Postgraduate Certificate
Data Processing In Streaming

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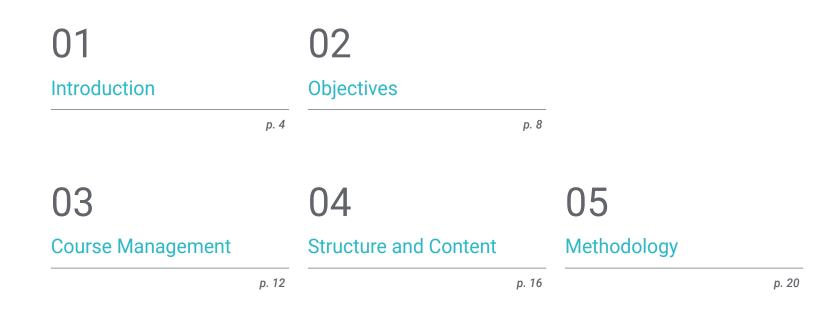
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Postgraduate Certificate
Data Processing
in Streaming

- » Modality: **online**
- » Duration: **6 weeks**
- » Certificate: **TECH Global University**
- » Credits: **6 ECTS**
- » Schedule: **at your own pace**
- » Exams: **online**

Website: **www.techtitute.com/us/information-technology/postgraduate-certificate/data-processing-streaming**

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01
Introduction

Financial institutions or large e-commerce companies are just some of the entities already using Streaming Data Processing. A technological advance that comes along with the irruption of Big Data and that requires specialized personnel for its correct treatment. This program invites the IT professional to dive into the most cutting-edge technology in this area and to gain a broader knowledge in real-time Cloud programming. All this can be achieved thanks to the extensive multimedia content and a completely online modality, which gives you the freedom to learn at any time and place.

> " Working correctly with Streaming Data Processing is a challenge for any IT professional. Specialize with this University Course and excel"

In this University Course, the IT professional will be able to offer companies and organizations an effective Streaming Data Processing, so that they can take advantage of all possible information from their customers and offer them the best possible experience. All this is achieved with the correct collection, structuring, processing and interpretation of any data source.

In this program you will learn more about the main uses of Streaming Data Processing. Students will carry out a previous statistical analysis and a study of the different programming modules, which will allow them to observe and understand data processing. Beyond the mastery of the technique, this University Course challenges the professional to reflect on the information, its ethical advantages and disadvantages.

A great opportunity for the IT professional to deepen in a field that will lead him to consolidate an up to date knowledge about Cloud environments and that will allow him to progress in his area. The 100% online modality offered by TECH gives you the possibility to access, from any device with internet connection, the video summaries, complementary readings and case studies at any time and without fixed schedules. In this way, students have greater flexibility to achieve full specialization.

This **Postgraduate Certificate in Data Processing in Streaming** contains the most complete and up-to-date program on the market. The most important features include:

- The development of practical cases presented by experts in Cloud Programming
- The graphic, schematic and practical contents of the book provide technical and practical information on those disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

Master the main streaming data applications: Apache Spark Streaming, Kafka Stream and Flink Stream, and outperform your competition"

Streaming Data Processing want to specialize? SQL will become your tool and language of choice, understanding how Spotify or Deezer use and develop their data"

Instagram, Netflix and Panda 3D have been programmed with Python. Learn in this course how to analyze data and obtain reliable business applications.

Become an expert in Maching Learning and advanced predictive modeling through this University Course.

The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

02
Objectives

During the 6 weeks of this University Course, the IT professional will be able to develop the key fundamentals of statistics, Maching Learning and data mining for understanding and analysis. In addition, you will learn about the current context and national uses of Streaming Data Processing. Case studies and a highly qualified teaching staff will help students advance in their professional field.

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Delve in this University Course in the main programming languages in Big Data and progress in your professional career"

General Objectives

- Analyze the different approaches to cloud adoption and their contexts
- Acquiring specialized knowledge to determine the right Cloud
- Develop a virtual machine in Azure
- Establish the sources of threats in application development and best practices to apply
- Assess the differences in the concrete implementations of different public cloud vendors
- Determine the different technologies applied to containers
- Identify the key aspects of a Cloud-Native adoption strategy
- Fundamentals and evaluation of the programming languages most commonly used in Big Data, necessary for data analysis and processing

Specific Objectives

♦ Analyze the process of collecting, structuring, processing, analyzing and interpreting streaming data

♦ Develop the principles of streaming processing, the current context and current use cases in the national context

♦ Develop key fundamentals of statistics, maching learning, data mining and predictive modeling for understanding data analysis and processing

♦ Analyze the main Big Data programming languages

♦ Examine the fundamentals of Apache Spark Streaming, Kafka Stream and Flink Stream

Take the step you were looking for in the Cloud sector. Achieve your objectives with this University Course. Enroll now"
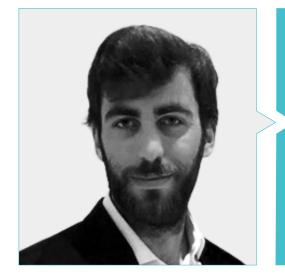
03
Course Management

The teaching staff that TECH selects for all its degrees has passed an exhaustive selection filter, where academic education and professional experience are valued. In this case, the students have at their disposal a brilliant faculty in Cloud and Big Data environments. The involvement of the teachers and their proximity will allow the IT professional to advance more quickly and with solid knowledge in an area with great demand in the technology sector.

TECH puts at your disposal a teaching team that is a reference in the sector to accompany you in this degree. Achieve your goals with the best"

Management

Mr. Bressel Gutiérrez-Ambrossi, Guillermo

- Specalist in Systems Administration and Computer Networks
- Storage and SAN Network Administrator at Experis IT (BBVA)
- Network Administrator at IE Business School
- Graduate in Computer Systems and Network Administration at ASIR (ASIR)
- Ethical Hacking course at OpenWebinar
- Powershel course at OpenWebinar

Professors

Ms. Rodríguez Camacho, Cristina

- Apis consultant and developer of microservices at Inetum
- Graduate in Health Engineering , with mention in Biomedical Engineering from the University of Malaga
- Master's Degree in Blockchain and Big Data from the Complutense University of Madrid
- Expert in DevOps & Cloud at UNIR

04

Structure and Content

The syllabus of this Postgraduate Certificate is structured in three blocks that deepen from the beginning in the Big Data treatment. Initially it addresses the Storage in Cloud Azure, one of the most reliable and economical data storage solutions in the cloud market. Also, in this program, great importance will be given to the correct management of data and its processing in Streaming. All this with a content rich in Video summaries, complementary readings and practical examples that will facilitate learning.

A highly competitive industry requires highly specialized professionals. Don't fall behind in this career"

Module 1. Real-Time Cloud Programming. Streaming

Video summaries, interactive material and essential readings, all at your disposal at any time so you can learn at your own pace with TECH"

05

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"*

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"

You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.

The student will learn to solve complex situations in real business environments through collaborative activities and real cases.

A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. 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 professional reality is taken into account.

"

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

The case method has been the most widely used learning system among the world's leading Information Technology 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 that you are presented with in the case method, an action-oriented learning method. Throughout the course, students will be presented with multiple real cases. They will have to combine all their knowledge and research, and 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.

In 2019, we obtained the best learning results of all online universities in the world.

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 university is the only one in the world authorized to employ 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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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. This methodology has 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, and financial markets and 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 training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for 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.

Practising Skills and Abilities

They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.

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.

30%

10%

8%

20%

25%

4%

3%

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 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.

Certificate

The Postgraduate Certificate in Data Processing in Streaming 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 program will allow you to obtain your **Postgraduate Certificate in Data Processing in Streaming** 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 Data Processing in Streaming**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**

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

Postgraduate Certificate in Data Processing in Streaming

This is a program of 180 hours of duration equivalent to 6 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

Dr. Pedro Navarro Illana
Rector

Unique TECH Code: AFWORD23S   techtitute.com/certificates

*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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