

# Postgraduate Certificate Apache Kafka



## Postgraduate Certificate Apache Kafka

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

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# 01

# Welcome

Apache Kafka is used today by thousands of organizations around the world to share massive amounts of data securely across a multitude of platforms and organizations. Because it is so widely used, learning to master this tool becomes essential for any IT or business professional who wants to boost their career with quality knowledge. That is why TECH has brought together the most knowledgeable experts in Apache Kafka to create this program, allowing students to improve their professional position by providing quality solutions in the field of analysis and large amounts of data ingestion.



Postgraduate Certificate in Apache Kafka  
TECH Global University



“

*Learn how to ingest Big Data by translating it into highly useful material”*

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 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+**  
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.

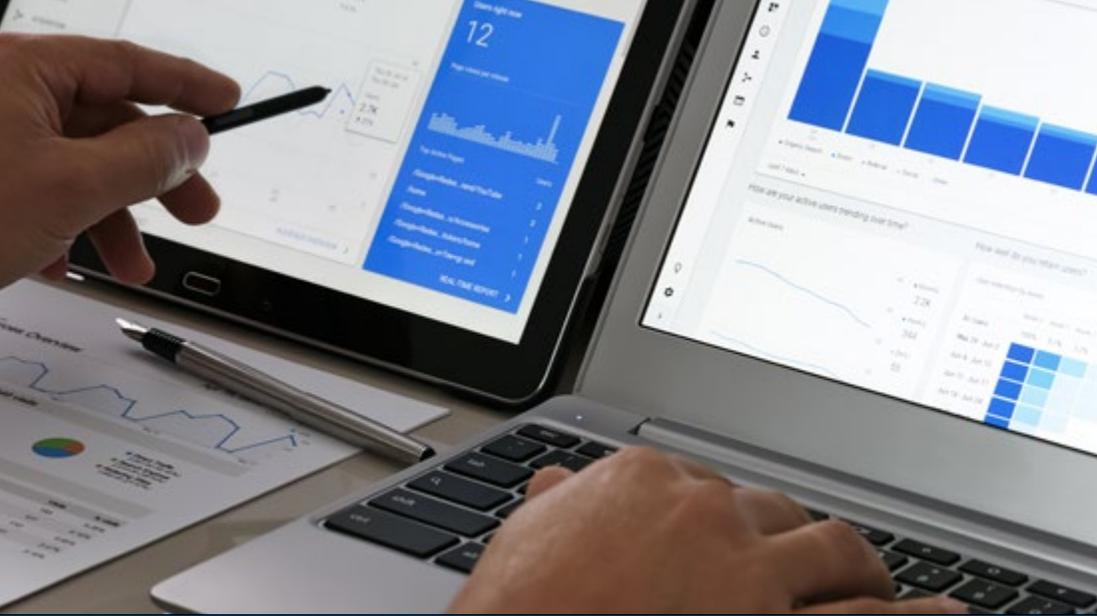
After completing this program, TECH helps students show the world their talent.



### 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

---

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

---

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

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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

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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

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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 Global University community.

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

04

# Objectives

The objective of this program is to provide its students with skills in all the crucial features of Apache Kafka so, with specialized and distinctive knowledge, they can apply for better jobs and increase their own economic and salary expectations.



“

*You will learn from professionals about the Hadoop Framework and its file system HDFS, Hadoop Distributed File System”*

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

The Postgraduate Certificate in Apache Kafka qualifies students to:

01

Know the artificial intelligence techniques applicable for massively parallelized data processing on a given data set and according to previously defined requirements

02

Know how to manage large volumes of data in a distributed manner





03

Understand the operation and characteristics of common mass data processing techniques

04

Identify commercial and open software tools oriented to statistical analysis, artificial intelligence and mass data processing

05

# Structure and Content

Being an entirely online program, the contents that students will find are designed to cover all their professional needs regarding Apache Kafka. Therefore, the structure of this Postgraduate Certificate is simple but straightforward, facilitating study with a multitude of practical examples and audiovisual support that lightens the teaching load.



“

*Enroll today and control the tools that will lead you to success: MapReduce, devised by Google in 2004, or Spark, now under the auspice of the Apache Software Foundation”*

## Syllabus

TECH's Postgraduate Certificate in Apache Kafka contains all the theoretical and practical material necessary for students to graduate mastering one of the main data management and visualization tools in the market, used by companies all over the world.

Therefore, during the 180-hour program, students learn about the use and applications of Apache Kafka in a contextual way, since the teachers have integrated numerous real case studies in order for to test the resolution of problems related to data processing through Apache Kafka.

Therefore, the present curriculum is a perfect opportunity to master this tool and get to stand out in the IT or data management departments of your organization, securing a better job position through projects with better results.

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

### Module 1

### Database Management and Data Parallelization Systems



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

TECH offers the possibility of developing this Postgraduate Certificate in Apache Kafka 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.** Database Management and Data Parallelization Systems

1.1. Conventional Databases	1.2. Non-Conventional Databases	1.3. Cloud Computing: Distributed Data Management	1.4. Tools for the Ingestion of Large Volumes of Data
1.5. Types of Parallels	1.6. Data Processing in Streaming and Real Time	1.7. Parallel Processing: Hadoop	1.8. Parallel Processing: Spark
<b>1.9. Apache Kafka</b> 1.9.1. Introduction to Apache Kafka 1.9.2. Architecture 1.9.3. Data Structure 1.9.4. Kafka APIs 1.9.5. Use Cases	1.10. Cloudera Impala		



*Your mastery of solving complicated problems with Apache Kafka will eventually earn you the reputation you need to elevate your professional status”*



# 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.

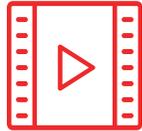
*Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.*

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.



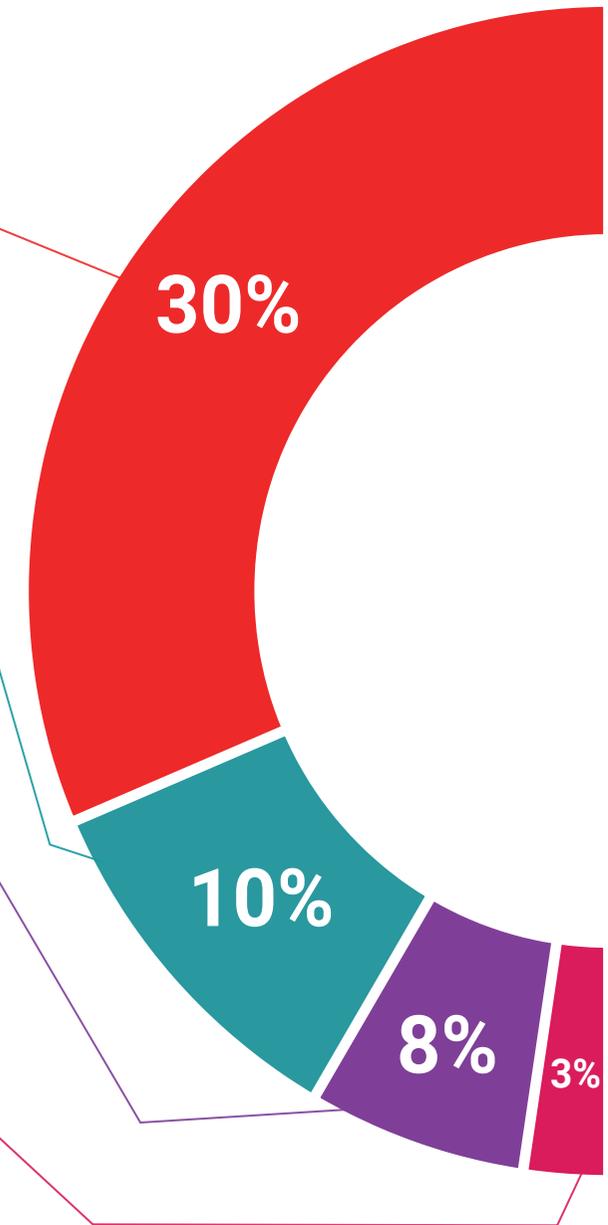
### Management Skills Exercises

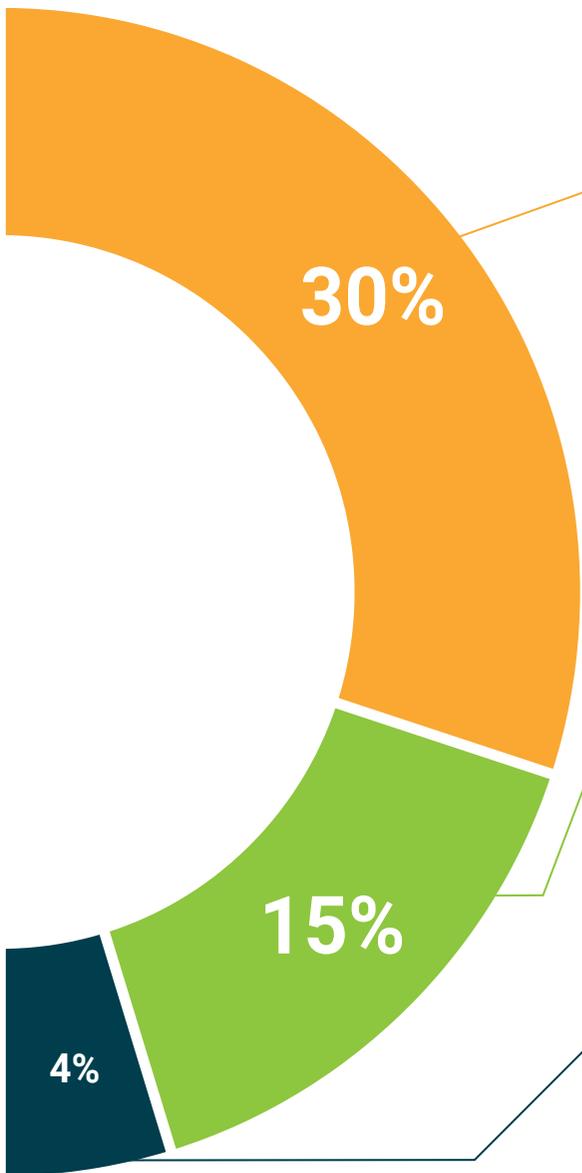
They will carry out activities to develop specific executive competencies in each thematic area. Practices and dynamics to acquire and develop the skills and abilities that a high-level manager needs to develop in the context of the globalization we live in.



### 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

This Postgraduate Certificate is aimed primarily at IT professionals with an interest in the field of data analysis and the use of Apache Kafka, although it is also available to students in the corporate and business area who wish to specialize in daily work tools. For all of them, this program is a good opportunity to obtain a comprehensive and multidisciplinary education to add quality to their daily work.





“

*Enroll now in this program in Apache Kafka by TECH and do not miss the opportunity to achieve a better professional future"*

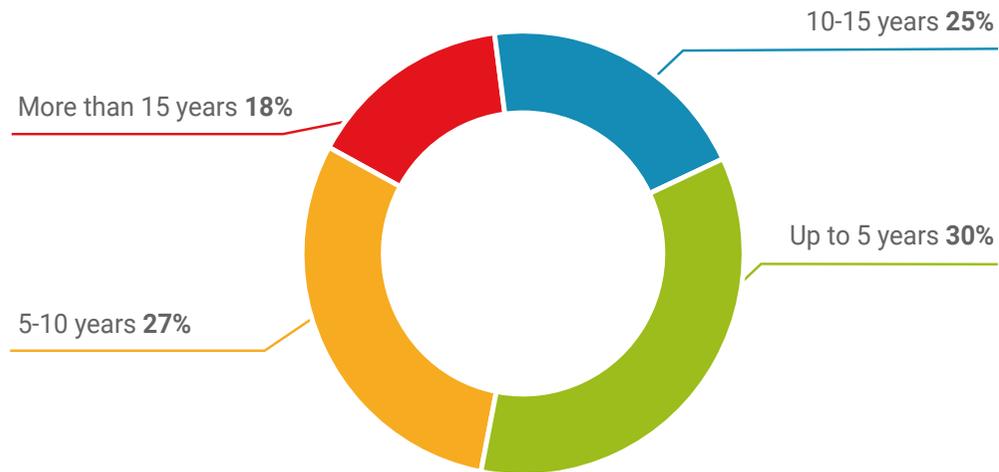
### Average Age

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

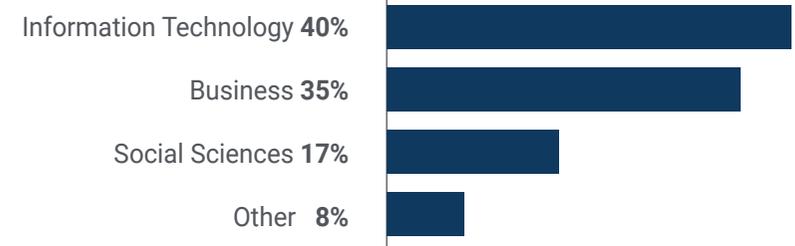
### Years of Experience

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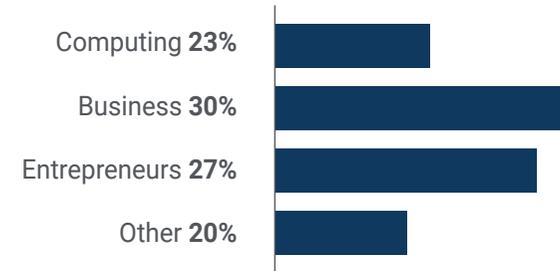
### Training

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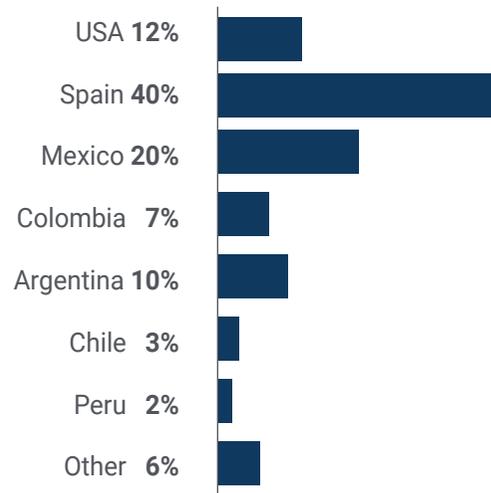
### Academic Profile

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## Geographical Distribution

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## Nuria Hernández Rodríguez

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Visual Analytics Expert

*"It was a great choice to choose this TECH program, where I was able to demonstrate my talent with data management and the use of Apache Kafka. This gave me access to a better job where, in addition to being better recognized, I could perform the tasks I was really prepared for"*

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 specialize at an international level in a booming sector that will catapult them to professional success.





“

*If you have experience in Big Data and are looking for an interesting improvement in your career while continuing to work, this is the program for you"*

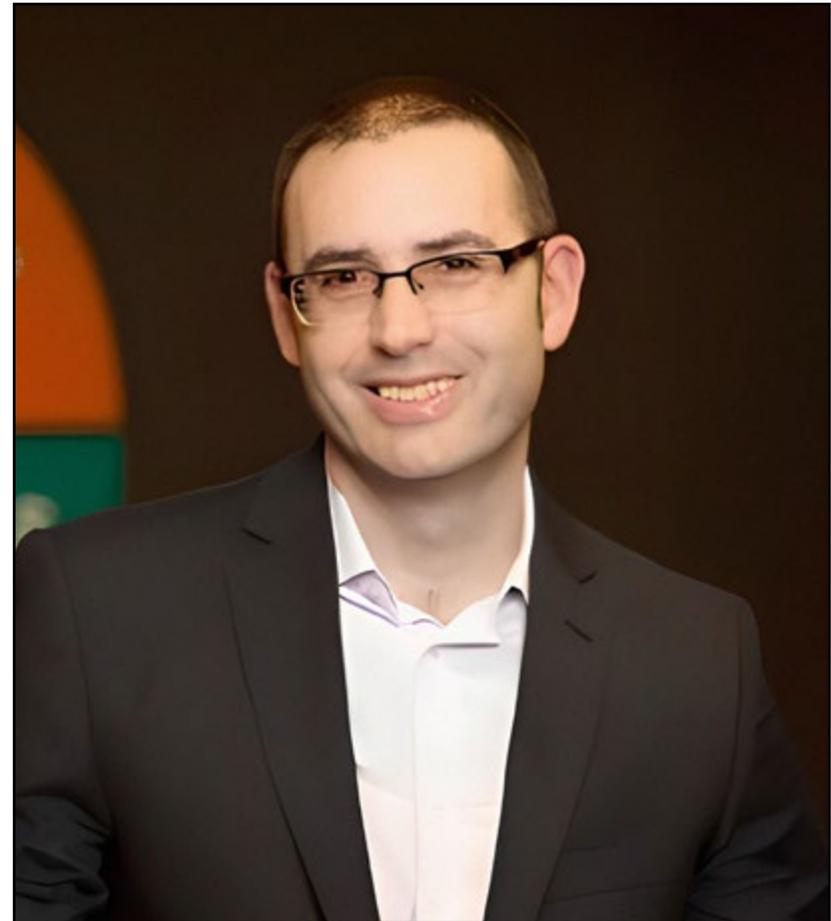
## International Guest Director

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. Almansa, Antonio

- ♦ Senior Technician: operation, engineering and architecture of the Data Center (DC) networks located in Independencia and Orduña, as well as the transport network at national level for tariffs and discharges
- ♦ Level 2 Expert: design and implementation of the networks (with technological change) of the DC of Fco. Sancha and later Manuel Tovar
- ♦ Design, implementation and integration of the Julian Camarillo DC contingency center

```
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  </head>
  <body>
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      <div class="af3">
        <div class="af4"></div>
      </div>
    </div>
    <h1>Registration</h1>
    <form action="" method="post">
      <p>Many fields</p>
      <p>And we have some question:</p>
      <!-- Add a box here -->
      <label for="subscribe-field">Would you like to recieve the news about our new proposals?</label>
      <input type="submit" value="Send">
    </form>
  </body>
</html>
```

09

# Impact on Your Career

TECH is aware of the difficulties that students may face when pursuing this type of program, which is why all efforts are made to achieve a significant improvement in their professional careers. So, in addition to the ease of being able to take this program entirely online, students are guaranteed the highest quality and adequacy of the contents to their professional aspirations, with the latest developments in Apache Kafka and all its work environment.



“

*A syllabus that will show you all aspects of data processing, developed along units prepared to take you to the control of the subject"*

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

This program is an excellent opportunity for all professionals who wish to reach their full potential and prove their worth in the workplace, getting the best out of themselves in data processing and use of the Apache Kafka tool, enabling them to master data processing.

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

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

#### When the change occurs



#### 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 benefits for a company of having a professional skilled in the use of Apache Kafka are endless. In addition to streamlining the internal data processing of the company, students will be able to provide added value in all tasks related to database processing, as well as being an important asset when it comes to processing data more efficiently.





“

*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

### **Intellectual Capital and Talent Growth**

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

---

02

### **Retaining high-potential executives to avoid talent drain**

This program strengthens the link between the company and the professional and opens new avenues for professional growth within the company.

03

### **Building agents of change**

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

---

04

### **Increased international expansion possibilities**

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



05

### **Project Development**

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

# 11

# Certificate

This Postgraduate Certificate in Apache Kafka guarantees, 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 program will allow you to obtain your **Postgraduate Certificate in Apache Kafka** 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: **Postgraduate Certificate in Apache Kafka**

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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