



# Program Big Data and New

Digital Trends in IT

» Modality: online

» Duration: 4 months

» Certificate: TECH Global University

» Credits: 10 ECTS

» Schedule: at your own pace

» Exams: online

» Target Group: Graduates and professionals with demonstrable experience in the sector

Website: www.techtitute.com/us/school-of-business/executive-development-program/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 Global 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.









## tech 08 | Why Study at TECH?

#### At TECH Global 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+

200+

executives trained each year

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.



#### Learn with the best

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

Teachers representing 20 different nationalities.



At TECH, you will have access to the most rigorous and up-to-date case studies in the academic community"

### Why Study at TECH? | 09 tech

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



#### **Analysis**

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



#### **Academic Excellence**

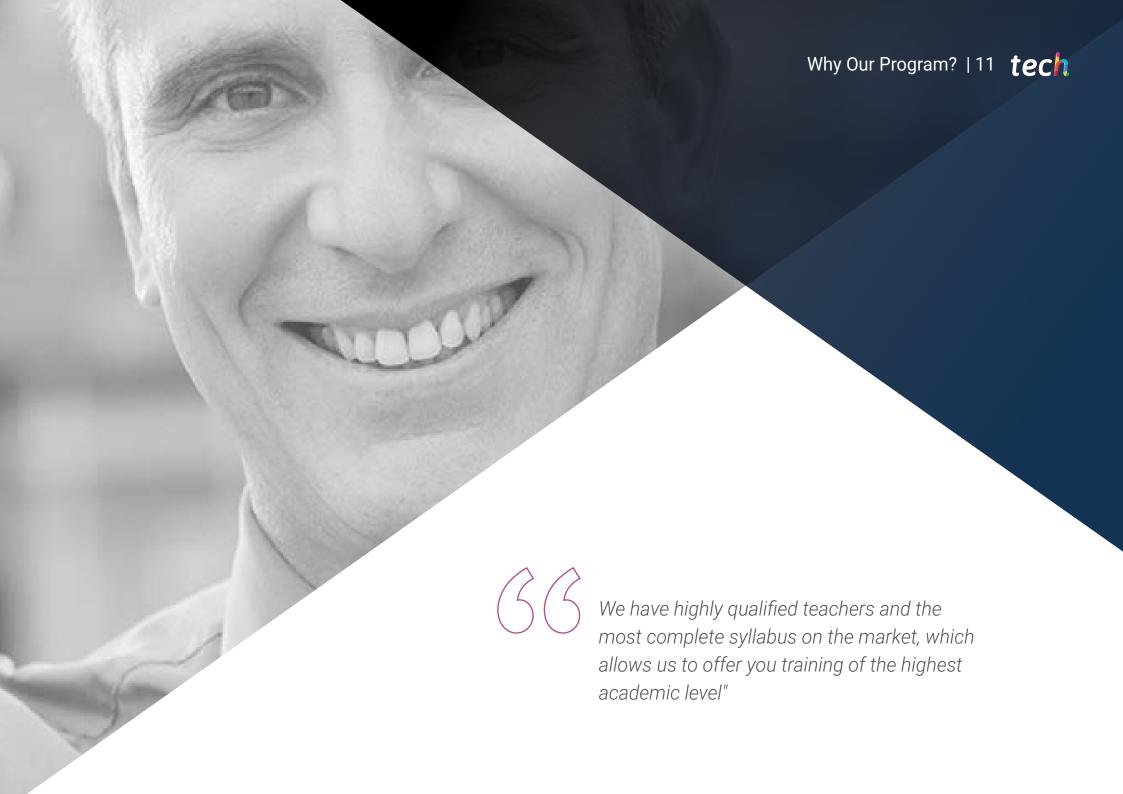
TECH offers students the best online learning methodology. The university combines the Relearning method (a postgraduate learning methodology with the highest international rating) with the Case Study. A complex balance between tradition and state-of-the-art, within the context of the most demanding academic itinerary.



#### **Economy of Scale**

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





## tech 12 | Why Our Program?

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



#### 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.



## 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.



### 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.



#### 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.



#### 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.



#### 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.



#### 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.



#### 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 Global University community.

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





## tech 16 | Objectives

## 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:



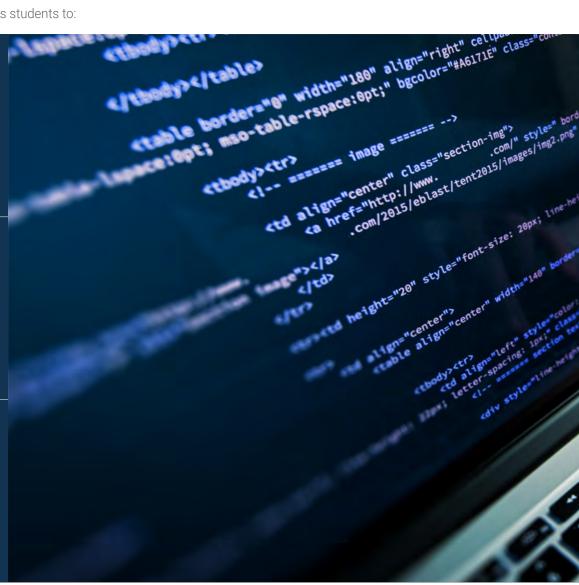
Implement methods to systematize technological innovation processes linked to the needs of the company

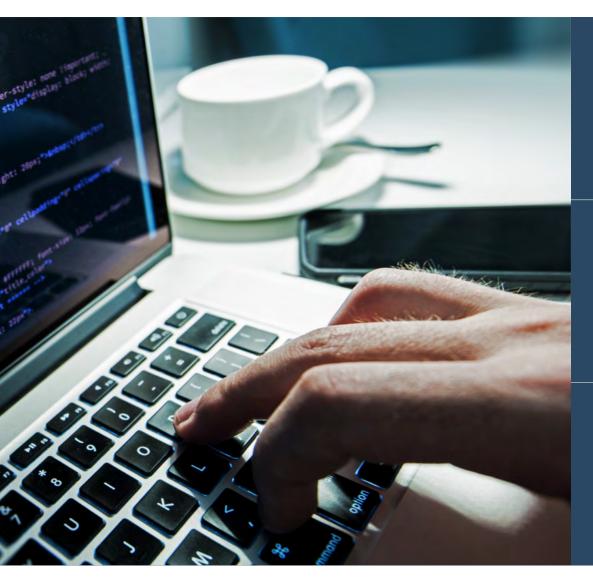


Assess the status, positioning and maturity of information technologies in business environments



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







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

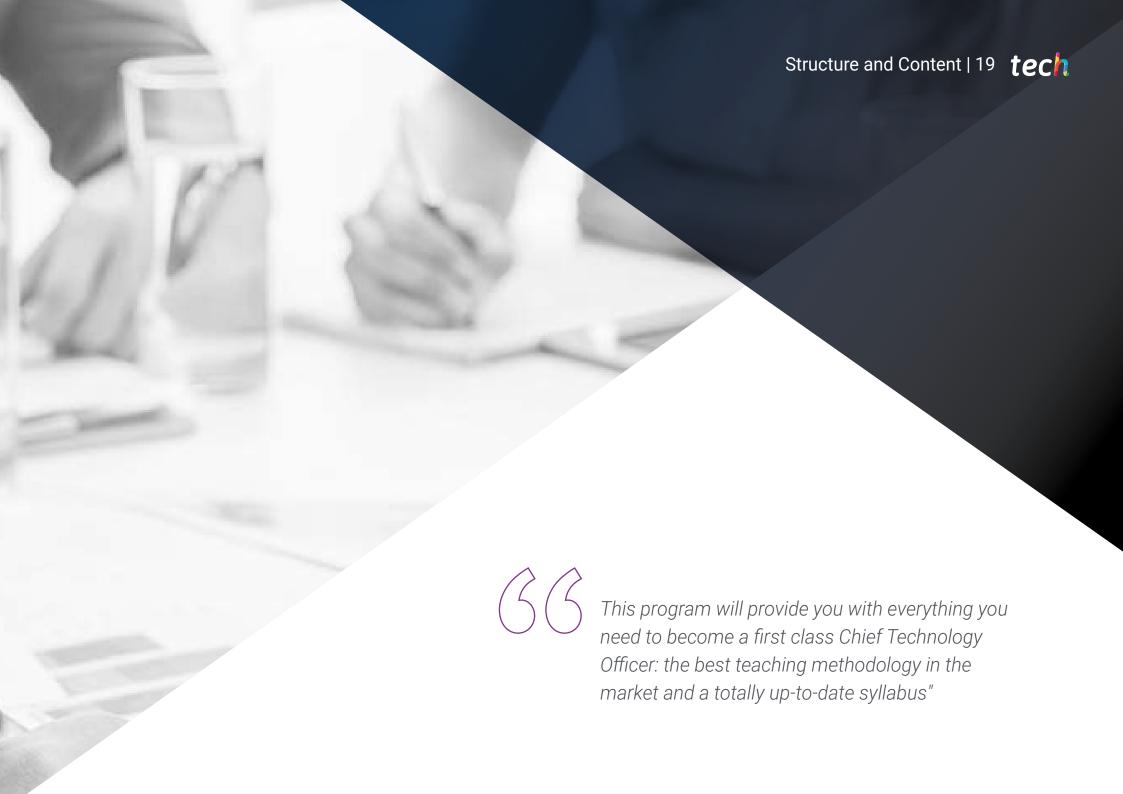


Describe how business intelligence information systems and Big Data operate, and their main utilities and components in order to provide information and knowledge which will improve decision making



Explain the new trends in business intelligence





### tech 20 | Structure and Content

#### **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:

Module 1	Trends I
Module 2	Trends II
Module 3	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.

### tech 22 | Structure and Content

#### 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

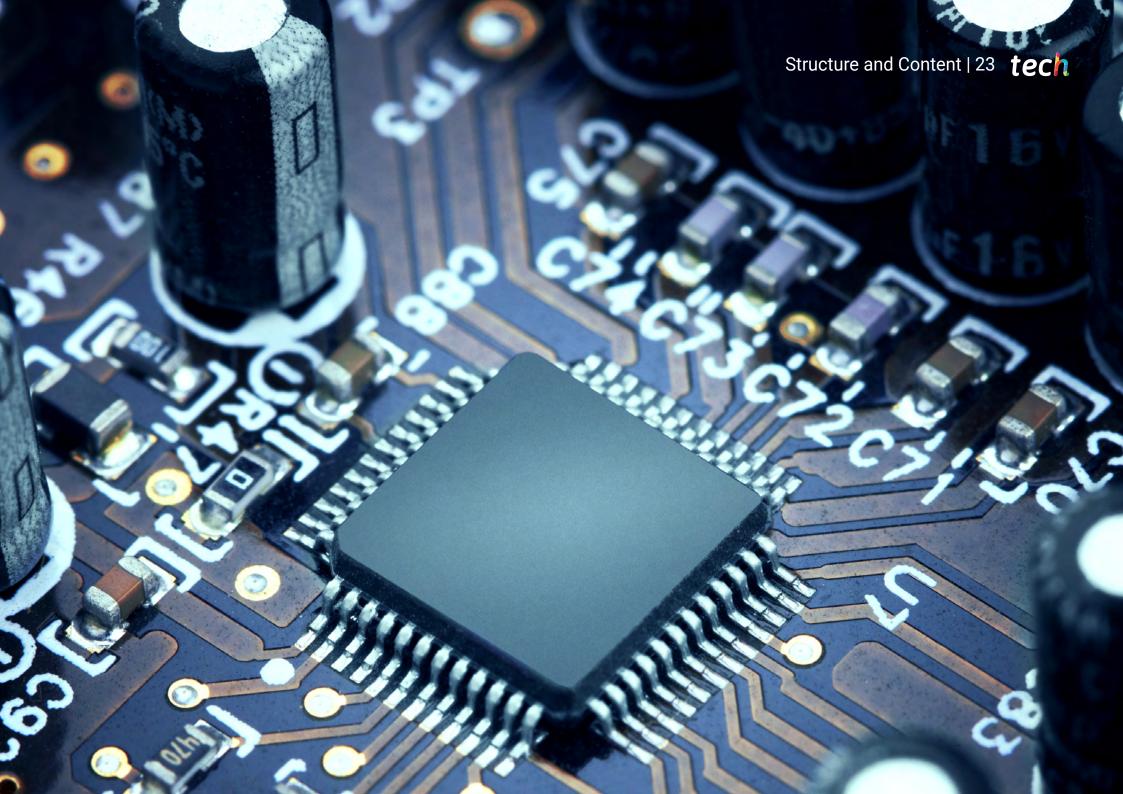
- 3.2.1. Electronic Signature
- 3.2.2. Digital Certificate
- 3.2.3. Data Encryption
- 3.2.4. Practical Applications of Cryptography

#### 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"





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.





## tech 26 | Methodology

## 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.





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.

## tech 28 | Methodology

#### 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.



### Methodology | 29 **tech**

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.





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**

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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.

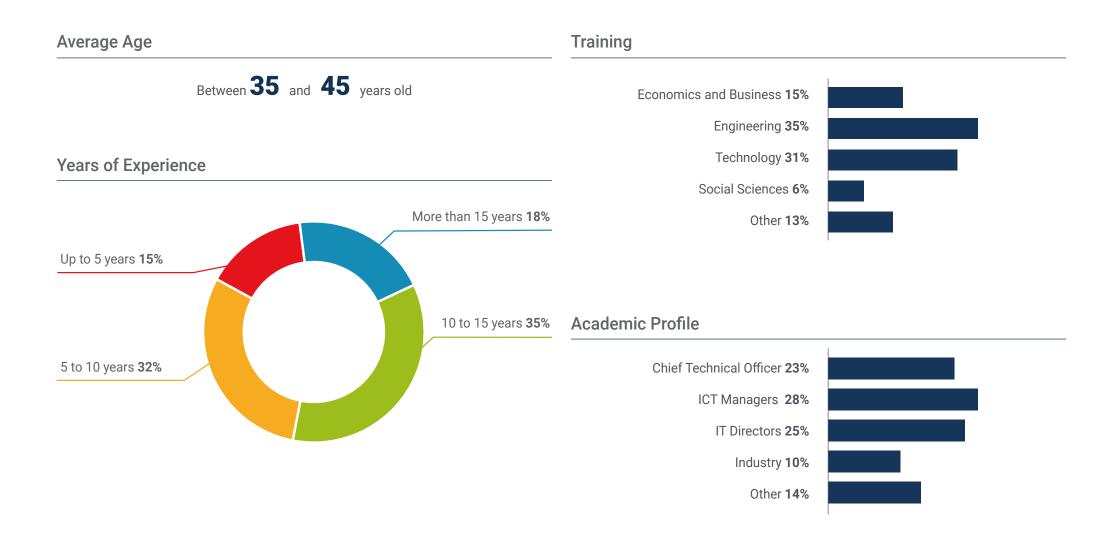


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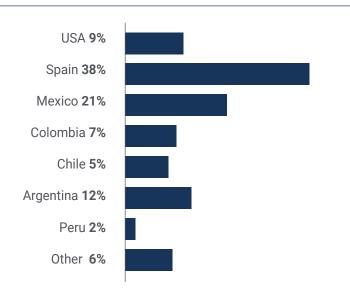




## tech 34 | Our Students' Profiles



### **Geographical Distribution**





## Luis Sánchez Ortiz

#### 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"



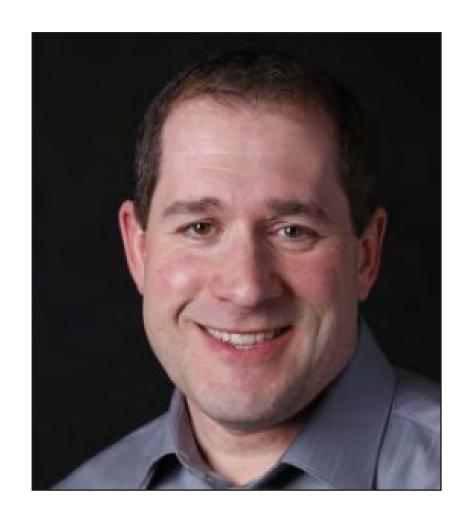


#### **International Guest Director**

A technology leader with decades of experience in major technology multinationals, Rick Gauthier has developed prominently in the field of cloud services and end-to-end process improvement. He has been recognized as a leader and manager of highly efficient teams, showing a natural talent for ensuring a high level of engagement among his employees.

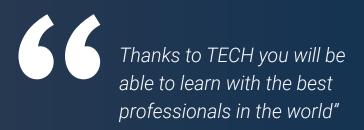
He possesses innate gifts in strategy and executive innovation, developing new ideas and backing his success with quality data. His background at **Amazon** has allowed him to manage and integrate the company's IT services in the United States. At **Microsoft** he has led a team of 104 people, responsible for providing corporate-wide IT infrastructure and supporting product engineering departments across the company.

This experience has allowed him to stand out as a high-impact manager with remarkable abilities to increase efficiency, productivity and overall customer satisfaction.



# Mr. Gauthier, Rick

- Regional IT Director Amazon, Seattle
- Senior Program Manager at Amazon
- Vice President, Wimmer Solutions
- Senior Director of Productive Engineering Services at Microsoft
- Degree in Cybersecurity from Western Governors University
- Technical Certificate in Commercial Diving from Divers Institute of Technology
- B.S. in Environmental Studies from The Evergreen State College



# tech 40 | Course Management

# Management

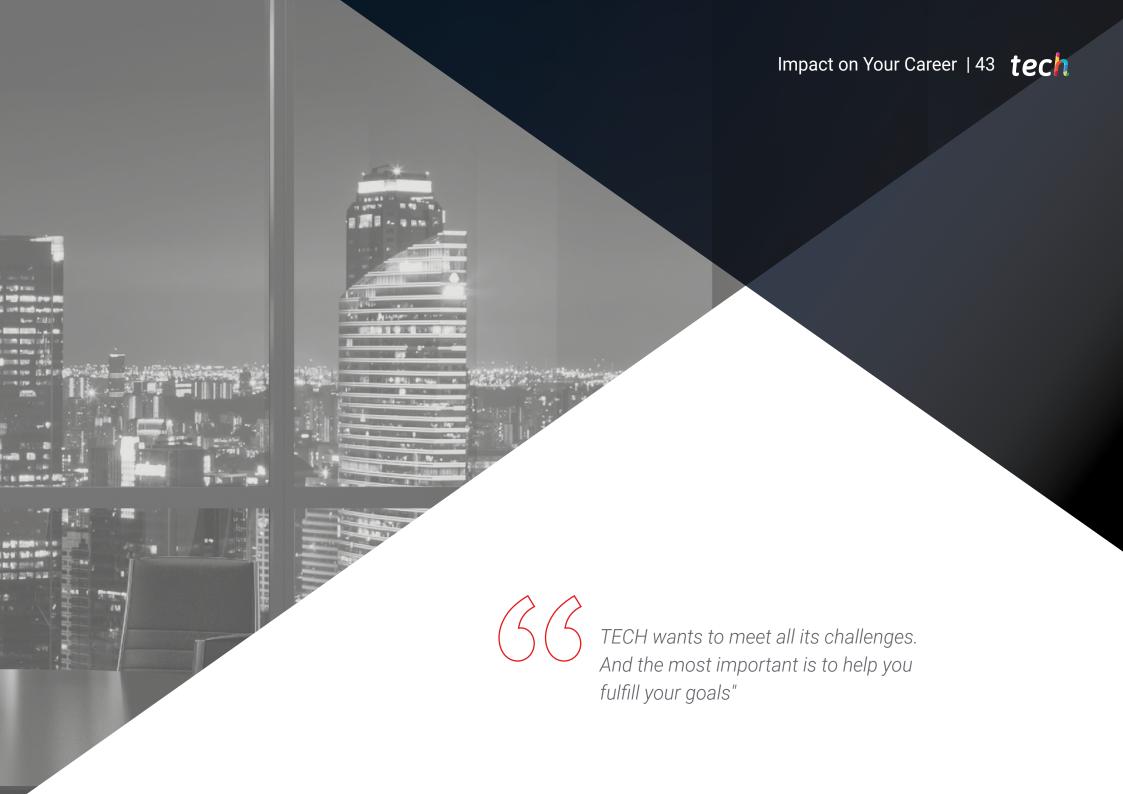


# Mr. Santana, Gustavo

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







# 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

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

Salary before **\$77,000** 

A salary increase of

25.22%

Salary after \$110,000





# tech 48 | Benefits for Your Company

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



#### **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.



# 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.



#### **Building Agents of Change**

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



#### **Increased International Expansion Possibilities**

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





# **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.

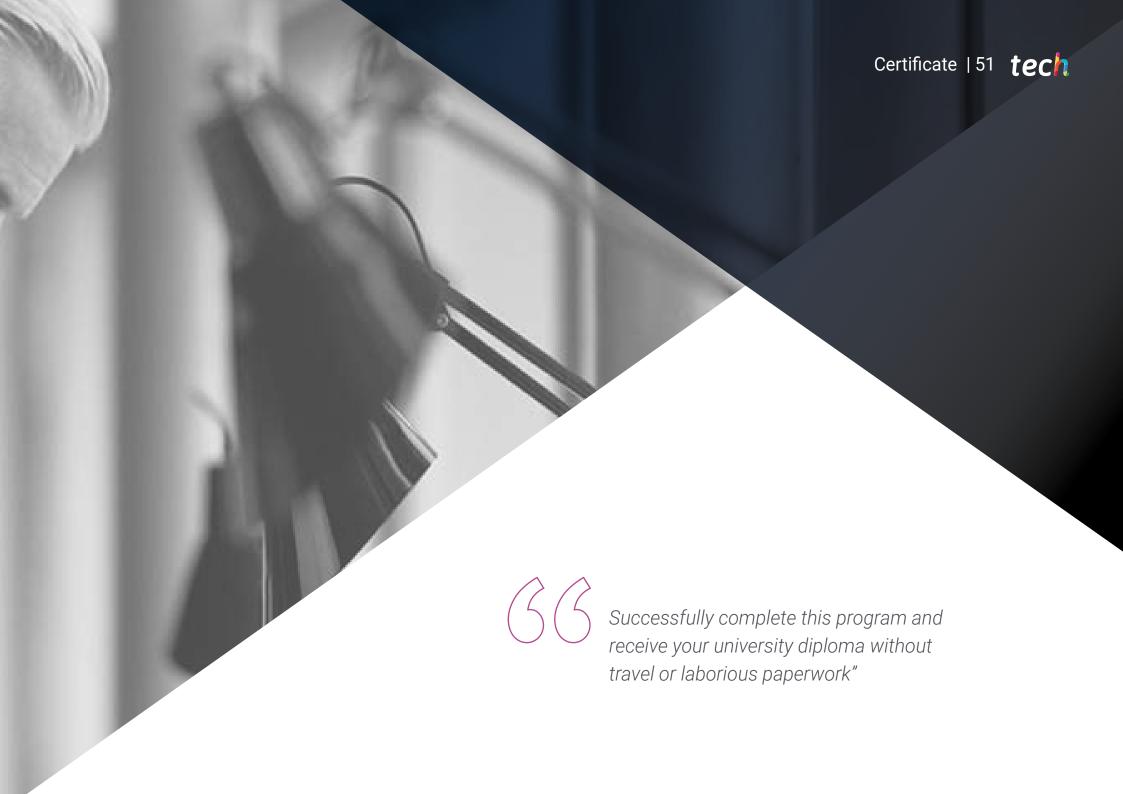


# **Increased Competitiveness**

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







# tech 52 | Certificate

This program will allow you to obtain your **Executive Development Program diploma** in **Big Data and New Digital Trends in IT** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

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

Title: Executive Development Program in Big Data and New Digital Trends in IT

Modality: online

Duration: 4 months

Accreditation: 10 ECTS



Mr./Ms. \_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

# Executive Development Program in Big Data and New Digital Trends in IT

This is a program of 250 hours of duration equivalent to 10 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



<sup>\*</sup>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.



# Executive Development Program Big Data and New Digital Trends in IT

» Modality: online

» Duration: 4 months

» Certificate: TECH Global University

» Credits: 10 ECTS

» Schedule: at your own pace

» Exams: online

