**Postgraduate Diploma** Tokenization and NFTs





# **Postgraduate Diploma** Tokenization and NFTs

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Technological University
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/information-technology/postgraduate-diploma/postgraduate-diploma-tokenization-nfts

# Index



06 Certificate

# 01 Introduction

Tokenization has had a remarkable impact on the digital realm by introducing new ways to represent, exchange and monetize assets virtually. One manifestation of this is NFTs that have simplified financing by empowering digital creators and promoting the authenticity of properties. In this context, it is crucial for IT professionals to keep abreast of the advances that the technology sector has undergone in asset trading. For this reason, TECH has developed a comprehensive program with the aim of enabling professionals to acquire advanced knowledge and understand its importance in the digital economy. In this way, students will have access to a program available in a flexible 100% online modality and with TECH's endorsement.



Learn now how to create a project based on Digital Assets and take advantage of business opportunities with the most complete Postgraduate Diploma in the current academic panorama"

# tech 06 | Introduction

Tokenization and NFTs have changed the digital landscape by offering new ways to represent, exchange and monetize assets. These technologies have democratized access to investment and empowered digital creators, while promoting transparency, authenticity and decentralization in the digital world.

These new forms of digital economy have rapidlya expanded to various fields, such as digital art, music, video games, sports, among others. Over time, artists, musicians, collectors and creatives have begun to use non-fungible tokens as a way to authenticate and directly sell their digital works without intermediaries.

Therefore, the role of the computer scientist becomes crucial, as mastering Tokenization and NFTs is essential in the monetization of goods. For this reason, TECH has developed this Postgraduate Diploma with a duration of 6 months, which has the most up to date content and has been elaborated by experts in the sector. The program will therefore provide participants with a detailed understanding of asset tokenization, from its conception to its commercialization and valuation, giving them the necessary tools to understand and participate in this constantly evolving field.

This is a unique academic qualification that offers high quality multimedia materials, including interactive summaries, quick action guides and specialized readings. Besides, thanks to the implementation of the Relearning method, which consists of the reiteration of TECH, IT professionals will advance smoothly, assimilating new concepts more easily and reducing the extensive hours of study.

This is an exceptional opportunity that will allow students to be at the forefront in the Tokenization of rights and will open doors to better career opportunities. In addition, they will have the flexibility to coordinate their daily activities and work responsibilities, since they will be able to access the program from anywhere and at any time, they will only need an electronic device with an Internet connection.

This **Postgraduate Diploma in Tokenization and NFTs** 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 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 work
- Content that is accessible from any fixed or portable device with an Internet connection

You will explore new ways of investing and financing in the digital era of Tokenization"

## Introduction | 07 tech

You will be prepared to be part of the future of digital property, gaining skills to participate in the creation, management and trading of assets"

Dive into the universe of NFTs and you will discover how these tokens are transforming industries such as art.

You will discover the security measures for the protection of blockchains in digital finance.

The program's teaching staff includes professionals from the field 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.

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

# 02 **Objectives**

The main purpose of this program is to provide computer scientists with in-depth and up-to-date knowledge about emerging technologies in the field of digital assets. In this way, the student will be able to understand and explore the various opportunities offered by the field of Tokenization and NFTs, such as application development, cybersecurity, system design and asset management. In addition, a wide variety of learning resources will be available 24 hours a day, with no time constraints.

#### FINANCE REPORT



UNE ITEMS SHIPPING 16.15 MS TAXES 0.15 MP

You will be prepared to lead IT in the digital world and position yourself as an expert in the virtual economy"

# tech 10 | Objectives



## **General Objectives**

- Analyze the scope of the Fintech revolution
- Identify the origin and reasons for the emergence of Fintechs
- Observe the differential value provided by Fintechs
- Understand the concept of Tokenization
- Analyze the tokenization process
- Identify which projects are tokenizable
- Establish the advantages offered by tokenization
- Provide an in-depth understanding of Blockchain technology and its implementation in asset tokenization
- Analyze the technical specifications of Tokens and their standards, the types of Blockchain, security in Blockchain networks, smart contracts, success stories and the advantages and disadvantages of asset tokenization
- Apply the most advanced concepts and tools to carry out token trading transactions of tokens and cryptocurrencies in a secure and efficient way

Become an expert in international taxation for cryptoassets and global wealth taxation"





#### Module 1. The Asset Tokenization Process

- Planning a Tokenization Process
- Planning Tokenization Stocks
- Determine the Key Points for Tokenization to succeed

#### Module 2. Blockchain Networks for Asset Tokenization

- Blockchain Networks for Asset Tokenization Develop the technical characteristics of tokens, including ERC20, ERC721 (NFT's) and other standards
- Examine the different types of assets that can be tokenized and how Blockchain networks work
- Study success stories and projects that use Blockchain for asset tokenization, as well as common vulnerabilities in Blockchain networks and security measures for their protection
- Analyze the functioning of the Ethereum Virtual Machine (EVM), including its security and transparency in the execution of smart contracts and the different programming languages used in this field

### Module 3. Art and Collectibles NFTs

- Explore the key characteristics of non-fungible tokens (NFTs), such as their unique, indivisible and verifiable nature
- Analyze the impact of NFTs in different industries and how they are transforming the way digital products are marketed and consumed
- Delve into the technology behind NFTs, such as the Blockchain and smart contracts, and how these tools are used to create, store and verify the authenticity of non-fungible tokens

- Identify the advantages and disadvantages of NFTs, including their potential impact on transparency, security and the environment, as well as their ability to improve the tracking and control of copyrights
- Explore the opportunities and challenges that NFTs may present for the art world, culture and the global economy in general. We will look at where they can be purchased along with their purchase process

#### Module 4. Taxation of Tokens

- Examine the different types of tokens and their particular tax characteristics
- Break down the tax obligations associated with buying, selling, exchanging, mining, staking tokens, etc. including treatment of capital gains and losses, income and deductions
- Analyze how token holdings and transactions should be recorded and reported on tax returns, addressing filing requirements and deadlines
- Develop case studies and real-world examples to illustrate how the tax rules apply in different scenarios and specific situations involving tokens

# 03 Course Management

TECH, committed to offering a quality program, has carried out an exhaustive selection process of the professors that make up this program. This guarantees that students access to an education designed by recognized experts in the field. In the case of this Postgraduate Diploma, graduates will benefit from a curriculum developed by leading specialists with vast experience in Tokenization and NFT'S In this way, students will be assured of obtaining a high-level qualification that will prepare them to excel in the field of non-fungible tokens.

3 G You will harness the power of NFTs and Tokenization to empower digital creators"

# tech 14 | Course Management

## Management



## Dr. Gómez Martínez, Raúl

- Founding Partner and CEO of Open 4 Blockchain Fintech
- Founding partner of InvestMood Fintech
- Managing Director of Apara
- Doctor of company's economy and, Rey Juan Carlos University, Madrid
- Degree in Economics and Business Administration from the University Madrid Complutense University)
- Master's Degree in Economic Analysis and Financial Economics, Complutense University of Madrid

## Professors

#### Mr. Diner, Franco

- Blockchain Developer at Open 4 Blockchain Fintech
- Blockchain Developer at Blocknitive
- IT Developer at Arbell
- Fullstack Developer at Digital House
- Systems Analyst at Escuela Técnica O.R.T
- Degree in Information Technologies in the University of Palermo
- Tutor and teacher at Coderhouse Web Development

### Mr. García Gorriti, Juan

- Consultant specialized in corporate taxation
- Specialist in Blockchain and cryptoassets
- Entrepreneur helping with the creation of innovative companies from the legal/tax branch
- Private teaching in the legal and administrative field

#### Mr. Gratacós Sánchez de Rivera, Ignacio

- Events Staff Coordinator at Alternativa Eventos
- Double Degree in Law and Business Administration from the Rey Juan Carlos University
- Expert in E-Commerce by the Rey Juan Carlos University
- Expert in Digital Marketing from the Rey Juan Carlos University

## Course Management | 15 tech



### Mr. Saiz De Pedro, Marcos Manuel

- Double Degree in Law and Business Administration and Management
- Degree in Business Administration and Management from the Ludwig Maximilians Universität
- Degree in Telecommunication Technologies and Services from the Polytechnic University
  of Madrid

### Mr. González Serradilla, Miguel Ángel

- Member of the Board of the Faculty of Economics and Business Sciences
- Delegate of the Law Degree at Rey Juan Carlos University
- Delegate of the Degree in Business Administration and Management at Rey Juan Carlos University
- Member of the National Council of Law Students

### Mr. Mateo Castro, Manuel

- Management of metrics development for results analysis at Ospina Abogados
- Billing Management at FACE S.L.
- Degree in Business Administration and Management from the Business & Marketing School
- Expert in Global Marketing Management by the Business & Marketing School



A unique, key, and decisive educational experience to boost your professional development"

# 04 Structure and Content

This program has been elaborated with a complete syllabus where the student will delve into the Fintech industry and Blockchain technology in the field of asset tokenization. Therefore, they will learn about new business models, including unmet needs and customer expectations. You will also develop Blockchain networks, the different types, their characteristics and a tour of the buying and selling of tokens and the associated means of payment. All this in a completely online format and that added to the Relearning methodology, guarantees the effective learning of the graduate with less effort and more performance.



Optimize your study time and maximize your information retention with TECH's Relearning method"

# tech 18 | Structure and Content

### Module 1. The Asset Tokenization Process

- 1.1. Asset Tokenization
  - 1.1.1. Asset Tokenization
  - 1.1.2. Parallels with traditional emissions
  - 1.1.3. Differences with traditional emissions
- 1.2. Tokenizable projects
  - 1.2.1. Business projects
  - 1.2.2. Community management with tokens
  - 1.2.3. Single Asset Tokens
- 1.3. Tokens to be issued: Main features
  - 1.3.1. Security tokens and STOs
  - 1.3.2. Utility tokens and STOs
  - 1.3.3. NFTs
  - 1.3.4. Differences between Tokens and Cryptocurrencies and ICOs
- 1.4. Advantages of Tokenization
  - 1.4.1. Investment Fundamentals
  - 1.4.2. Liquidity
  - 1.4.3. Security/Safety
  - 1.4.4. Transparency
  - 1.4.5. Authentication
  - 1.4.6. Communications Management
- 1.5. The Asset Tokenization Process Conceptualization of the project
  - 1.5.1. The design of the White Paper
  - 1.5.2. Writing a White Paper
  - 1.5.3. Content a White Paper
- 1.6. The Tokenization Process II: Placement of tokens
  - 1.6.1. Target Audience
  - 1.6.2. The pre-sales
  - 1.6.3. Direct placement
- 1.7. The Tokenization III Process: assignation of tokens
  - 1.7.1. Means of Payment
  - 1.7.2. Cold wallet
  - 1.7.3. Pooled wallet

## Structure and Content | 19 tech

- 1.8. The secondary token market: Bilateral market
  - 1.8.1. Liquidity for the tokenist
  - 1.8.2. Bilateral trading
  - 1.8.3. Advantages and Disadvantages
- 1.9. The secondary token market: Exchanges
  - 1.9.1. Entry requirements
  - 1.9.2. Characteristics of token trading on the exchange
  - 1.9.3. Advantages and Disadvantages
- 1.10. Valuation of tokens
  - 1.10.1. Market value
  - 1.10.2. Theoretical value
  - 1.10.3. Investment opportunities

#### Module 2. Blockchain Networks for Asset Tokenization

- 2.1. Blockchain Networks for Asset Tokenization
  - 2.1.1. Blockchain for Tokenization
  - 2.1.2. Development of Blockchain Networks
  - 2.1.3. Types of Blockchain and their characteristics
- 2.2. Blockchain Networks. Blockchain Characteristics of in Asset Tokenization
  - 2.2.1. Benefits of Blockchain Networks
  - 2.2.2. Projects that use them
  - 2.2.3. Costs and speeds
- 2.3. Security in Blockchain Networks
  - 2.3.1. Common vulnerabilities in Blockchain networks and their impact on asset tokenization
  - 2.3.2. Security measures for their protection
  - 2.3.3. Cases of hacks and frauds in projects
- 2.4. Asset Tokenization
  - 2.4.1. Definition of Tokenization and its Connection to Blockchain
  - 2.4.2. Types of Assets I Can Own
  - 2.4.3. Advantages and Disadvantages of Asset Tokenization

## tech 20 | Structure and Content

- 2.5. Type of Tokens
  - 2.5.1. Security tokens
  - 2.5.2. Utility tokens
  - 2.5.3. Asset Tokens
- 2.6. Technical characteristics of tokens and standards
  - 2.6.1. ERC20 Tokens
  - 2.6.2. ERC721 tokens (NFT's)
  - 2.6.3. Other standards (ERC1155, ERC721A, ERC4337)
- 2.7. Smart Contracts and Tokenization
  - 2.7.1. Smart contracts. Smart Contracts
  - 2.7.2. Advantages and disadvantages of smart contracts
  - 2.7.3. Utilization cases of smart contracts in asset tokenization
- 2.8. Bitcoin in Tokenization
  - 2.8.1. Bitcoin in Tokenization. Contextualization
  - 2.8.2. Possibilities with Bitcoin in Tokenization
  - 2.8.3. Advantages and Disadvantages of Tokenization
- 2.9. Ethereum in Tokenization
  - 2.9.1. Ethereum in Tokenization. Contextualization
  - 2.9.2. Possibilities with Ethereum in Tokenization
  - 2.9.3. Advantages and Disadvantages of Tokenization
- 2.10. EVM Operations
  - 2.10.1. Ethereum Virtual Machine
  - 2.10.2. Operation
  - 2.10.3. Security and transparency in the execution of smart contracts
  - 2.10.4. Programming Languages

### Module 3. Art and Collectibles NFTs

#### 3.1. NFTs

- 3.1.1. NFTs
- 3.1.2. Key Features
- 3.1.3. Examples of popular NFTs
- 3.2. NFTs and the art world
  - 3.2.1. Changes in the Video Art Industry
  - 3.2.2. Examples of art NFTs and their value in the market
  - 3.2.3. Impact of NFTs on artists
- 3.3. NFTs as collectors' items
  - 3.3.1. The NFTs as collectors' items
  - 3.3.2. Examples of Heritage popular NFTs and their value in the market
  - 3.3.3. NFTs and their potential to expand the collectibles market
- 3.4. Social Impact of NFTs
  - 3.4.1. Social Benefits of NFTs
  - 3.4.2. NFTs for Communities Creation
  - 3.4.3. Opportunities NFTs offer for the world of art and culture
- 3.5. Advantages and Disadvantages of NFTs
  - 3.5.1. The end of counterfeiting
  - 3.5.2. Vulnerabilities in the security of NFTs
  - 3.5.3. NFTs and their Impact on the Environment
- 3.6. Technology behind NFTs
  - 3.6.1. Blockchain and its role in the creation of NFTs
  - 3.6.2. Smart Contracts and its Use in the creation of NFTs
  - 3.6.3. Creation and verification of NFTs
- 3.7. Creation of NFTs and royalties
  - 3.7.1. Copyrights
  - 3.7.2. Secondary market control
  - 3.7.3. Transparency and monitoring

## Structure and Content | 21 tech

#### 3.8. NFT Markets

- 3.8.1. Market platforms
- 3.8.2. Purchasing Process
- 3.8.3. Value and demand
- 3.9. NFTs in different industries
  - 3.9.1. NFTs in the Music Industry
  - 3.9.2. NFTs in the Video Sports Industry
  - 3.9.3. NFTs in the Video Game Industry
- 3.10. The Future of NFTs
  - 3.10.1. Trends in the of NFTs Market
  - 3.10.2. Changes in the near future
  - 3.10.3. The impact of NFTs on the global economy

#### Module 4. Taxation of Tokens

- 4.1. Indirect taxes
  - 4.1.1. Indirect taxes Features
  - 4.1.2. Types and examples of indirect taxes
  - 4.1.3. Indirect taxes applied to tokens
- 4.2. Taxation of the purchase of a token (VAT)
  - 4.2.1. Application of indirect taxes on the different types of tokens
  - 4.2.2. Types, liquidations and deadlines for their presentation
  - 4.2.3. Methods of control by the administration
- 4.3. Indirect taxes Relevant Features
  - 4.3.1. direct taxes
  - 4.3.2. Types and examples of Direct taxes
  - 4.3.3. Income taxes
- 4.4. Wealth Taxes
  - 4.4.1. Concept of the Tax
  - 4.4.2. Assets on which Wealth Tax is levied
  - 4.4.3. Countries of Application

- 4.5. Other direct taxes
  - 4.5.1. Features
  - 4.5.2. Examples of these Direct Taxes
  - 4.5.3. Countries of Application
- 4.6. Token Sale Taxation. Income
  - 4.6.1. Application of Direct taxes on the different types of tokens
  - 4.6.2. Different types of token yields
  - 4.6.3. Income
  - 4.6.4. Different Wealth Taxes at a global level
  - 4.6.5. Others
- 4.7. Other Taxes to be applied
  - 4.7.1. Informative declarations
  - 4.7.2. Examples, deadlines and information in informative returns
  - 4.7.3. Other tax matters
- 4.8. International Taxation
  - 4.8.1. International Taxation Principles
  - 4.8.2. European Union
  - 4.8.3. Analysis of different regulations for the same operation
- 4.9. Tax Havens
  - 4.9.1. Features and Types
  - 4.9.2. Prevention and Control of Tax Havens
  - 4.9.3. Influence on cryptoassets
- 4.10. Tax Planning
  - 4.10.1. Tax Planning Concept
  - 4.10.2. Tax planning for individuals and companies
  - 4.10.3. International taxation for cryptoassets (CBDCs) Evolution and trends

# 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"

## tech 24 | Methodology

### 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.

# Methodology | 25 tech



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.

# tech 26 | Methodology

## **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.



## Methodology | 27 tech

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.



# tech 28 | Methodology

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.

30%

10%

8%

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.

## Methodology | 29 tech



#### **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.



20%

25%

# 06 **Certificate**

The Postgraduate Diploma in Tokenization and NFTs guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.



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

# tech 32 | Certificate

This **Postgraduate Diploma in Tokenization and NFTs** 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 Diploma** issued by **TECH Technological University** via tracked delivery\*.

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

Title: **Postgraduate Diploma in Tokenization and NFTs** Official N° of Hours: **600 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

technological university

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