

# Executive Development Program

## Big Data and New Digital Trends in IT





## Executive Development Program

### Big Data and New Digital Trends in IT

- » Modality: online
- » Duration: 4 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online
- » Target Group: graduates and professionals with demonstrable experience in the sector

Website: [www.techtute.com/pk/school-of-business/executive-development-program/big-data-new-digital-trends-it](http://www.techtute.com/pk/school-of-business/executive-development-program/big-data-new-digital-trends-it)

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# 01

# Welcome

New technologies and digital trends, such as Big Data, have brought about new ways of analyzing information and fostering the development and innovation of businesses. With this TECH Technological University program, students will acquire the necessary skills to describe how business intelligence information systems and Big Data operate, as well as their main utilities and components in order to provide information and knowledge that will improve decision making. Undoubtedly, a unique learning opportunity to become true specialists in technology project management.



Executive Development Program in Big Data and New Digital Trends in IT.  
TECH Technological University



“

*The figure of the strict, inflexible and authoritarian manager has become obsolete. A new profile has emerged, one that is much more in line with new trends and stands out for being technologically savvy, practising active listening and being self-critical of their work"*

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

Thanks to the completion of this program, students will develop the necessary skills to apply the most innovative information and communication technologies in their professional practice. In this way, they will be able to use business intelligence systems and Big Data to improve strategic decision making that will result in greater benefits for their business.





“

*You will be able to apply the most innovative technologies in your own business”*

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

The Executive Development Program in Big Data and New Digital Trends in IT qualifies students to:

01

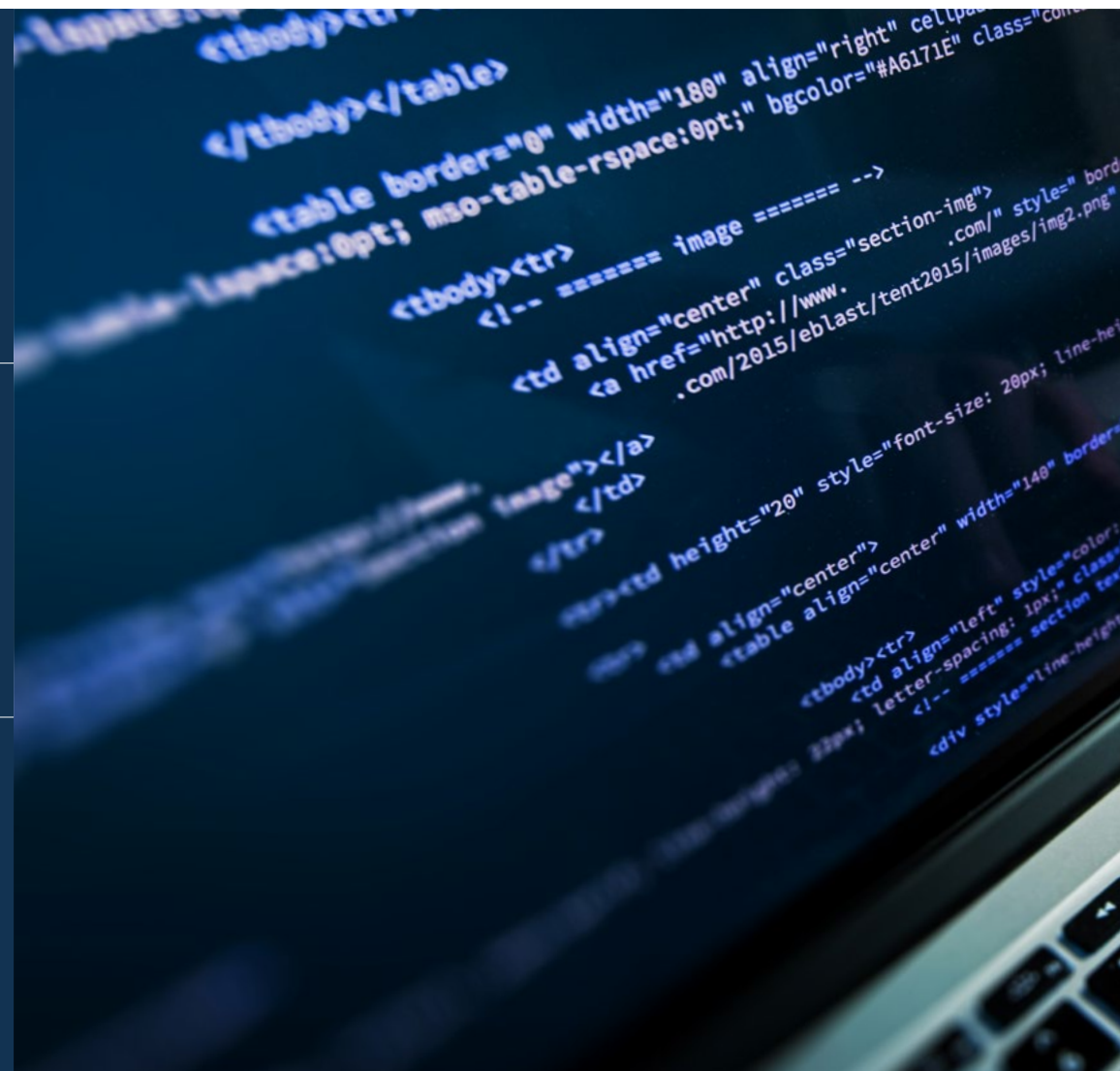
Implement methods to systematize technological innovation processes linked to the needs of the company

02

Assess the status, positioning and maturity of information technologies in business environments

03

Adopt strategic governance models for information technologies that are integrated and harmonized with corporate strategy and management







04

Participate in projects related to ICT management, innovation and research development

05

Describe how business intelligence information systems and Big Data operate, and their main utilities and components in order to provide information and knowledge which will improve decision making

06

Explain the new trends in business intelligence

05

# Structure and Content

The Executive Development Program in Big Data and New Digital Trends in IT at TECH Technological University is tailored to the needs of the students and, therefore, is offered in a 100% online format. Therefore, the program has 3 modules that cover all the new developments that are emerging in the field of information technologies and that have revolutionized the business world.



“

*This program will provide you with everything you need to become a first class Chief Technology Officer: the best teaching methodology in the market and a totally up-to-date syllabus"*

## Syllabus

The content of the Executive Development Program in Big Data and New Digital Trends in IT is designed to foster the development of management skills that will enable students to make sound decisions in uncertain environments.

Throughout 250 hours of study, the student will analyze a multitude of practical cases, which will be fundamental for more exhaustive learning. It is, therefore, a real immersion in real business situations in which information technology plays a major role.

In this way, the program is focused on improving students' skills and, therefore, has a broad theoretical and practical content developed by a teaching team of specialists in the field. A program that allows students to study at their own pace, following their own schedules and needs. In this way, they will be able to continue their learning without neglecting the rest of their daily commitments.

This Executive Development Program takes place over 4 months and is divided into 3 modules:

|                 |            |
|-----------------|------------|
| <b>Module 1</b> | Trends I   |
| <b>Module 2</b> | Trends II  |
| <b>Module 3</b> | Trends III |



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

TECH offers the possibility of developing this Executive Development Program in Big Data and New Digital Trends in IT completely online. Over the course of 4 months, 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. Trends I

### 1.1. The Internet of Things

- 1.1.1. Visions and Challenges
- 1.1.2. Key Technologies
- 1.1.3. Pioneering Projects

### 1.2. Gamification

- 1.2.1. Business Gamification Techniques
- 1.2.2. Gamification Design Framework
- 1.2.3. Operating Mechanisms and Motivation
- 1.2.4. Benefits and Return on Investment

### 1.3. Big Data

- 1.3.1. Sectoral Application
- 1.3.2. Business Models
- 1.3.3. New Professions

## Module 2. Trends II

### 2.1. Artificial Intelligence

- 2.1.1. Methodological Aspects in Artificial Intelligence
- 2.1.2. Heuristic Search
- 2.1.3. Rule Inference Methods
- 2.1.4. Semantic Networks

### 2.2. Robotics

- 2.2.1. Robot Morphology
- 2.2.2. Mathematical Tools for Spatial Localization
- 2.2.3. Cinematic Control
- 2.2.4. Criteria for Implementing an Industrial Robot

## Module 3. Trends III

### 3.1. Modelling and Simulation

- 3.1.1. Modelling using DEVS
- 3.1.2. Modelling of Random Inputs
- 3.1.3. Generation of Random Inputs
- 3.1.4. Design of Experiments and Optimization

### 3.2. Implementing Cryptography in Technology Projects

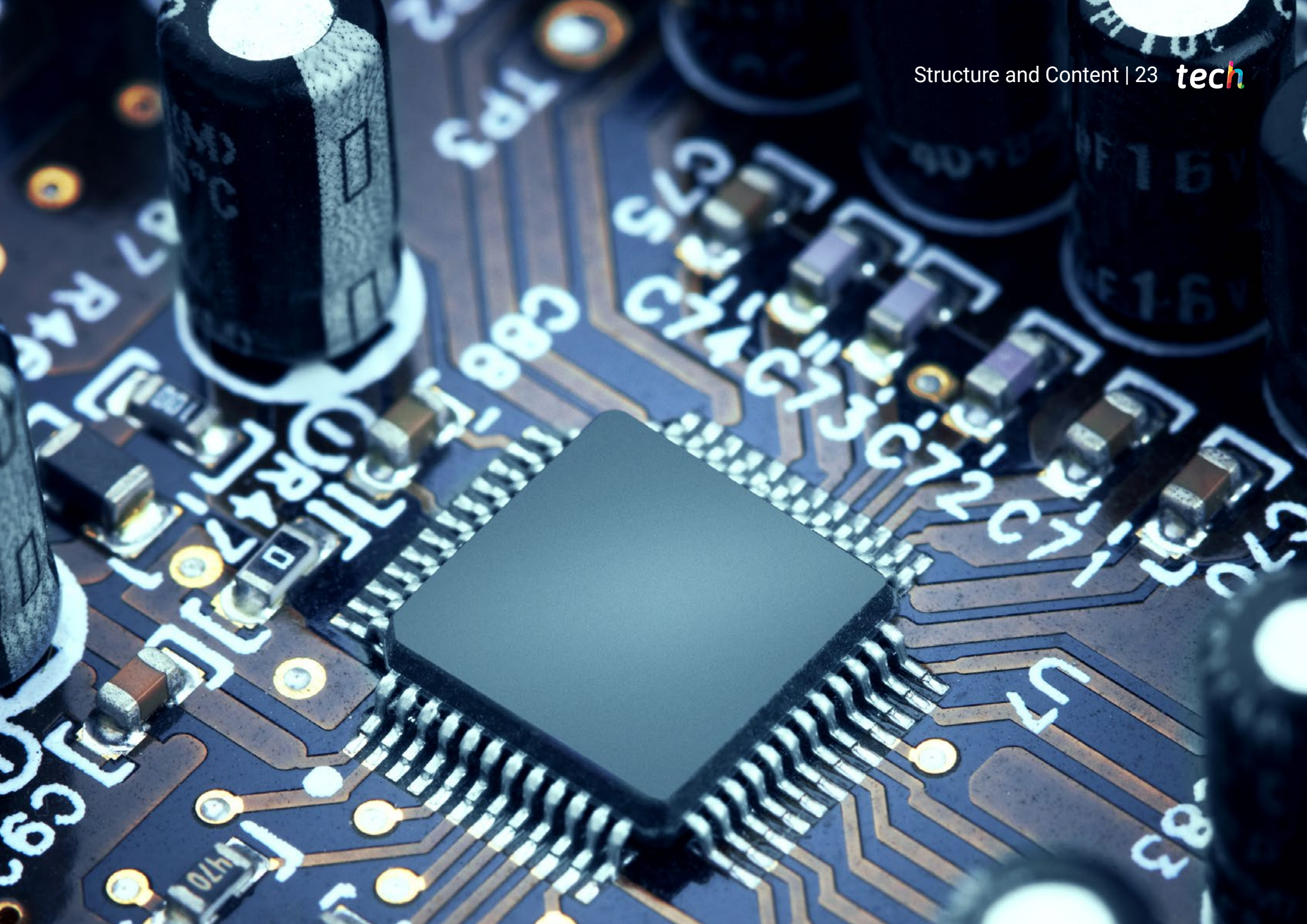
- 3.2.1. Electronic Signature
- 3.2.2. Digital Certificate
- 3.2.3. Data Encryption
- 3.2.4. Practical Applications of Cryptography

### 3.3. Other Trends

- 3.3.1. 3D Printing
- 3.3.2. Drones
- 3.3.3. Artificial Vision
- 3.3.4. Augmented Reality



*Specialize in new digital trends, such as drones and augmented reality, and take a leap in your career"*



# 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 Executive Development Program in Big Data and New Digital Trends in IT is a program aimed at Chief Technology Officers and professionals from other related areas who want to update their knowledge, discover new ways to manage data and information and advance in their professional career.







“

*If you have experience in the financial sector and are looking for an interesting career boost while continuing to work, then this is the program for you”*

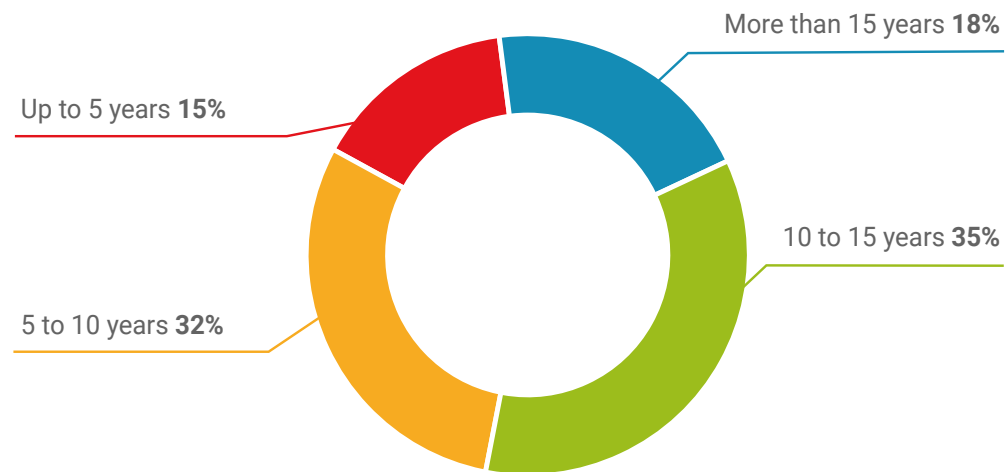
### Average Age

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

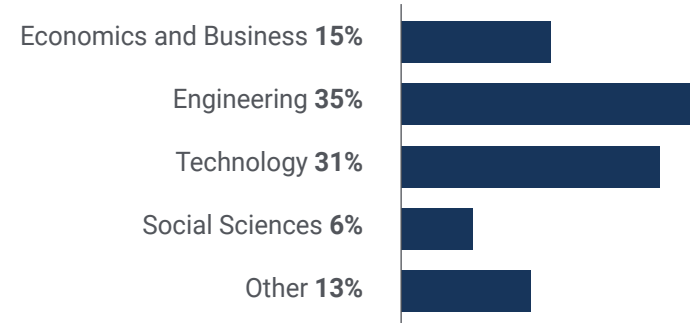
### Years of Experience

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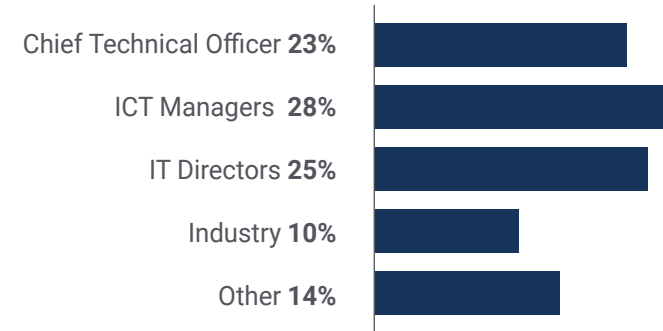
### Training

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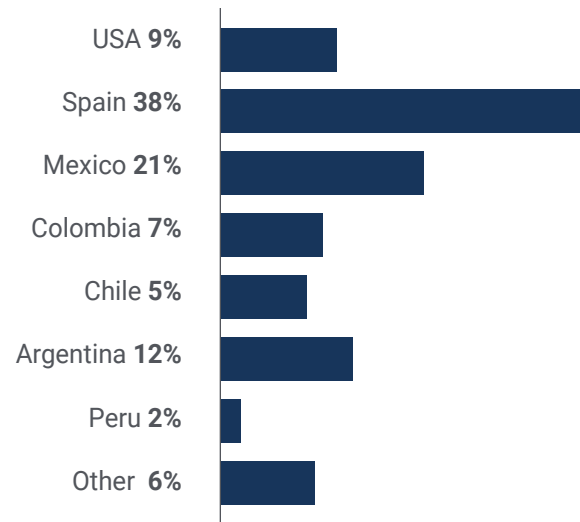
### Academic Profile

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## Geographical Distribution

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## Luis Sánchez Ortiz

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IT Manager

*"Completing this program has given me and my business a great competitive advantage, as I have been able to get up to speed on the main tools available to technology businesses. The best part of all has been the up-to-date syllabus and the possibility of taking it completely online"*

08

# Course Management

TECH has professionals specialized in each area of knowledge, who contribute their work experience to the program. A multidisciplinary team with recognized prestige has joined forces to offer students all their knowledge in this field.



“

*Our teaching team on this Executive Development Program in Big Data and New Digital Trends in IT, will help you succeed in your profession"*

## Management



### **Mr. Santana, Gustavo**

- Engineer General Manager of Multiconversión Roi Agency
- Consulting and implementation of digital strategies aimed at profitability



09

# Impact on Your Career

Carrying out a program of this nature requires a great effort on the part of the professionals. But it is also a great reward. Achieving that long-awaited promotion, changing business or fulfilling that dream of setting up their own business are some of the options that are waiting for students who successfully complete this program. A first-class academic option, aimed at those seeking professional excellence.





“

*TECH wants to meet all its challenges.  
And the most important is to help you  
fulfill your goals”*

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

TECH's Executive Development Program in Big Data and New Digital Trends in IT is an intensive program that prepares students to face business challenges and decisions at the technological level, both nationally and internationally. The main objective is to promote personal and professional growth, helping students achieve success.

This program is the best academic option to reach the business elite.

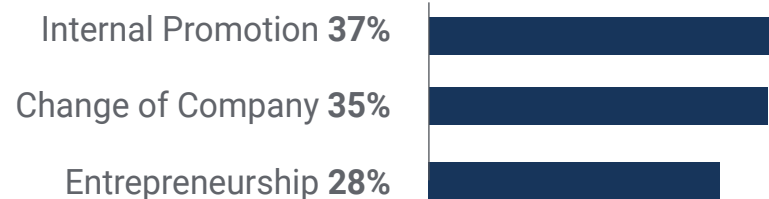
*Thanks to this programme you will receive a large number of job offers with which you will be able to start your professional growth.*

*Your advanced training will be essential to achieve that much desired job improvement*

#### 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 Executive Development Program in Big Data and New Digital Trends in IT is a program aimed at the specialization of high-level business leaders. But, in addition, their higher qualification will be an added value in their businesses, since they will be able to apply everything they have learned to achieve higher performance and, therefore, more economic benefit.



“

*By applying the techniques proposed in this program, you will improve the net profit margin of your business"*

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

01

### Intellectual Capital and Talent Growth

The executive 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 executive and opens new avenues for professional growth within the company.

03

### Building Agents of Change

The manager 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 manager can work on a real project or develop new projects in the field of R&D or Business Development of his 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 Executive Development Program in Big Data and New Digital Trends in IT guarantees, in addition to the most rigorous and up-to-date education, access to a Executive Development Program issued by TECH Technological University.





“

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

This **Executive Development Program in Big Data and New Digital Trends in IT** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **Executive Development Program** issued by **TECH Technological University** via tracked delivery\*.

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

Title: **Executive Development Program in Big Data and New Digital Trends in IT**  
Official N° of hours: **250 h.**



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



## Executive Development Program

Big Data and New  
Digital Trends in IT

- » Modality: **online**
- » Duration: **4 months**
- » Certificate: **TECH Technological University**
- » Dedication: **16h/week**
- » Schedule: **at your own pace**
- » Exams: **online**

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Big Data and New Digital Trends in IT