



Cloud Programming Services in Azure, AWS and Google Cloud

» 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/cloud-programming-services-azure-aws-google-cloud

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# tech 06 | Introduction

IT professionals who wish to specialize in Cloud programming and the main servers must be aware of the latest developments in the technology sector, in order to transfer all their information and knowledge to the projects. Security in the cloud is one of the points of great concern for companies that are reluctant to work in Cloud environments. However, with this program, students will delve into the main problems that arise in cloud computing and their solutions.

Likewise, IT professionals will gain full access to software process and programming models to complete their knowledge in a field in constant transformation and expansion. The teaching team that makes up this program has experience in this area, thus supporting a specialization that is close to the reality of the field.

Furthermore, this teaching facilitates learning thanks to a 100% online mode, which allows students to access the content with an internet connection device at any time of the day. The library of resources and real cases complement this program, which offers a great opportunity to specialize in a fielda with great demand in the technology field.

This Postgraduate Certificate in Cloud Programming Services in Azure, AWS and Google Cloud 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 Internet connection





All this, in a 100% online education, without fixed schedules and with the syllabus available from the first day. Set your own pace of learning"

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

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

The design of this program focuses on Problem-Based Learning, by means of which professionals must try to solve the different professional practice situations that arise during the academic year. For this purpose, students will be assisted by an innovative interactive video system developed by renowned experts.

Master the Cloud Computing Architecture. Delve into its main features and progress in your professional field.

Reduce risks in Cloud environments.

Offer guarantee and security to companies with this Postgraduate

Certificate. Enroll now.





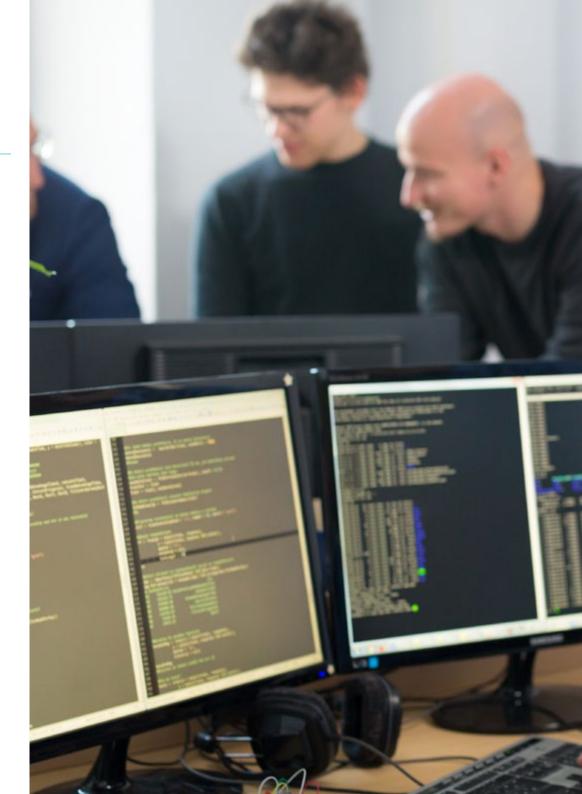


# tech 10 | Objectives



# **General Objectives**

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







# **Specific Objectives**

- Generate specialized knowledge about the cloud and the differences with traditional on-premise solutions
- Acquire specialized vocabulary fundamental to the cloud Master the terms used by different vendors
- Establish the main components of the cloud and its their uses
- Determine the vendors in the cloud market, their strengths and weaknesses, and contributions



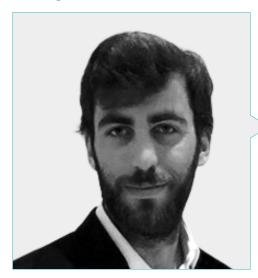
Improve your knowledge of Public, Private and Hybrid Cloud with the help of relevant teachers from the technology sector"





# tech 14 | Course Management

### 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**

### D. Bernal de la Varga, Yeray

- Big Data Solutions Architect at Orange Bank
- Big Data Architect at Bankia
- Big Data Engineer at Hewlett-Packard
- Adjunct Professor in the Master of Big Data at the University of Deusto
- Degree in IT from the Polytechnic University of Madrid
- Expert in Big Data by U-TAD



The syllabus of this Postgraduate Certificate follows the strict criteria of the teaching team that makes up this degree. Students will learn about Cloud services and technologies, the Cloud Computing ecosystem and cloud service models. Subsequently, they will delve into Azure, Aws and Google Cloud to extract from each of them the best features that can be offered to companies according to their needs and possibilities. The wide range of resources with video summaries of each topic, additional readings and the Relearning system, based on the reiteration of content, complete this study plan.

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        Array.prototype.remove=function(i) {
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     var n = this.length, k = 0, B = [];
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while (j < k && B[j] !== this[i]) j++;
        if (j == k) B[k++] = this[i];
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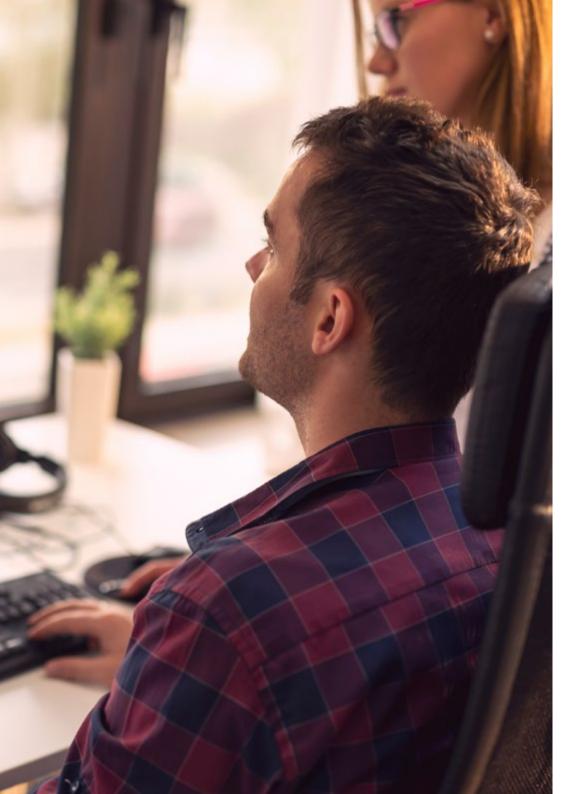
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# tech 18 | Structure and Content

### Module 1. Cloud Programming: Azure, AWS and Google Cloud Services

- 1.1. Cloud Cloud Services and Technologies
  - 1.1.1. Cloud Services and Technologies
  - 1.1.2. Cloud Terminology
  - 1.1.3. Reference Cloud Providers
- 1.2. Cloud Computing
  - 1.2.1. Cloud Computing
  - 1.2.2. Cloud Computing Ecosystem
  - 1.2.3. Types of Cloud Computing
- 1.3. Cloud Service Models
  - 1.3.1. laaS. Infrastructure as a Service
  - 1.3.2. SaaS. Software as a Service
  - 1.3.3. PaaS Platform as a Service
- 1.4. Cloud Computing Technologies
  - 1.4.1. Virtualization Systems
  - 1.4.2. Service-Oriented Architecture (SOA)
  - 1.4.3. GRID Computing
- 1.5. Architecture Cloud Computing
  - 1.5.1. Architecture Cloud Computing
  - 1.5.2. Network Types in Cloud Computing
  - 1.5.3. Cloud Computing Security
- 1.6. Public Cloud
  - 1.6.1. Public Cloud
  - 1.6.2. Public Cloud Architecture and Costs
  - 1.6.3. Public Cloud Typology
- 1.7. Private Cloud
  - 1.7.1. Private Cloud
  - 1.7.2. Architecture and Costs
  - 1.7.3. Private Cloud Typology





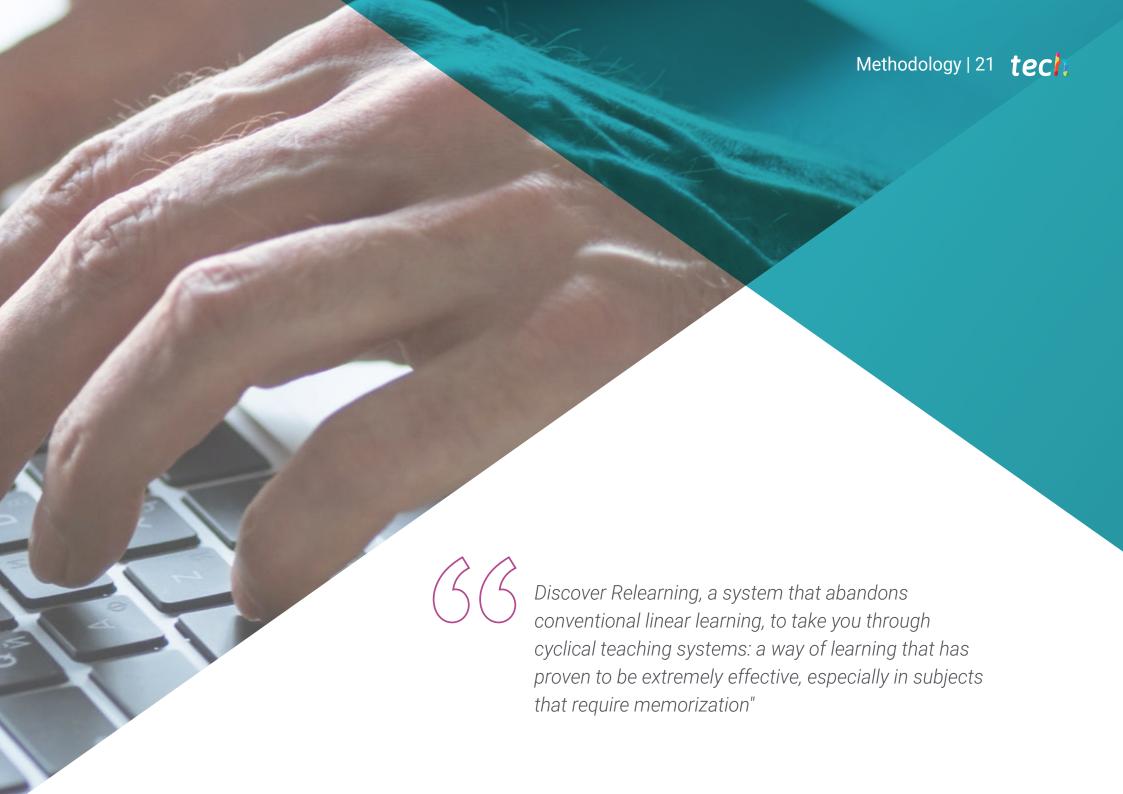
# Structure and Content | 19 tech

- 1.8. Hybrid Cloud
  - 1.8.1. Hybrid Cloud
  - 1.8.2. Architecture and Costs
  - 1.8.3. Hybrid Cloud Typology
- 1.9. Cloud Providers
  - 1.9.1. Amazon Web Services
  - 1.9.2. Azure
  - 1.9.3. Google
- 1.10. Cloud Security
  - 1.10.1. Infrastructure Security
  - 1.10.2. Operating System and Network Security
  - 1.10.3. Cloud Risk Mitigation



Have access to the entire syllabus from the first day, download it and view it at any time. A Postgraduate certificate designed to combine work and personal and environment. Enroll now"





# tech 22 | Methodology

### 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.



## Methodology | 25 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.

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.



# Methodology | 27 tech



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.





# tech 30 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Cloud Programming Services in Azure, AWS and Google Cloud** 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 Cloud Programming Services in Azure, AWS and Google Cloud

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



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

### Postgraduate Certificate in Cloud Programming Services in Azure, AWS and Google Cloud

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



<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.

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

