

Postgraduate Certificate Virtualization



Postgraduate Certificate Virtualization

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

Website: www.techtute.com/us/engineering/postgraduate-certificate/virtualization

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01

Introduction

More and more companies are looking for a profile to fill *Cloud Engineer* positions. The possibilities offered by the cloud and its price are attractive to any company. *Cloud Computing*, despite being highly developed, is a market that still has a long way to go, which is why this 100% online program teaches graduates to carry out, in an agile and effective way, the management, planning, architecture and monitoring of cloud systems. In addition, the acquisition of best practices for deploying an application in the cloud and taking advantage of its full potential to create it at the lowest cost and with the highest performance.





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*Address the virtualization process
from a practical and industrial
innovation perspective”*

According to Microsoft estimates, *Cloud Computing* is capable of creating up to 14 million jobs in the next two years. Cloud Computing provides users with access to data wherever they are through an Internet connection. Employing this technology is an advantageous tool for businesses, saving time and money by increasing productivity, improving collaboration and promoting innovation.

This course is very broad, from the justification and advantages of *OnCloud Services* compared to traditional *On Premise* models, through an analysis of Microsoft's offer and its different exploitation/interaction schemes, to a detailed analysis of each of the most significant services. In this way, it offers a complete and specialized vision of the meaning of an *OnCloud Platform*, as well as an advanced knowledge of *Azure Cloud Services*.

In addition, students are provided with the best 100% online study methodology, which eliminates the need to attend classes in person or have to comply with a predetermined schedule. In this way, in just 6 weeks they will deepen their understanding of the scope of application of *Cloud Computing*, understanding the competitive advantages it brings, so they will be positioned at the technological forefront and will be able to lead ambitious industrial projects in the present and in the future.

This **Postgraduate Certificate in Virtualization** 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 Virtualization
- ◆ 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



Companies involved in IT development and maintenance have embarked on an intensive search for qualified personnel. Specialize with TECH"

“

The possibilities for professional growth that this program offers you are immense”

The program includes in its teaching staff professionals from the sector who bring to this program the experience of their work, in addition to recognized specialists from prestigious reference societies and 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 course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

More and more companies are migrating their data to the cloud, whether public, private or hybrid.

If you are determined to become a Cloud Engineer, this program is made for you.



02

Objectives

The main objective of this innovative program is to perform a technical immersion in Cloud Computing, one of the most relevant technologies that will play a major role in technological advances and, above all, in Industry 4.0 in the coming years. The contents of this program are not classical subjects, this program specializes engineers in the application of technologies of the future, but with real applications in the present.





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Specialize now and offer companies cost savings, scalability, high performance, economies of scale and more”



General Objectives

- ◆ Examining the possibilities offered by Cloud Computing
- ◆ Develop expertise in MS Azure
- ◆ Interacting with MS Azure
- ◆ Secure Azure Services

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You will have a global vision of implementation of Cloud Computing, the protagonist of global digitalization, and the ability to apply it”





Specific Objectives

- ◆ Examine the different *Cloud* providers and Microsoft's specific offer with Azure
- ◆ Analyze the six ways in which MS Azure provides access to the administration and configuration of its services
- ◆ Examine the various computing services Azure has to offer
- ◆ Generate specialized knowledge on Azure web services platforms
- ◆ Develop the features and advantages of the "On *Cloud Storage* offered by Azure
- ◆ Determine which storage options are most beneficial in each case
- ◆ Delve into Azure IoT cloud services and MS Azure AI services
- ◆ Gain further understanding of Azure Security features and acquire advanced knowledge to ensure Data Security in the Cloud

03

Course Management

TECH has made an exhaustive search for the best IT engineers, experts in the *Cloud* world. In the field of Information and Communication Technologies, this program covers the newest and technologies and areas of study, as well as the most disruptive and surprising practical applications that can be found. The teachers will give the keys and tools that are in their hands to lead the engineers to an unthinkable horizon of professional growth.





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Experienced engineers in the world of Virtualization will guide you to lead the transformation and digital evolution of the world the digital transformation and evolution in the world"

Management



Mr. Molina Molina, Jerónimo

- ♦ Head of the Artificial Intelligence Department at Ibermática
- ♦ IA Engineer & Software Architect at NASSAT - Internet Satellite in Motion
- ♦ Senior Consultant at Hexa Ingenieros. Introducer of Artificial Intelligence (ML and CV).
- ♦ Expert in Artificial Intelligence-Based Solutions in the fields of Computer Vision, ML/DL and NLP
- ♦ Postgraduate Diploma in Business Creation and Development (Bancaixa - FUNDEUN Alicante)
- ♦ Computer Engineer, University of Alicante
- ♦ Professional Master's Degree in Artificial Intelligence from the Catholic University of Avila
- ♦ Executive MBA (European Business Campus Forum)

Professors

Mr. Domenech Espí, Plácido

- ♦ Software Architect specialized in Artificial Intelligence
- ♦ Founder and Managing Director of VISOPHY, MXND, MINDS HUB and ALICANTE.AI
- ♦ Consultant in Smart City projects and development team management
- ♦ Computer Management Engineer from the University of Alicante



04

Structure and Content

With a focus on updating the knowledge of computer engineering and from a practical and innovative business perspective, this qualification includes eminently practical content.

This program brings together in one module specialized knowledge in the different options offered by Microsoft. This program offers a complete vision of the meaning of an OnCloud Platform, as well as an advanced knowledge of Azure Cloud Services.





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This program offers a complete overview of the OnCloud Platform, as well as advanced knowledge of Azure Cloud Services”

Module 1. Communication Innovation with Cloud Computing

- 1.1. *Cloud Computing* State of the Art Online Revolution
 - 1.1.1. *Cloud Computing*
 - 1.1.2. Suppliers
 - 1.1.3. Microsoft Azure
- 1.2. Interaction Methods. Tool Configuration and Management. *Cloud Services*
 - 1.2.1. Portal
 - 1.2.2. App
 - 1.2.3. Powershell
 - 1.2.4. Azure CLI
 - 1.2.5. Azure REST API
 - 1.2.6. ARM Templates
- 1.3. Computing Available *OnCloud* Services
 - 1.3.1. Virtual Machine
 - 1.3.2. Containers
 - 1.3.3. AKS / Kubernetes
 - 1.3.4. Function (Serverless)
- 1.4. Computing Available *OnCloud* Services. *Web Apps*
 - 1.4.1. Web
 - 1.4.2. *Web Apps*
 - 1.4.3. Rest API
 - 1.4.4. *API Management*
- 1.5. Cloud Storage Systems. Security and Communications
 - 1.5.1. *Storage*
 - 1.5.2. *Data Lake*
 - 1.5.3. *Data Factory*
 - 1.5.4. *Data Services*
 - 1.5.5. Backup Copies





- 1.6. OnCloud Databases. Structured OnCloud Information. Unlimited Scalability
 - 1.6.1. Azure SQL
 - 1.6.2. PostgreSQL / MySQL
 - 1.6.3. Azure Cosmos DB
 - 1.6.4. Redis
- 1.7. *IoT. OnCloud Device Data Management and Storage*
 - 1.7.1. *Stram Nalytics*
 - 1.7.2. *Digital Twins*
- 1.8. *OnCloud Artificial Intelligence*
 - 1.8.1. *Machine Learning*
 - 1.8.2. *Cognitive Services*
 - 1.8.3. *Quantum Computing*
- 1.9. OnCloud Computing. Advanced Features
 - 1.9.1. *Security/Safety*
 - 1.9.2. *Monitoring. DataDog*
 - 1.9.3. *Application Insights*
- 1.10. *OnCloud Computing Applications*
 - 1.10.1. *LOB Scenario: Customer Relationship Management (CRM)*
 - 1.10.2. *IoTScenario: Smart City*
 - 1.10.3. *AI Scenario: Chat Bot*

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The contents of this program are aimed at experienced engineers with a great interest in the subjects studied, so the professional level is high"

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 is the most widely used learning system in the best faculties in the world. 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 program, the studies 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 8 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 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.





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.



06

Certificate

The Postgraduate Certificate in Virtualization 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 Virtualization** 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** diploma 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 Virtualization**

Official N° of Hours: **150 h.**



*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.

future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present
development language
virtual classroom



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