Postgraduate Certificate
Blockchain for Asset Tokenization

tech technological university

Postgraduate Certificate
Blockchain for Asset Tokenization

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

Website: **www.techtitute.com/pk/information-technology/postgraduate-certificate/blockchain-asset-tokenization**

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01
Introduction

The Blockchain for Asset Tokenization has evolved from its initial focus on cryptocurrencies to representing a wide range of real-world assets. Their growing adoption has improved efficiency, liquidity and accessibility in financial markets and other sectors, opening up new opportunities for investors and transforming the way properties are managed and invested. Given growth of this financial modality, there is a demand for IT specialists with expertise in this field and the ability to implement tokenization solutions. For this reason, a 100% online program has been designed that provides alternative of accessing at any time and place, since it only requires an electronic device with a connection to the network.

Thanks to TECH, you will learn how to develop your own solutions with the power of Blockchain networks"

Blockchain for asset tokenization has undergone significant evolution over the years. Initially, the concept was mainly associated with cryptocurrencies, such as Bitcoin and Ethereum. These early implementations enabled the creation and transfer of digital goods, but their primary focus was on digital money function.

However, over time, the Blockchain's potential to tokenize a wide range of objects, not just digital currencies, was recognized. The idea of using technology to represent and manage real-world properties, such as real estate holdings, works of art, stocks and other financial securities, emerged. This gave rise to concept of asset tokenization, where each property is represented by a unique digital token in the block.

This is why figure of the IT specialist in this field is becoming more and more essential. Because these knowledgeable professionals are qualified to design secure and tamper-resistant solutions, which is critical to protecting digital assets and the integrity of transactions.

Considering the above, a Postgraduate Certificate in Blockchain for Asset Tokenization has been designed to provide the student with necessary tools to play a crucial role in ensuring that tokenization solutions are compliant with regulatory and policy requirements, providing confidence to investors and market participants.

In this sense, TECH offers a series of didactic resources in a 100% online format, which gives the student total freedom to coordinate their daily personal or professional activities with their study time, since they will not be subject to any fixed schedule. Additionally, with the Relearning method, professionals will learn with less effort and more performance.

This **Postgraduate Certificate in Blockchain for Asset Tokenization** 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 Finance and Blockchain.The development of practical cases presented by experts in finance and Blockchain

- 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 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 an Internet connection

With the Relearning method, you will reduce your study hours and strengthen your understanding in long run"

With this Postgraduate Certificate, you will discover the key security measures for Assets in Blockchain networks"

You will ensure assets in Blockchain networks and discover key security measures for Asset Tokenization.

Convert any type of asset into digital tokens and obtain unique advantages in the labor field.

The program includes, in its teaching staff, professionals from the sector who bring to this educational program their work experience, as well as renowned specialists from reference societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will allow the professional a situated and contextual learning, that is, a simulated environment that will provide an immersive education programmed to prepare for real situations.

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

02
Objectives

The main objective of this Certificate is for the IT professional to be at forefront of Blockchain and to acquire necessary skills to take advantage of opportunities offered by this technology in the field of digital asset transformation. For this reason, a program has been developed with a series of multimedia materials such as interactive summaries and specialized readings, all gathered in a 100% online format and stored in the virtual library that TECH provides for the student, in an unlimited manner both inside and outside the Postgraduate Certificate.

You will have the tools you need to verify authenticity of Assets"

General Objectives

- To analyze scope of the Fintech revolution

- To identify origin and reasons for Fintechs to appear

- To observe the differential value provided by Fintechs

- To develop the tokenization concept

- To analyze the tokenization process

- To identify which projects are tokenizable

- To establish tokenization advantages

- To provide an in-depth understanding of Blockchain technology and its implementation in asset tokenization

- To analyze technical specifications of tokens and their standards, Blockchain types, security in Blockchain networks, smart contracts, success stories and advantages and disadvantages of asset tokenization

- To apply the most advanced concepts and tools to carry out token and cryptocurrency trading transactions in a secure and efficient manner
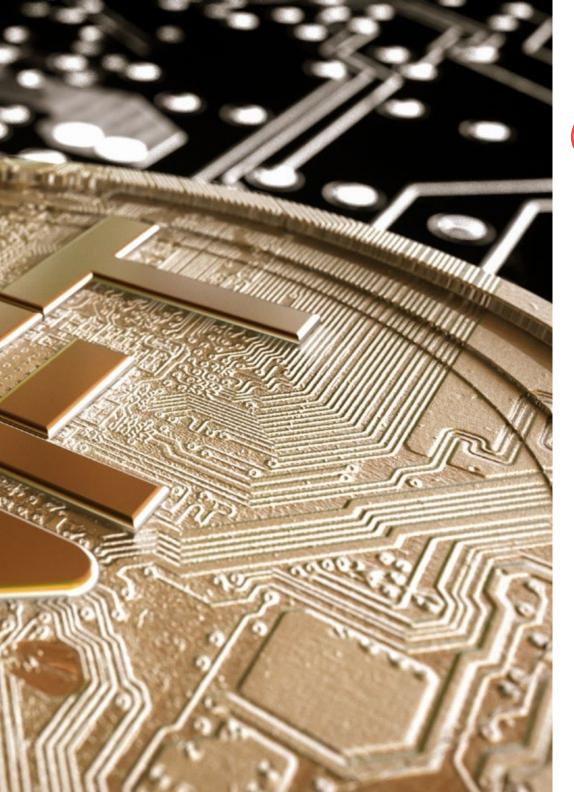
Specific Objectives

♦ To develop Token technical characteristics, including ERC20, ERC721 (NFTs) and other standards

♦ To examine different types of Assets that can be tokenized and how Blockchain networks work

♦ To study success stories and projects using Blockchain for Asset Tokenization, as well as common vulnerabilities in Blockchain networks and security measures for their protection

♦ To analyze functioning of the Ethereum Virtual Machine (EVM), including its security and transparency in execution of smart contracts and different programming languages used in this area

With didactic resources offered by TECH, you will master the ERC20 and ERC721"

03
Course Management

With the objective of offering a Certificate of excellent level, TECH has recruited experts in Tokenization and Blockchain as part of its faculty, who have been responsible for creating the most updated materials. This way, you will have opportunity to acquire knowledge from specialist with great trajectory in digital and financial field, giving the keys for your professional growth in a field that is in line with new technologies and latest developments in academic environment.

You will understand the role of smart contracts and learn how to use them efficiently and securely"

Management

Dr. Gómez Martínez, Raúl

- Founding Partner and CEO of Open 4 Blockchain Fintech
- Founding Partner of InvestMood Fintech
- General Manager of Apara
- D. in Business Economics and Finance from Universidad Rey Juan Carlos de Madrid
- Degree in Economics and Business Administration from Universidad Complutense de Madrid
- Professional Master's Degree in Economic Analysis and Financial Economics from the Complutense University of Madrid

Professors

Mr. Diner, Franco
- Blockchain Developer at Open 4 Blockchain Fintech
- Blockchain Developer at Bifrost
- IT Developer at Arbell
- Fullstack Developer at Digital House
- Systems Analyst at O.R.T. Technical School
- Degree in Information Technology from the University of Palermo
  Tutor and teacher of Coderhouse Web Development

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Structure and Content

The content of this Postgraduate Certificate focuses on several topics, such as development of Blockchain networks, security in these networks, types of assets that can be tokenized and Smart Contracts. To achieve this, TECH implements the Relearning methodology, with which students can learn effectively and in less time. In addition, the format is flexible and allows access at any time and place, since it only requires an electronic device with an Internet connection.

" *A Syllabus customized to your needs and designed under the most effective pedagogical methodology, Relearning"*

Module 1. Blockchain Networks For Asset Tokenization

1.1.   Blockchain Networks for Asset Tokenization

    1.1.1.   Blockchain for Tokenization

    1.1.2.   Blockchain networks development

    1.1.3.   Blockchain types and their characteristics

1.2.   Blockchain Networks. Blockchain Features in Asset Tokenization

    1.2.1.   Blockchain networks Benefits

    1.2.2.   Projects using these

    1.2.3.   Costs and speeds

1.3.   Blockchain network security

    1.3.1.   Common vulnerabilities in Blockchain networks and their impact on asset tokenization

    1.3.2.   Security measures for protection

    1.3.3.   Cases of hacking and fraud in projects

1.4.   Asset Tokenization

    1.4.1.   Definition of Tokenization and its connection to Blockchain

    1.4.2.   Types of tokenizable assets

    1.4.3.   Advantages and disadvantages of asset tokenization

1.5.   Token Types

    1.5.1.   Security tokens

    1.5.2.   Utility tokens

    1.5.3.   Asset tokens

1.6.   Technical characteristics of tokens and standards

    1.6.1.   ERC20 Tokens

    1.6.2.   ERC721 tokens (NFT's)

    1.6.3.   Other standards (ERC1155, ERC721A, ERC4337)

1.7.   Smart Contracts and Tokenization

    1.7.1.   Smart contracts. Smart Contracts

    1.7.2.   Advantages and disadvantages of smart contracts

    1.7.3.   Use cases for smart contracts in asset tokenization

You will harness potential and opportunities of Asset Tokenization with Bitcoin"

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.
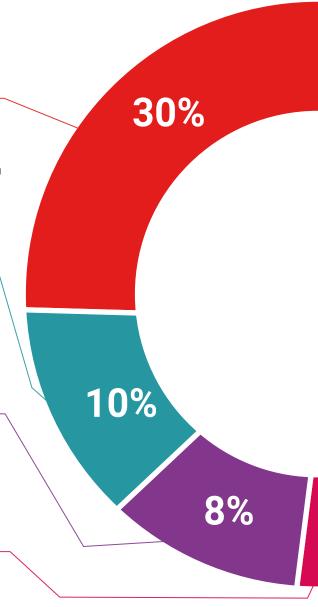
Practising Skills and Abilities

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.
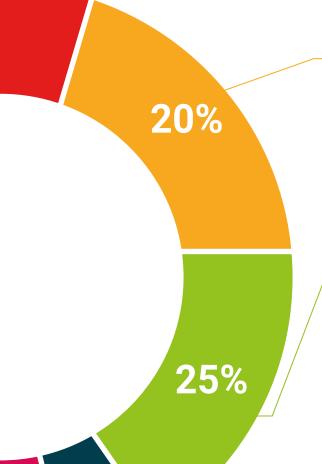
Additional Reading

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.

30%

10%

8%

tech

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.

06

Certificate

The Postgraduate Certificate in Blockchain for Asset Tokenization 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 certificate without having to travel or fill out laborious paperwork"

This **Postgraduate Certificate in Blockchain for Asset Tokenization** 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 Blockchain for Asset Tokenization**

Official Nº of Hours: **150 h.**

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Awards the following
CERTIFICATE
to
Mr./Ms. _____, with identification number _____.
For having passed and accredited the following program

POSTGRADUATE CERTIFICATE
in

Blockchain for Asset Tokenization

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

Tere Guevara Navarro
Dean

Unique 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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