Postgraduate Certificate
Cloud Data Management

tech *technological university*

Postgraduate Certificate
Cloud Data Management

- » Modality: **online**
- » Duration: **12 weeks**
- » Certificate: **TECH Technological University**
- » Dedication: **16h/week**
- » Schedule: **at your own pace**
- » Exams: **online**

Website: **www.techtitute.com/us/information-technology/postgraduate-certificate/cloud-data-management**

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01
Introduction

Large companies require data management in the cloud to enable them to make better decisions, protect information content, reduce costs and ensure transparency. In this course, IT professionals will acquire the basics to establish proper data governance and use a storage system such as Cloud Azure, which provides, among other aspects, detailed control over who has access to information. A perfect opportunity to expand your knowledge with a 100% online teaching and easy access from any electronic device to the interactive resources offered by this program.

"The health, gaming or finance sectors use Azure Storage. Master it and expand your professional opportunities with this program"

Large companies and organizations already work in Cloud environments, but little by little, smaller companies have joined this technology due to its advantages. This scenario leads IT professionals to find a very favorable job scenario for advancement.

Likewise, as the network of networks has continued to grow, the volume of data and its value has also increased. Thus, as data is transferred to the cloud, every enterprise must consider an approach to data governance, along with well-defined policies and roles, to ensure security and regulatory compliance.

In this teaching, IT professionals will acquire intensive and advanced learning on Cloud Data management, delving into all aspects and technical features of Azure Cloud Storage. For this purpose, they will have a teaching team with extensive experience in the sector and in the implementation of projects in Cloud environments.

The 100% online format, without fixed schedules or in-person attendance, facilitates the distribution of the teaching load during the six weeks of duration of this program. In this way, students who wish to combine their work situation with learning can do it comfortably by connecting from any electronic device with internet connection.

This **Postgraduate Certificate in Cloud Data Management** 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 with which they are created, provide practical information on the disciplines that are essential for professional practice
- Practical exercises where the self-assessment process can be carried out 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

Create the best Disaster Recovery Plan and provide effective solutions to any disaster by applying what you have learned in this program"

Establish a Disaster Recovery Plan that provides security to companies in any Cloud environment. Enroll in this Diploma and specialize.

This Diploma is extremely useful in Cloud environments. Secure a better professional position for you by perfecting your skills.

Learn to implement effective governance strategies and respond to companies seeking security for companies immersed in Cloud environments"

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.

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.

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 are presented to them throughout the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

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Objectives

This program provides the opportunity for IT professionals to generate specialized knowledge on the management, strategies and data processing techniques most used today. They will also be able to generate virtual networks and master Storage Azure Cloud to guarantee companies and organizations for which they work an effective service in the governance and transmission of data. Thanks to this program and the latest technological content, they will be able to improve their career path.

Whatever your goal in the IT field is, TECH will help you to achieve it with a 100% online learning and relevant content"

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
- Fundamentals and evaluation of the programming languages most commonly used in Big Data, necessary for data analysis and processing

Learn with this program how to structure information correctly and prevent the companies and institutions you work for from suffering cyber-attacks or loss of their data"

Specific Objectives

- Examine a virtual machine in Azure
- Establish the different types of storage
- Evaluate the backup functions
- Manage Azure resources
- Analyze the different types of services
- Examine the different types of security
- Generate virtual networks
- Concretize the different network connections
- Generate specialized knowledge on data management, strategies and processing techniques
- Develop data governance strategies targeting people, processes, and tools
- Carry out data governance from ingest to preparation and usage
- Determine techniques to govern data transmission
- Establish data protection for authentication, security, backup and monitors

03

Course Management

In this Postgraduate Diploma, the IT professionals have a teaching staff with extensive experience in the Cloud sector, involved in the development of Blockchain, Storage and Big Data. Their extensive knowledge in this field, as well as their degree have been decisive for TECH to incorporate them into this program, which seeks to offer students an education that is at the forefront. The IT professional is thus guaranteed to be receiving a current and relevant program for their field.
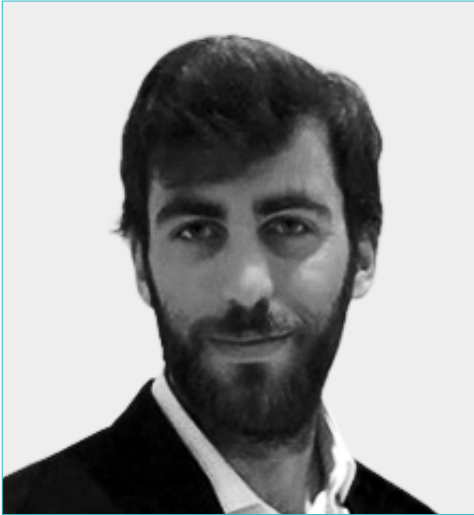
Only teaching professionals who are currently active in the technology field will be able to teach you the latest developments. You can find them here. Enroll now"

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
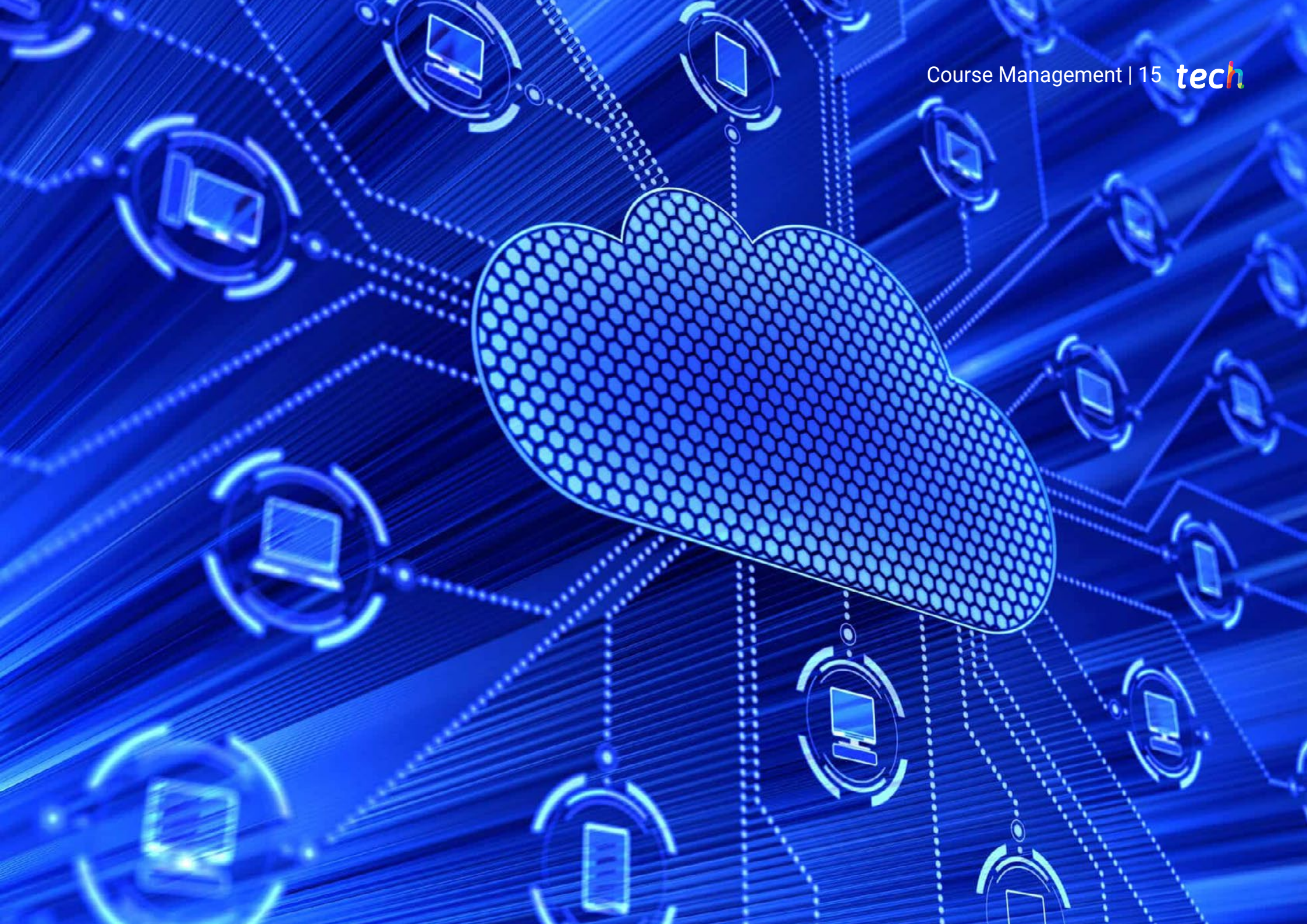
04
Structure and Content

The teaching team of this Postgraduate Certificate has developed a study plan divided into two modules. In the first, students will learn about Storage in Cloud Azure, from its installation, the types of Blob, storage or tables and queues. In the second part, they will gain full access to the knowledge of data governance, all the elements that make it up and the legal requirements that the company must comply with to avoid risks. The syllabus is supported by multimedia material, complementary readings and a Relearning system to facilitate learning.

Over the six weeks of the program, we help you to learn comfortably with a Relearning system and a wide range of multimedia content"

Module 1. Azure Cloud Storage

1.1.   MV Installation in Azure
    1.1.1.   Creation Commands
    1.1.2.   Visualization Commands
    1.1.3.   Modification Commands
1.2.   Azure Blobs
    1.2.1.   Types of Blobs
    1.2.2.   Container
    1.2.3.   Azcopy
    1.2.4.   Reversible Blob Suppression
1.3.   Managed Disk and Storage in Azure
    1.3.1.   Managed Disk
    1.3.2.   Security/Safety
    1.3.3.   Cold Storage
    1.3.4.   Replication
        1.3.4.1. Local Redundancy
        1.3.4.2. Redundancy in a Zone
        1.3.4.3. Geo-Redundant
1.4.   Azure Tables, Queues, Files
    1.4.1.   Tables
    1.4.2.   Queues
    1.4.3.   Files
1.5.   Azure Encryption and Security
    1.5.1.   Storage Service Encryption (SSE)
    1.5.2.   Access Codes
        1.5.2.1. Shared Access Signature
        1.5.2.2. Container-Level Access Policies
        1.5.2.3. Access Signature at Blob Level
    1.5.3.   Azure AD Authentication
1.6.   Azure Virtual Network
    1.6.1.   Subnetting and Matching
    1.6.2.   Vnet to Vnet
    1.6.3.   Private Link
    1.6.4.   High Availability

1.7.   Types of Azure Connections
    1.7.1.   Azure Application Gateway
    1.7.2.   Site-to-Site VPN
    1.7.3.   Point-to-Site VPN
    1.7.4.   ExpressRoute
1.8.   Azure Resources
    1.8.1.   Blocking Resources
    1.8.2.   Resource Movement
    1.8.3.   Removal of Resources
1.9.   Azure Backup
    1.9.1.   Recovery Services
    1.9.2.   Azure Agent Backup
    1.9.3.   Azure Backup Server
1.10.   Solutions Development
    1.10.1.   Compression, Deduplication, Replication
    1.10.2.   Recovery Services
    1.10.3.   Disaster Recovery Plan

Module 2. Cloud Programming. Data Governance

2.1.   Data Management
    2.1.1.   Data Management
    2.1.2.   Data Handling Ethics
2.2.   Data Governance
    2.2.1.   Classification. Access Control
    2.2.2.   Data Processing Regulation
    2.2.3.   Data Governance Value
2.3.   Data Governance. Data Science
    2.3.1.   Lineage
    2.3.2.   Metadata
    2.3.3.   Data Catalog. Business Glossary
2.4.   User and Processes in Data Governance
    2.4.1.   Users
        2.4.1.1. Roles and Responsibilities
    2.4.2 Processes
        2.4.2.1. Data Enrichment

Master Talend or Collibra, two of the main Cloud data governance tools"

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"

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 Cloud Data Management guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

Successfully complete this program and receive your postgraduate certificate without having to travel or fill out laborious paperwork"

This **Postgraduate Certificate in Data Management** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery*.

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

Title: **Postgraduate Certificate in Cloud Data Management**

Official Nº of Hours: **300 h.**

tech technological university

Awards the following

DIPLOMA

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Cloud Data Management

This is a qualification awarded by this University, equivalent to 300 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

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 EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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