

# Postgraduate Certificate Cloud Infrastructure Monitoring and Backup



## Postgraduate Certificate Cloud Infrastructure Monitoring and Backup

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtitute.com/in/information-technology/postgraduate-certificate/cloud-infrastructure-monitoring-backup](http://www.techtitute.com/in/information-technology/postgraduate-certificate/cloud-infrastructure-monitoring-backup)

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# 01

# Introduction

Companies are increasingly demanding more and more in terms of security and compliance levels, which means that monitoring and *Backup* management have become vitally important. This is why many companies demand professionals who are specialized in these areas, to facilitate the achievement of the objectives. This is the reason why TECH has created a program that seeks to provide students with the necessary skills and competencies to master these tools and measures with total control and capacity. In this way, a program is offered that delves into topics such as Availability and Security of Cloud systems, Monitoring and *Backup* typologies or Continuous Improvement. All this in a convenient 100% online mode that gives total freedom of organization.



```
63  
64 /**  
65  * Implements hook_permission().  
66  */  
67 function taxonomy_permission() {  
68     $permissions = array(  
69         'administer taxonomy' => array(  
70             'title' => t('Administer vocabularies and terms'),  
71         ),  
72     );  
73     foreach (taxonomy_get_vocabularies() as $vocabulary) {  
74         $permissions = array_merge(  
75             'edit terms in ' . $vocabulary->vid => array(  
76                 'title' => t('Edit terms in %s', array($vocabulary->name)),  
77             ),  
78             $permissions,  
79             'delete terms in ' . $vocabulary->vid => array(  
80                 'title' => t('Delete terms from %s', array($vocabulary->name)),  
81             ),  
82         );  
83     }  
84     return $permissions;  
85 }  
86  
87
```



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*Reach your full professional potential in the field  
of Cloud Infrastructure Monitoring and Backup”*

Security and compliance requirements are becoming more and more stringent for companies and this makes it essential to have an efficiently managed Monitoring and Backup strategy. In this way, it is possible to guarantee the optimal operation of services and systems or the security of data against possible threats that may arise.

This is the reason why specialized professionals with in-depth knowledge in this area have become so in demand and the reason why TECH has created a Postgraduate Certificate in Cloud Infrastructure Monitoring and Backup. This program seeks to develop the skills and competencies of the students in these tools and security measures, through the deepening of topics such as Types of Monitoring, the different Challenges and Threats, Best Practices or Strategies, Planning and Management of Cloud Backups.

All this in a 100% online mode that allows the students to combine their studies with professional and personal activities of their day to day, without time limits and without the need for travel of any kind. In addition, the achievement of the objectives will be easily achievable, thanks to the most complete, dynamic and updated contents that can be found available in the academic market.

This **Postgraduate Certificate in Cloud Infrastructure Monitoring and Backup** contains the most complete and up-to-date program on the market. The most important features include:

- ◆ The development of case studies presented by experts in Cloud Infrastructure Monitoring and Backup
- ◆ 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 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 tools and services available in the cloud to implement more efficient security strategies"*



*Get the most out of your business, thanks to the acquisition of skills in weak point detection"*

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 provide the professionals with situated and contextual learning, i.e., a simulated environment that will provide an immersive education programmed to learn in real situations.

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

*Expand your knowledge in the most efficient strategies and services in Cloud Infrastructures.*

*Acquire the ability to deal with any incident in Monitoring, with the maximum possible efficiency.*



# 02 Objectives

The objective of this Postgraduate Certificate in Cloud Infrastructure Monitoring and Backup is to improve and enhance the student's needs so that they can get the most out of the tools and *backupsecurity* measures as efficiently as possible. All this, thanks to a program that has the most complete, practical and updated content.





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*Reach your most demanding professional goals, thanks to the most complete program in Cloud Infrastructure Backup"*



## General Objectives

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- ◆ Develop specialized knowledge about what infrastructures are and what motivations exist for their transformation to the cloud
- ◆ Acquire the skills and knowledge necessary to implement and manage IaaS solutions effectively
- ◆ Acquire specialized knowledge to add or remove storage and processing capacity quickly and easily, enabling you to adapt to fluctuations in demand
- ◆ Examine the scope of Network DevOps, demonstrating that it is an innovative approach for network management in IT environments
- ◆ Understand the challenges faced by an enterprise in *Cloud* governance and how to address them
- ◆ Use security services in *Cloud* environments such as Firewalls, SIEMS and threat protection, to secure applications and services
- ◆ Establish best practices in the use of *Cloud* Services and the main recommendations when using them
- ◆ Increase user efficiency and productivity: by enabling users to access their applications and data from anywhere and on any electronic device, VDI can improve user efficiency and productivity
- ◆ Gain specialized knowledge about Infrastructure as Code
- ◆ Identify key points to demonstrate the importance of investing in backup and monitoring in organizations





## Specific Objectives

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- ◆ Determine how to establish a *backup* strategy and a monitoring strategy
- ◆ Establish the most demanded services and usage of each service
- ◆ Identify the types of *backup* and its uses
- ◆ Determine a robust *backup* strategy that meets business objectives
- ◆ Develop a business continuity plan
- ◆ Identify the types of monitoring and the purpose of each one
- ◆ Generate a proactive attitude towards incidents by establishing a scalable monitoring strategy
- ◆ Apply the different strategies on real use cases
- ◆ Identify improvement points in order to evolve the environments as the business evolves



*Reach your objectives easily and quickly, thanks to the most complete content and the most innovative technologies in terms of Cloud Infrastructure training"*

# 03

# Course Management

In order to offer an optimal teaching, TECH has formed a team of experts, composed of professionals with an outstanding track record in the teaching and professional field. In this way, the achievement of the objectives can be guaranteed, thanks to the creation of theoretical and practical contents of the highest quality in terms of Cloud Infrastructure Monitoring and *Backup*.





“

*Succeed with the best teaching team  
and master all aspects of the most  
complete syllabus in the field of Cloud  
Infrastructure Monitoring”*

## Management



### Mr. Bressel Gutiérrez-Ambrossi, Guillermo

- Specialist 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 OpenWebinars
- Powershell course at OpenWebinar



# 04

# Structure and Content

This program has a precise structure and content of the highest possible quality. It has been designed by the outstanding professionals that make up TECH's team of subject matter experts, who have poured their experience and the most specialized knowledge into the syllabus. Thus, the syllabus has the most complete, accurate and updated theoretical and practical materials, which have been created based on the most efficient pedagogical methodology, *Relearning*.





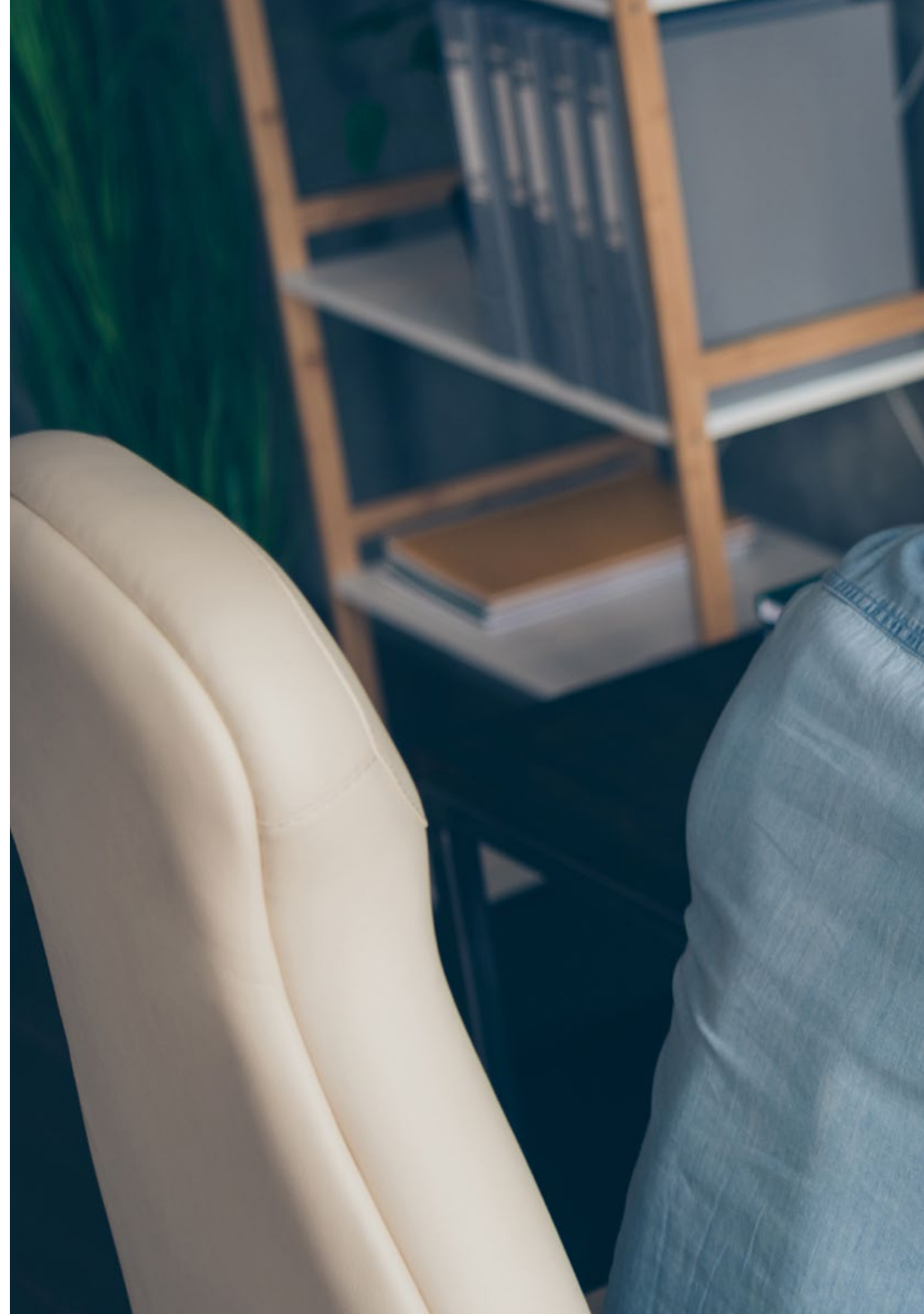


“

*TECH offers you the best contents and the most efficient pedagogical methodology so that you can reach your objectives in a precise and fast way”*

## Module 1. Cloud Infrastructure Monitoring and Backup

- 1.1. Monitoring and Backup of Cloud Infrastructures
  - 1.1.1. Benefits of Backup in Cloud
  - 1.1.2. Types of Backup
  - 1.1.3. Benefits of Monitoring in Cloud
  - 1.1.4. Types of Monitoring
- 1.2. Availability and Cloud Infrastructure System Security
  - 1.2.1. Main Factors
  - 1.2.2. Most Demanded Uses and Services
  - 1.2.3. Evolution
- 1.3. Types of Backup Services in Cloud Infrastructures
  - 1.3.1. Total Backup
  - 1.3.2. Increase Backup
  - 1.3.3. Differential Backup
  - 1.3.4. Other Types of Backup
- 1.4. Strategy, Planning and Management of backups in Cloud Infrastructures
  - 1.4.1. Establishment of Objectives and Scope
  - 1.4.2. Types of Backups
  - 1.4.3. Good Practices
- 1.5. Cloud Infrastructure Continuity Plan
  - 1.5.1. Strategy Continuity Plan
  - 1.5.2. Types of Plans
  - 1.5.3. Creating a Continuity Plan
- 1.6. Monitoring Types in Cloud Infrastructures
  - 1.6.1. Performance Monitoring
  - 1.6.2. Availability Monitoring
  - 1.6.3. Event Monitoring
  - 1.6.4. Log Monitoring
  - 1.6.5. Network Traffic Monitoring





- 1.7. Strategy, Tools and Techniques for Monitoring *Cloud* Infrastructures
  - 1.7.1. How to Set Objectives and Scope
  - 1.7.2. Types of Monitoring
  - 1.7.3. Good Practices
- 1.8. Continuous Improvement in *Cloud* Infrastructures
  - 1.8.1. Continuous Improvement in Cloud
  - 1.8.2. Key Performance Metrics (KPIs) in the Cloud
  - 1.8.3. Designing a Continuous Improvement Plan in the Cloud
- 1.9. Case Studies in *Cloud* Infrastructures
  - 1.9.1. *Backup* Case Study
  - 1.9.2. Monitoring Case Study
  - 1.9.3. Lessons Learned and Best Practices
- 1.10. Case Studies in *Cloud* Infrastructures
  - 1.10.1. Laboratory 1
  - 1.10.2. Laboratory 2
  - 1.10.3. Laboratory 3

“ Access all the content on *Continuous Improvement in Cloud Infrastructures* and expand your knowledge with a wide variety of additional material available on the *Virtual Campus*”

# 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.

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*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.





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 adapted in 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 competencies and skills in each thematic field. 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.





#### 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 assess and re-assess students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



# 06 Certificate

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



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*Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”*

This **Postgraduate Certificate in Cloud Infrastructure Monitoring and Backup** 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 certificate 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 Infrastructure Monitoring and Backup**

Official N° of Hours: **150 h.**



\*Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.



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