Postgraduate Certificate
Business Blockchain Development: Hyperledger Fabric

tech technological university

Postgraduate Certificate
Business Blockchain Development: Hyperledger Fabric

- » 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/business-blockchain-development-hyperledger-fabric**

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01
Introduction

Hyperledger Fabric is one of the main tools used in private business transactions within the Blockchain technology field. Therefore, in order to be able to participate in its development, it is necessary to have a series of new skills. This qualification offers the computer scientist or engineer all the skills to be able to develop projects effectively in Hyperledger Fabric, and it does so by deepening in aspects such as frameworks, nodes, the architecture of this Hyperledger or Chaincodes, among many others. Additionally, this program is presented in a totally online format, so that the professionals will be able to decide how, when and where to study, without interfering with their work.

Discover all the keys to successfully develop enterprise blockchain projects in Hyperledger Fabric"

Blockchain technology offers enormous possibilities in areas such as business. It supports public or private transactions by taking advantage of its main features: transactions are recorded and can be traced on the blockchain; it is transparent, since each transaction is associated with a unique user; and it is immutable, providing high security. Within this field, there are several projects such as Hyperledger, which have differentiated features.

Specifically, Hyperledger Fabric is one of the most important, and offers support for a private Blockchain dedicated to the business world. This Postgraduate Certificate in Business Blockchain Development: Hyperledger Fabric contains the most important keys for development in this specific area, and goes deeper into issues such as Docker, certification, server preparation or the structure of a Chaincode, among many others.

The whole learning process can be followed through a 100% online system that ensures that the professionals can balance their work with their studies while being guided by the best teachers in the field. Additionally, you will have at your disposal the best multimedia resources such as interactive summaries, master classes, practical exercises or explanatory videos.

This **Postgraduate Certificate in Business Blockchain Development: Hyperledger Fabric** contains the most complete and up-to-date program on the market. The most important features include:

- The development of case studies presented by Blockchain experts
- The graphic, schematic, and practical contents with which they are created, provide scientific and 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 work
- Content that is accessible from any fixed or portable device with an internet connection

Specialize in Hyperledger Fabric with this Postgraduate Certificate, which contains all the keys to develop initiatives in this field"

"*Hyperledger Fabric is one of the most important Blockchain projects: specialize in it and progress professionally in a fast way*"

Learn more about the enormous possibilities offered by Hyperledger Fabric with this specialized qualification.

This Postgraduate Certificate provides the most up-to-date knowledge in Hyperledger Fabric. Don't wait any longer and enroll.

The program's teaching staff includes professionals from the sector who contribute their work experience to this training 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 training programmed to train in real situations.

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

02
Objectives

The main objective of the Postgraduate Certificate in Business Blockchain Development: Hyperledger Fabric is to offer professionals the latest development tools in this field, so that they can program the best Blockchain solutions for the business area. To achieve this goal, this program offers high-level content, an experienced faculty and an innovative teaching methodology that emphasizes adaptation to the student's personal circumstances.

*Advance professionally thanks to your new knowledge in Hyperledger Fabric and Blockchain technology"*

General Objectives

- Generate specialized knowledge about what Hyperledger Fabric encompasses and how it works
- Examine the resources that Hyperledger provides free of charge
- Analyze the features of Hyperledger Fabric
- Facing the deployment of a Hyperledger Fabric project
- Develop Fabric's current main application case studies
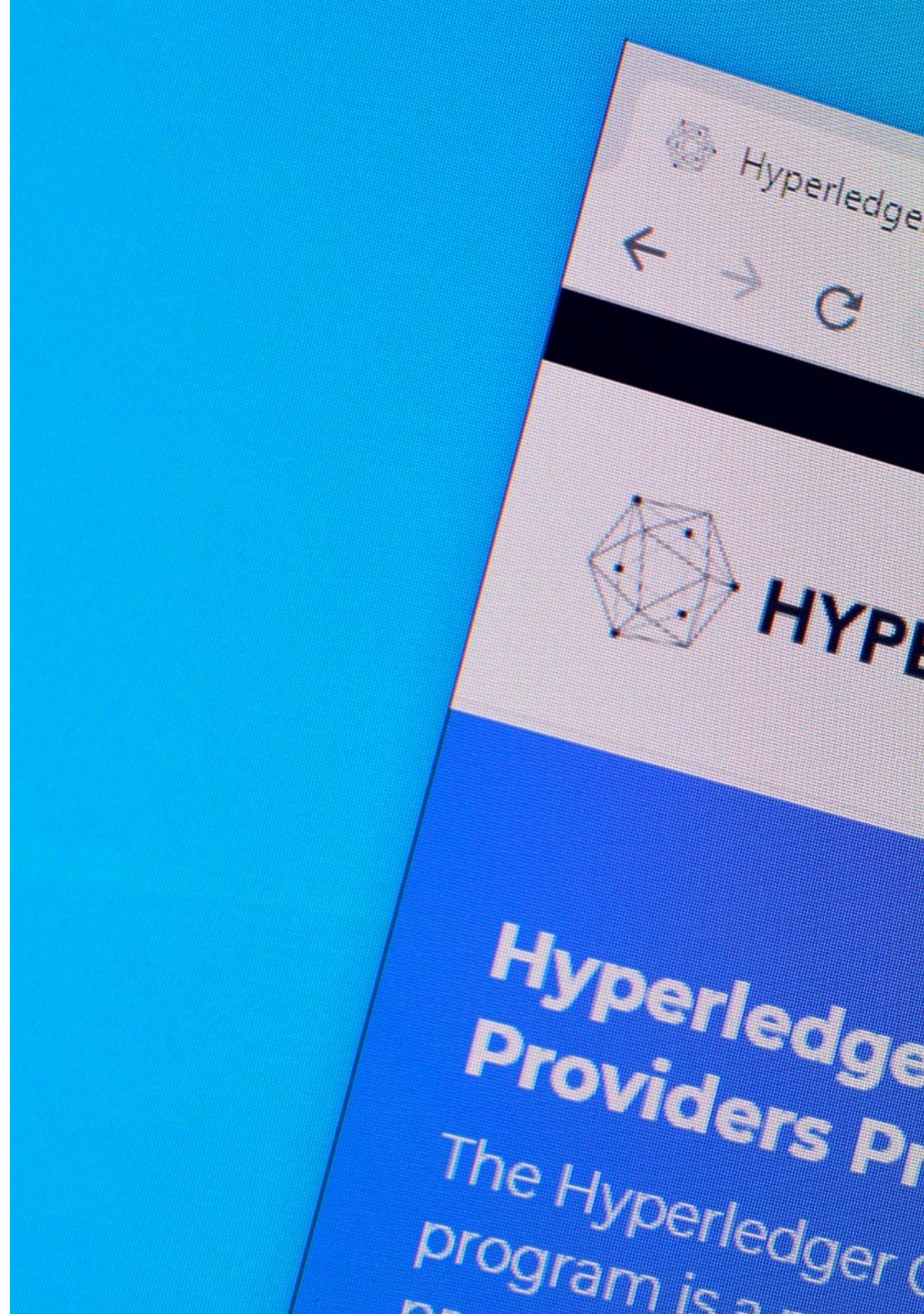
Specific Objectives

- Generate specialized knowledge about Hyperledger and Fabric
- Analyze what can be done with this technology
- Determine the inner workings of transactions
- Solve a problem with Fabric
- Deploy Fabric
- Gain experience in Fabric deployments

Master all the tools to develop enterprise Blockchains, delving into the particularities of Hyperledger Fabric"

03
Course Management

This Postgraduate Certificate in Business Blockchain Development: Hyperledger Fabric has the most experienced and expert faculty in the field, and will guide the entire learning process so that the computer scientist who enrolls can obtain the latest knowledge. As a result, at the end of your qualification, you will be able to put all the tools you have acquired directly into practice, and you will experience immediate professional progress.

This faculty member knows all the latest news about Hyperledger Fabric and will pass it on to you quickly and easily so that you can incorporate it into your work immediately"

International Guest Director

Chris Sutton is a leading professional with extensive experience in the field of technology and finance, specializing in the Blockchain area. In fact, he has held the senior position of Director of the Blockchain and Digital Assets Department at Mastercard. In addition, he has been the Founder of the consulting firm N17 Capital, in which he offers advice to companies in the field of Blockchain and digital assets. So, one of his functions has been to identify the components that make up these new tools, analyze them and create working strategies.

His professional experience has included high-level roles in leading companies in the sector, such as Oasis Pro Market, where he has performed duties as Director of Blockchain Services. In addition, he has worked as Mergers and Acquisitions Product Manager at Cisco, and as Product Manager at IBM. These positions have allowed him to stand out internationally for his ability to lead teams, develop innovative strategies and manage large-scale projects.

Throughout his career, he has participated in important technological and financial events. In this sense, Chris Sutton has given presentations and has been part of international panels, along with other leading experts in this sector. In this way, on the occasion of the 15th anniversary of the white paper on Bitcoin, he participated in the events of the FinTech week in Hong Kong. He also presented his expertise at a conference organized by Mastercard in Dubai on banking in the digital age and the impact of digital assets. Likewise, his analyses have focused on delving into the history, principles and future of the Blockchain.

In short, his strategic vision and outstanding skills in programming and algorithms have been key to his success in the international market, consolidating him as a leader in his field.
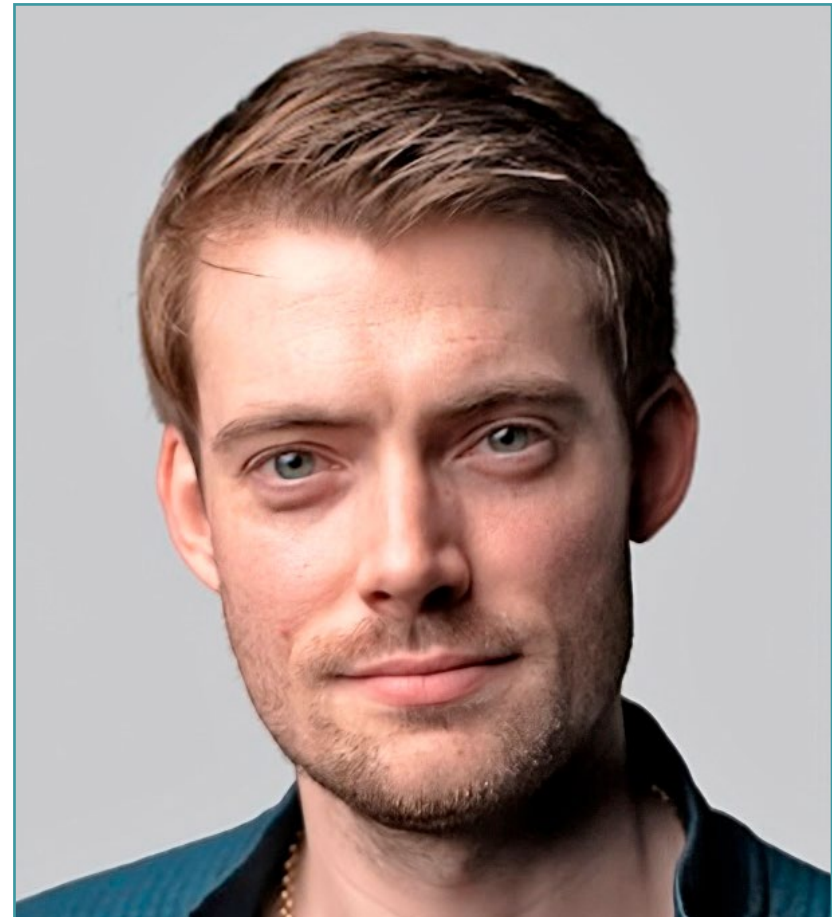
D. Sutton, Chris

- Director of Blockchain and Digital Assets at Mastercard, Miami, U.S.A.
- Founder of N17 Capital
- Director of Blockchain Services at Oasis Pro Market
- Mergers and Acquisitions Product Manager at Cisco
- Product Manager at IBM
- Contributor at Cointelegraph
- Master's degree in Financial Systems Engineering from University College London
- Bachelor's Degree in Computer Science from Florida International University

" Thanks to TECH, you will be able to learn with the best professionals in the world"

Management

Mr. Torres Palomino, Sergio

- Blockchain Architect Telefónica
- Blockchain Architect Signeblock
- Blockchain Developer Blocknitive
- Big Data Engineer Golive Services
- Big Data Engineer IECISA
- Degree in Computer Engineering from San Pablo CEU University
- Master's Degree in Big Data Architecture
- Master's Degree in Big Data and Business Analytics

Professors

Mr. Triguero Tirado, Enrique

- Blockchain Infrastructure Technical Manager at UPC-Threepoints
- Chief Technical Officer at Ilusiak
- Project Management Officer at Ilusiak and Deloitte
- ELK Engineer at Everis
- Systems Architect at Everis
- Degree in Technical Engineering in Computer Systems at the Polytechnic University of Valencia
- Master's Degree in Blockchain and its Business Applications from ThreePoints and the Polytechnic University of Valencia

Structure and Content

The contents of This Postgraduate Certificate in Business Blockchain Development: Hyperledger Fabric are compiled in a specialized module in which you will be able to deepen in different aspects of this type of Blockchain. In this way, the IT specialist will learn about the latest advances in nodes, transaction processing, Chaincodes, Docker or automatic and guided test-Network deployments, among many others.
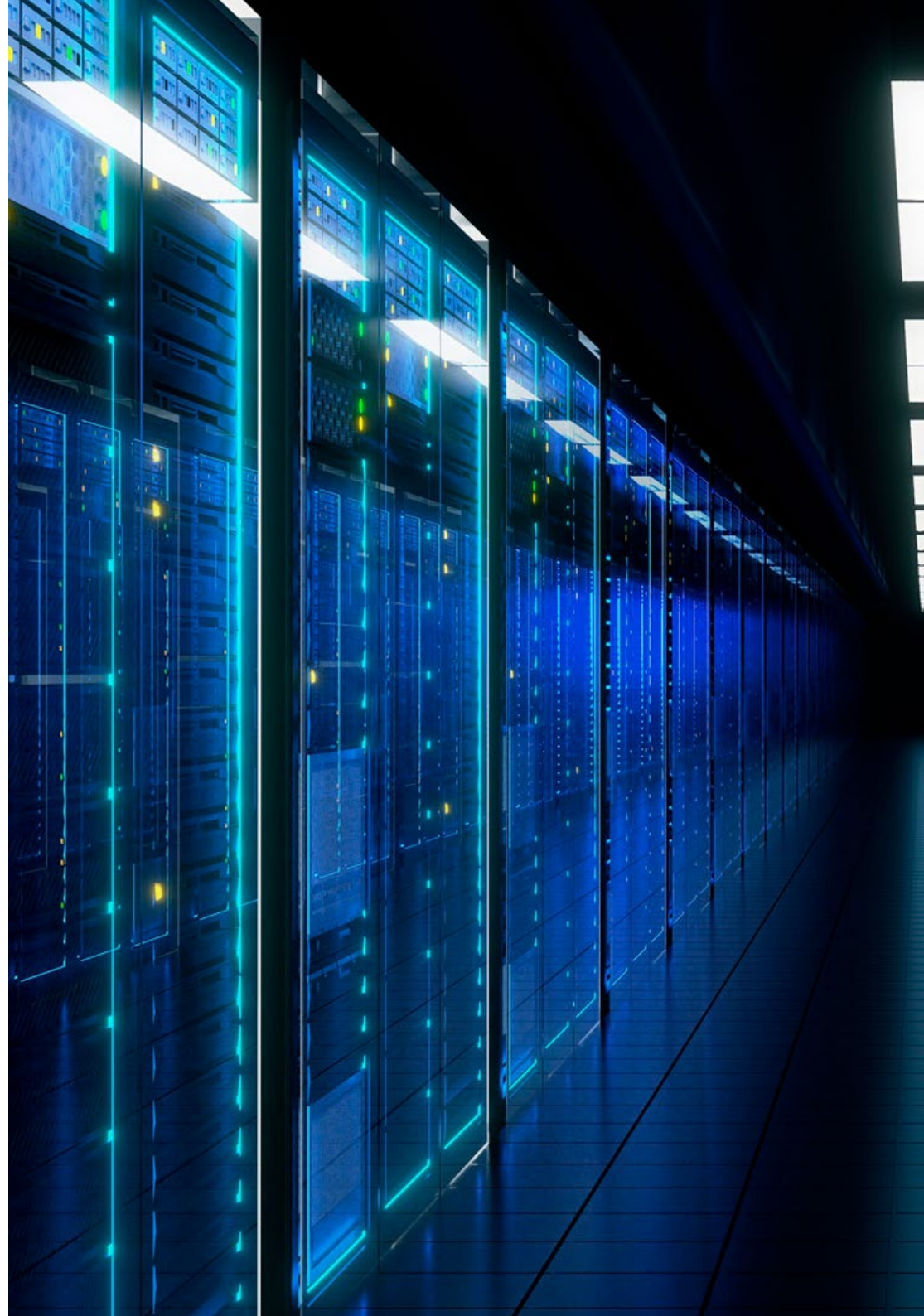
Enjoy the best content on Hyperledger Fabric in this qualification and develop Blockchain projects with great potential in the business environment"

Module 1. Corporate Blockchain Development: Hyperledger Fabric

1.1.   Hyperledger
    1.1.1.   Hyperledger Ecosystem
    1.1.2.   Hyperledger Tools
    1.1.3.   Hyperledger Frameworks

1.2.   Hyperledger Fabric – Architectural Components. State-of-the-Art
    1.2.1.   State-of-the-Art of Hyperledger Fabric
    1.2.2.   Nodes
    1.2.3.   Orderers
    1.2.4.   CouchDB and LevelDB
    1.2.5.   CA

1.3.   Hyperledger Fabric. Components of its Architecture. Process of a Transaction
    1.3.1.   Process of a Transaction
    1.3.2.   Chain Codes
    1.3.3.   MSP

1.4.   Enabling Technologies
    1.4.1.   Go
    1.4.2.   Docker
    1.4.3.   Docker Compose
    1.4.4.   Other Technology

1.5.   Pre-Requisite Installation and Environment Preparation
    1.5.1.   Server Preparation
    1.5.2.   Download Prerequisites
    1.5.3.   Download from Official Hyperledger Repository

1.6.   First Deployment
    1.6.1.   Automatic Test-Network Deployment
    1.6.2.   Guided Test NetworkDeployment
    1.6.3.   Review of Deployed Components

Fabric has some differentiating features compared to other Hyperledger projects, and with this course you will be able to master them"

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:
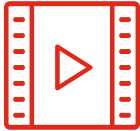
Study Material

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.

20%

25%

4%

3%
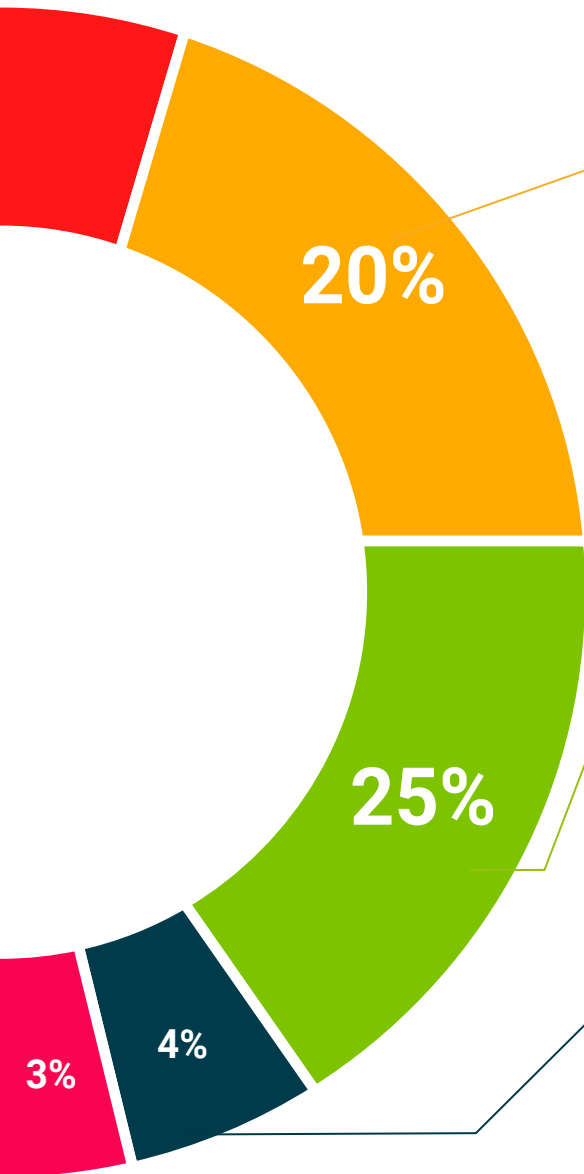
Case Studies

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

This Postgraduate Certificate in Business Blockchain Development: Hyperledger Fabric 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 university qualification without having to travel or fill out laborious paperwork"

This **Postgraduate Certificate in Business Blockcha in Development: Hyperledger Fabric** 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 Business Blockchain Development: Hyperledger Fabric**

Official Nº of Hours: **150 h.**

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Awards the followi ng
CERTIFICATE
to

Mr./Ms. _____, with identification number _____ .
For having passed and accredited the following progra m

POSTGRADUATE DIPLOMA
in

Development Hyperledger Fabric

This is a qualification awarded by this University, equivalent to 150 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

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This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.U   nique TECH Code: AFWORD23S   techtitute.com/certificates

*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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Corporate Blockchain Development: Hyperledger Fabric

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