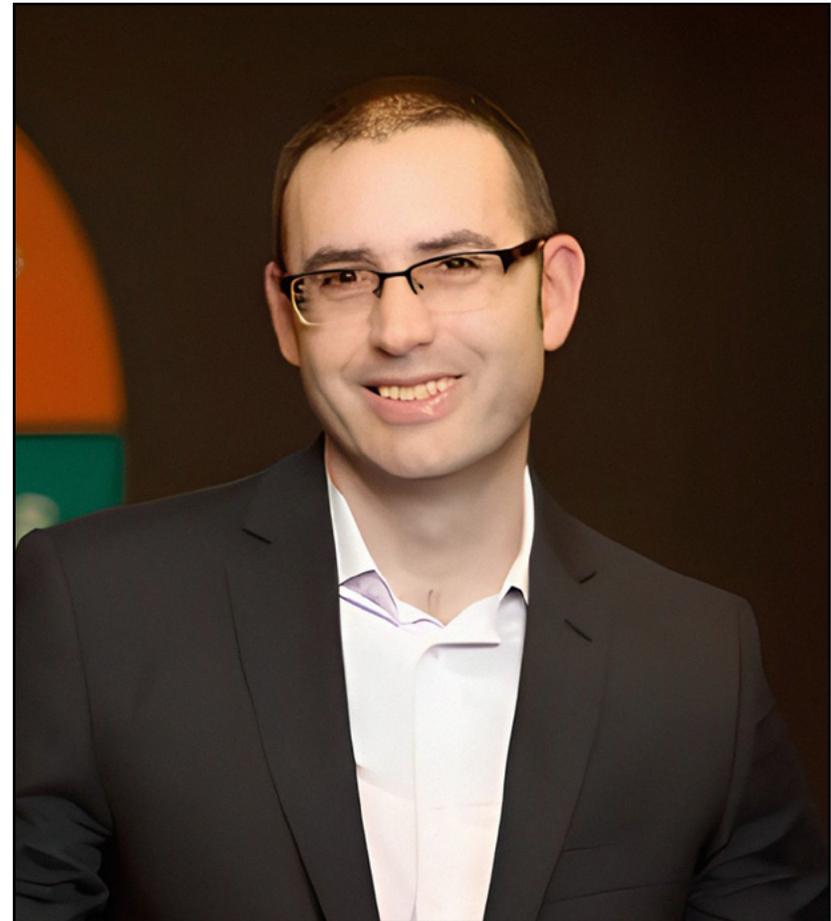
International Guest Director

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 from 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. Cordero García, Marta

- ◆ University Professor, Polytechnic School of Madrid
- ◆ Aerospace Engineering Department: Mathematics Applied to Aerospace Engineering



09

Impact on Your Career

We are aware that studying a program like this entails great economic, professional and, of course, personal investment. The ultimate goal of this great effort should be to achieve professional growth. And, with us, you will find great possibilities to achieve it. For this, we have the perfect equation for a quality specialisation: a highly updated syllabus and internationally renowned teachers. Undoubtedly, a unique opportunity that will help you to boost your career in a short period of time.



“

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”

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

This Postgraduate Certificate in Introduction to Statistics by TECH Global University is a program with which students will be able to advance drastically in their profession, although there is no doubt that, in order to do so, they will have to invest in different areas, such as the economic, professional and personal ones.

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

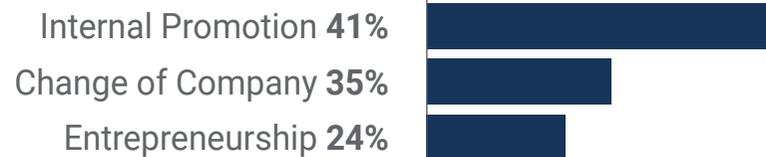
A stimulating professional growth journey designed to keep you interested and motivated throughout the program.

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 Course in Introduction to Statistics helps raise the organization's talent to its maximum potential through the training of high-level leaders.

By taking part in this Postgraduate Certificate is a unique opportunity to access a powerful network of contacts where you can find future professional partners, clients, or suppliers.



“

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

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.

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.

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

11 Certificate

The Postgraduate Certificate in Introduction to Statistics guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



“

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

This private qualification will allow you to obtain a **Postgraduate Postgraduate Certificate in Introduction to Statistics** 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.

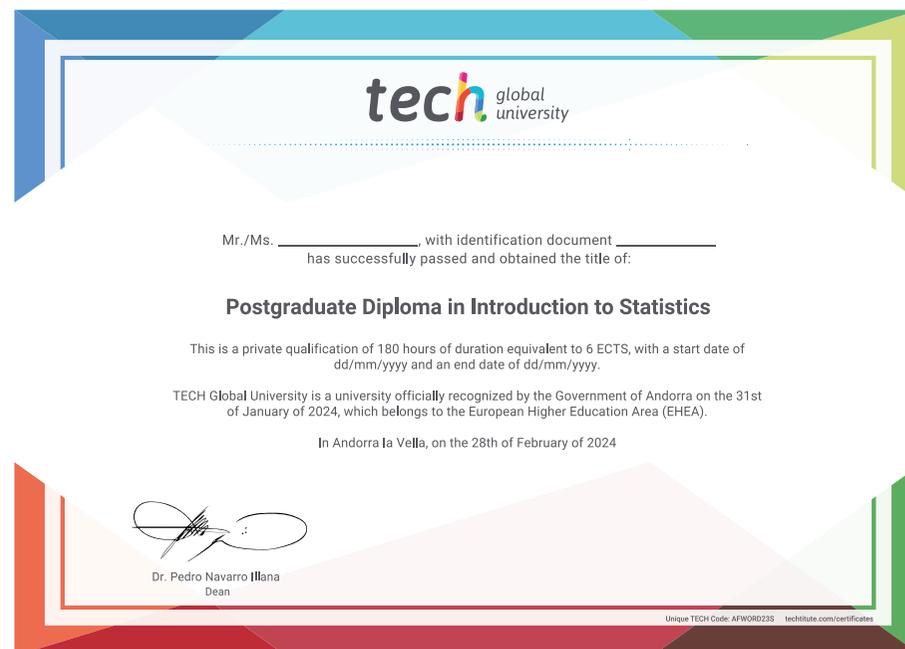
This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Postgraduate Certificate in Introduction to Statistics**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



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



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