

Postgraduate Certificate Cryptocurrency and Blockchain Security



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- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online
- » Target Group: University Graduates who have previously completed any of the degrees in the fields of Social and Legal Sciences, Administrative and Business Sciences.

Website: www.techtute.com/us/school-of-business/postgraduate-certificate/cryptocurrency-blockchain-security

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01 Welcome

The interest in using cryptocurrencies and Blockchain technology in the business scenario has increased substantially and with it the need to protect information and IT assets. In this context, the most sought-after professionals are those who manage to lead the IT transformation process through an excellent command of topics such as cryptography, privacy and traceability in cryptocurrency operations, security in TOR networks and VPNs, and user and permissions management. That is why TECH provides this program where the most up-to-date contents in this field are gathered in a 100% online format. Through this program, graduates will be able to work successfully in technological and financial consulting, leading the most complex and outstanding projects.



Postgraduate Certificate Cryptocurrency and Blockchain Security.
TECH Global University



“

With this 100% online program you will gain the management skills most sought after by the financial sector to lead its digital transformation and implement innovative cybersecurity strategies”

02

Why Study at TECH?

TECH is the world's largest 100% online business school. It is an elite business school, with a model based on the highest academic standards. A world-class center for intensive managerial skills education.



“

TECH is a university at the forefront of technology, and puts all its resources at the student's disposal to help them achieve entrepreneurial success"

At TECH Global University



Innovation

The university offers an online learning model that balances the latest educational technology with the most rigorous teaching methods. A unique method with the highest international recognition that will provide students with the keys to develop in a rapidly-evolving world, where innovation must be every entrepreneur's focus.

"*Microsoft Europe Success Story*", for integrating the innovative, interactive multi-video system.



The Highest Standards

Admissions criteria at TECH are not economic. Students don't need to make a large investment to study at this university. However, in order to obtain a qualification from TECH, the student's intelligence and ability will be tested to their limits. The institution's academic standards are exceptionally high...

95% | of TECH students successfully complete their studies



Networking

Professionals from countries all over the world attend TECH, allowing students to establish a large network of contacts that may prove useful to them in the future.

+100000

executives prepared each year

+200

different nationalities



Empowerment

Students will grow hand in hand with the best companies and highly regarded and influential professionals. TECH has developed strategic partnerships and a valuable network of contacts with major economic players in 7 continents.

+500

collaborative agreements with leading companies



Talent

This program is a unique initiative to allow students to showcase their talent in the business world. An opportunity that will allow them to voice their concerns and share their business vision.

After completing this program, TECH helps students show the world their talent.



Multicultural Context

While studying at TECH, students will enjoy a unique experience. Study in a multicultural context. In a program with a global vision, through which students can learn about the operating methods in different parts of the world, and gather the latest information that best adapts to their business idea.

TECH students represent more than 200 different nationalities.



TECH strives for excellence and, to this end, boasts a series of characteristics that make this university unique:



Learn with the best

In the classroom, TECH's teaching staff discuss how they have achieved success in their companies, working in a real, lively, and dynamic context. Teachers who are fully committed to offering a quality specialization that will allow students to advance in their career and stand out in the business world.

Teachers representing 20 different nationalities.



At TECH, you will have access to the most rigorous and up-to-date case analyses in academia"



Analysis

TECH explores the student's critical side, their ability to question things, their problem-solving skills, as well as their interpersonal skills.



Academic Excellence

TECH offers students the best online learning methodology. The university combines the *Relearning* methodology (the most internationally recognized postgraduate learning methodology) with Harvard Business School case studies. A complex balance of traditional and state-of-the-art methods, within the most demanding academic framework.



Economy of Scale

TECH is the world's largest online university. It currently boasts a portfolio of more than 10,000 university postgraduate programs. And in today's new economy, **volume + technology = a groundbreaking price**. This way, TECH ensures that studying is not as expensive for students as it would be at another university.

03

Why Our Program?

Studying this TECH program means increasing the chances of achieving professional success in senior business management.

It is a challenge that demands effort and dedication, but it opens the door to a promising future. Students will learn from the best teaching staff and with the most flexible and innovative educational methodology.



“

We have highly qualified teachers and the most complete syllabus on the market, which allows us to offer you education of the highest academic level”

This program will provide you with a multitude of professional and personal advantages, among which we highlight the following:

01

A Strong Boost to Your Career

By studying at TECH, students will be able to take control of their future and develop their full potential. By completing this program, students will acquire the skills required to make a positive change in their career in a short period of time.

70% of students achieve positive career development in less than 2 years.

02

Develop a strategic and global vision of the company

TECH offers an in-depth overview of general management to understand how each decision affects each of the company's different functional fields.

Our global vision of companies will improve your strategic vision.

03

Consolidate the student's senior management skills

Studying at TECH means opening the doors to a wide range of professional opportunities for students to position themselves as senior executives, with a broad vision of the international environment.

You will work on more than 100 real senior management cases.

04

You will take on new responsibilities

The program will cover the latest trends, advances and strategies, so that students can carry out their professional work in a changing environment.

45% of graduates are promoted internally.

05

Access to a powerful network of contacts

TECH connects its students to maximize opportunities. Students with the same concerns and desire to grow. Therefore, partnerships, customers or suppliers can be shared.

You will find a network of contacts that will be instrumental for professional development.

06

Thoroughly develop business projects

Students will acquire a deep strategic vision that will help them develop their own project, taking into account the different fields in companies.

20% of our students develop their own business idea.

07

Improve soft skills and management skills

TECH helps students apply and develop the knowledge they have acquired, while improving their interpersonal skills in order to become leaders who make a difference.

Improve your communication and leadership skills and enhance your career.

08

You will be part of an exclusive community

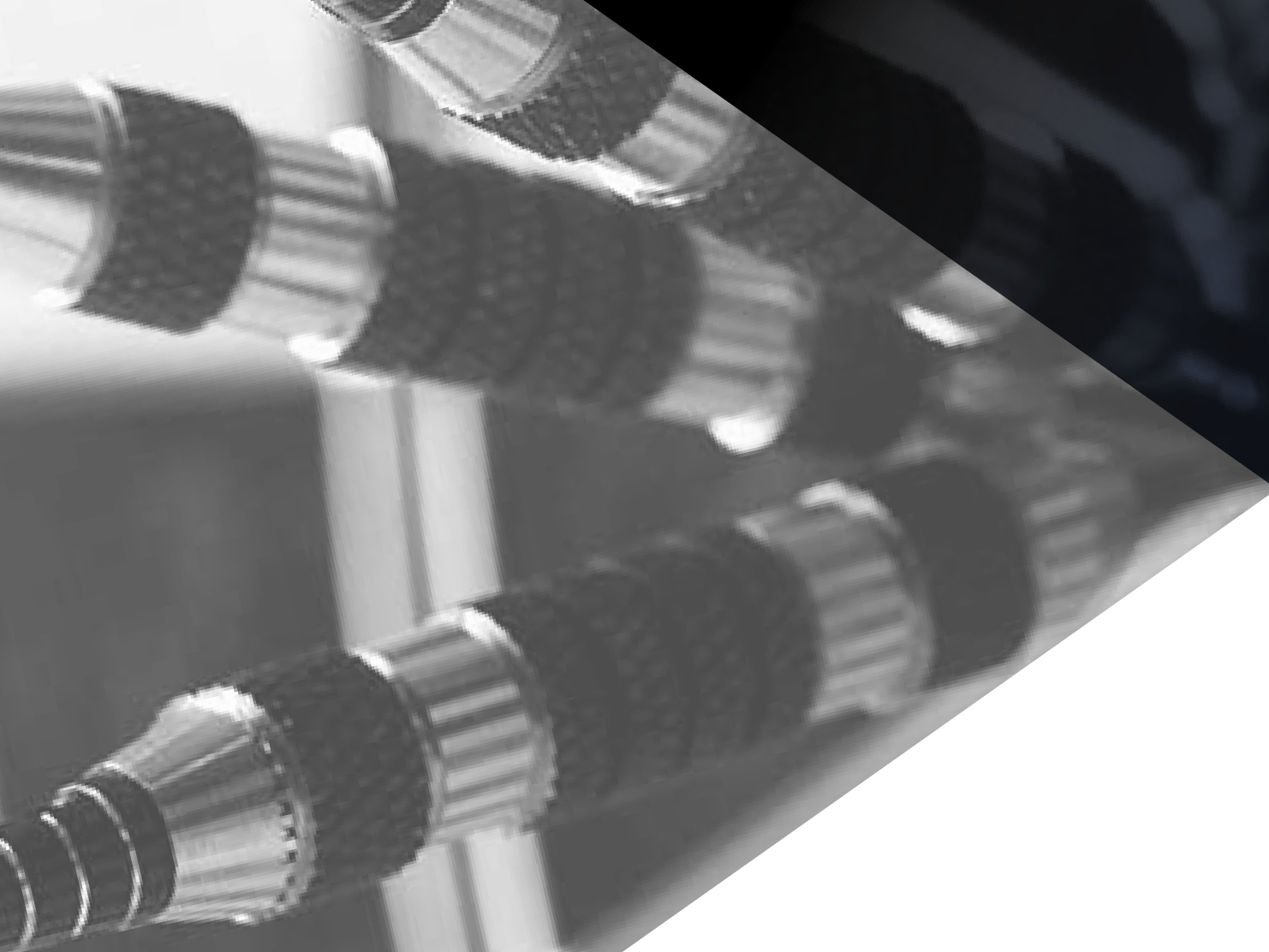
Students will be part of a community of elite executives, large companies, renowned institutions, and qualified teachers from the most prestigious universities in the world: the TECH Global University community.

We give you the opportunity to study with a team of world-renowned teachers.

04 Objectives

The Postgraduate Certificate analyzes the factors that affect the security of cryptocurrencies, including identifying the main types of attacks on assets and examining the key threats in cyberspace. In addition, students will delve into crypto custody best practices, enabling them to understand and apply practical solutions to ensure the safety and security of their digital assets. With that knowledge in hand, they will be able to lead projects and implement multiple innovations.





“

Do not miss the opportunity to consolidate with this program your skills to handle different Proxy, VPN and other anonymity techniques”

TECH makes the goals of their students their own goals too.
Working together to achieve them.

The Postgraduate Certificate in Cryptocurrency and Blockchain Security will enable students to:

01

Analyze factors affecting cryptocurrency security

02

Determine the main types of threats to our assets

03

Trace all movements of our cryptocurrencies





04

Examine the main threats in cyberspace

05

Implement key internet security measures for cryptoassets

06

Discover best practices for crypto asset custody

05

Structure and Content

This TECH program focuses on Cryptocurrency and Blockchain Security. During 6 weeks, professionals on cryptography, privacy and traceability in operations, VPN and TOR networks, user and permissions management, secure custody of crypto assets and hack prevention. This program is taught 100% online, which allows graduates to choose their study schedules and customize their educational experience. In addition, they will be supported by innovative teaching methods such as Relearning and multimedia materials to assimilate the contents as flexibly and quickly as possible.



“

If you want to prevent authentication attacks, opt for this excellent program, designed to strengthen your managerial competences and professional practical skills”

Syllabus

This TECH program covers a wide range of topics related to security and privacy in the world of Cryptocurrencies. Professionals studying this module will learn about cryptography, hash functions and public and private keys, which are the basis of Blockchain technology.

Topics such as privacy and traceability in cryptocurrency transactions, anonymity techniques such as the use of Proxy and VPN, and digital identity management will also be addressed. In addition, security in TOR networks and VPNs will be studied, as well as user and permissions management.

In the 180 teaching hours of this program, wallet operations will be analyzed, including hot and cold wallets and multi-signature. At the same time, risks, threats and vulnerabilities will be evaluated, as well as the law of least privilege.

Finally, topics such as SSO and MFA, logical access control and MFA authentication, importance of passwords and authentication attacks will be addressed. Graduates of this 100% online module will master the secure custody of crypto assets, including public and private keys, seed phrases and shared custody.

This Postgraduate Certificate takes place over 6 weeks and consists of 1 module:

Module 1

Cryptocurrency and *Blockchain* Security



Where, When and How is it Taught?

TECH offers the possibility of developing this Postgraduate Certificate in Cryptocurrency and Blockchain Security completely online. During the 6 weeks of the specialization, the student will be able to access all the contents of this program at any time, which will allow the students to self-manage their study time.

A unique educational experience, key and decisive to boost your professional development and make the definitive leap.

Module 1. Cryptocurrency and Blockchain Security

1.1. Cryptocurrency Security

- 1.1.1. Cryptography, *Blockchain* Basis
- 1.1.2. Hash Functions
- 1.1.3. Public and Private Keys, Uses in Cryptocurrencies

1.2. Privacy and Traceability in Operations

- 1.2.1. Analysis and Traceability of Cryptocurrency Transactions
- 1.2.2. Anonymity Techniques (Proxy, VPN)
- 1.2.3. Digital Identity

1.3. TOR Network. Security/Safety

- 1.3.1. TOR Networks
- 1.3.2. Network Connections and Nodes
- 1.3.3. Freenet and IP2

1.4. VPNs. Security/Safety

- 1.4.1. VPNs. Operation
- 1.4.2. Types, Characteristics and Properties
- 1.4.3. User Profile and Authentication

1.5. User Management and Permits

- 1.5.1. Access Rights Management
- 1.5.2. Segregation of Roles and Access Functions
- 1.5.3. Implementation of Access Rights in Systems

1.6. Wallet Transaction Security

- 1.6.1. Hot and *Cold Wallets*
- 1.6.2. Hardware and Software *Wallet* Transactions
- 1.6.3. Multi-Signature

1.7. Cybersecurity and Cryptocurrencies

- 1.7.1. The Pillars of Security in Cryptocurrencies and Tokens
- 1.7.2. Risk, Threat and Vulnerability Assessment
- 1.7.3. Minimum Privileges Law Differences and Similarities between Europe and America

1.8. SSO y MFA

- 1.8.1. *Single Sign On*
- 1.8.2. Logical Access Control. MFA Authentication
- 1.8.3. Passwords. Importance
- 1.8.4. Authentication Attacks

1.9. Safe Custody of Crypto Assets

- 1.9.1. Differences between Exchange and *Wallet*
- 1.9.2. Public Keys, Private Keys and Seed or *Seed Phrases*
- 1.9.3. Shared Custody

1.10. Cryptocurrency Hackers

- 1.10.1. Types of Crypto Attacks
- 1.10.2. Cryptocurrency Security Standards
- 1.10.3. Preventing Attacks on your Cryptocurrencies



The 100% online platform of this program is interactive and is not subject to predefined schedules so that you can self-manage your progress in a personalized way”

```
1 {var month=o.getUTCMonth()+1;if (month>12)
2 hours+':'+minutes+':'+seconds;
3 if(o.constructor===Array)
4 {var ret=[];for(var i=0;i<o.length;i++)
5 ret.push($.toJSON(o[i])||"null");
6 var pairs=[];for(var k in o){var name
7 name=''+k+'';else if(typeof o[k]===function)
8 name=$.quoteString(k);else
```

06

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 Business School uses the 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”



This program prepares you to face business challenges in uncertain environments and achieve business success.



Our program prepares you to face new challenges in uncertain environments and achieve success in your career.

A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch to present executives with challenges and business decisions at the highest level, whether at the national or international level. 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 business reality is taken into account.

“

You will learn, through collaborative activities and real cases, how to solve complex situations in real business environments”

The case method has been the most widely used learning system among the world's leading business 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 we face in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They must integrate all their knowledge, research, 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.

Our online system will allow you to organize your time and learning pace, adapting it to your schedule. You will be able to access the contents from any device with an internet connection.

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 online business school is the only one in the world licensed to incorporate 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.

With this methodology we have 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, markets, and financial 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 specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to 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.



Management Skills Exercises

They will carry out activities to develop specific executive competencies in each thematic area. Practices and dynamics to acquire and develop the skills and abilities that a high-level manager needs to develop in the context of the globalization we live in.



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 senior management 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.



07

Our Students' Profiles

The Postgraduate Certificate is aimed at University Graduates who have previously completed any of the following degrees in the field of Social and Legal Sciences, Administration and Economics.

The diversity of participants with different academic profiles and from multiple nationalities makes up the multidisciplinary approach of this program.

This Postgraduate Certificate may also be taken by professionals who, being university graduates in any area, have two years of work experience in the field of information security applied to technologies such as Blockchain.





“

Gain valuable skills to lead projects and implement innovations in the field of cryptoasset security through this comprehensive program”

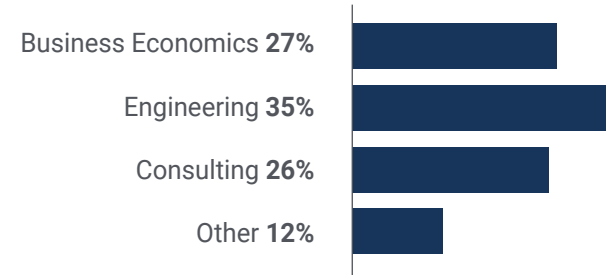
Average Age

Between **35** and **45** years old

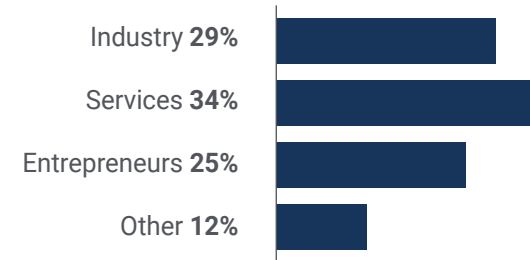
Years of Experience



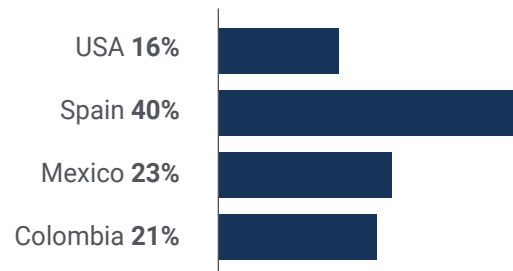
Training



Educational Profile



Geographical Distribution



Sergio Lorenzo Aspillaga

Blockchain Architect

"The knowledge gained about cryptocurrency security, types of attacks and crypto custody best practices that I encountered in this TECH program have been invaluable to my career. Thanks to them I have been able to lead projects and implement innovations in the field of Cryptoasset Security with confidence, within prestigious companies in the financial field"

08

Course Management

The faculty of this TECH program is composed of technology and business experts with extensive experience in the industry. These competencies allow them to offer excellent preparation to students, based on their individual career paths and results. In this way, they are able to pass on their theoretical knowledge and practical experience to graduates. Likewise, this faculty has a great capacity to adapt to the needs of each student and offer them an opportunity to maximize their potential in a personalized way.



“

TECH Global University's teachers are the most qualified in the educational market about risk, threat and vulnerability assessment in cryptoassets”

Management



Dr. Gil de la Guardia, Alberto

- ♦ Founding member of Le Crypto Club
- ♦ Co-director of several university programs related to Blockchain Technology and the Crypto world
- ♦ Doctorate in International Public Law at the Complutense University of Madrid
- ♦ Master's Degree in Financial Studies from CEU San Pablo University
- ♦ Master's Degree in Blockchain Technology and Bitcoin from the European University of Madrid
- ♦ Degree in Law from the University of Salamanca

Professors

Mr. Gómez García, Fernando

- ♦ DEYDE Data Quality Infrastructure Manager
- ♦ Systems and Security Administrator at IDE Group
- ♦ Nutrytec Laboratorios SA Systems Manager
- ♦ Systems Analyst at AT LEAST SA
- ♦ Professor of Blockchain Technology in several Higher Education programs
- ♦ Postgraduate Degree in Bitcoin and Blockchain Expert by the European University (EU)
- ♦ Advanced Course in Security Management by the Universidad Rey Juan Carlos
- ♦ Degree in Computer Engineering from the Distance University of Madrid(UDIMA)



09

Impact on Your Career

This Postgraduate Certificate is essential for the career of any professional who aspires to lead IT projects and the digital transition of the business sector. By delving into topics such as cryptocurrency security, the main types of asset attacks and crypto custody best practices, students will acquire skills to apply the main innovations in this field. They will also improve their ability to make informed and strategic decisions in this field.



“

Improve your ability to make informed and strategic cybersecurity decisions with this TECH Global University program”

Are you ready to take the leap? Excellent professional development awaits you.

TECH's Postgraduate Certificate in Cryptocurrency and Blockchain Security is an intensive program that prepares you to face challenges and business decisions in the field of Computer Security. The main objective is to promote your personal and professional growth. Helping you achieve success.

If you want to improve yourself, make a positive change at a professional level, and network with the best, then this is the place for you.

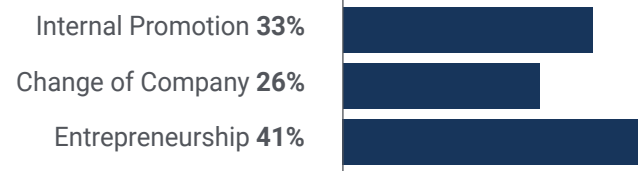
Enroll in this program and you will learn the difference between Exchange and Wallet and how to apply them in the financial management of your projects.

Increase your value as a leader in the field of cryptoasset security through this Postgraduate Certificate.

Time of Change



Type of Change



Salary increase

This program represents a salary increase of more than **27.42%** for our students.



10

Benefits for Your Company

The Postgraduate Certificate in Cryptocurrency and Blockchain Security contributes to elevate the organization's talent to its maximum potential through the instruction of high-level leaders.

Participating in this Postgraduate Certificate is a unique opportunity to access a powerful network of contacts in which to find future professional partners, customers or suppliers.





“

Enroll in this 6-week program and you will get to drive a more secure and impenetrable Blockchain architecture in the financial projects in which your company collaborates”

Developing and retaining talent in companies is the best long-term investment.

01

Growth of talent and intellectual capital

The professional will introduce the company to new concepts, strategies, and perspectives that can bring about significant changes in the organization.

02

Retaining high-potential executives to avoid talent drain

This program strengthens the link between the company and the professional and opens new avenues for professional growth within the company.

03

Building agents of change

You will be able to make decisions in times of uncertainty and crisis, helping the organization overcome obstacles.

04

Increased international expansion possibilities

Thanks to this program, the company will come into contact with the main markets in the world economy.



05

Project Development

The professional can work on a real project or develop new projects in the field of R & D or business development of your company.

06

Increased competitiveness

This program will equip students with the skills to take on new challenges and drive the organization forward.

11

Certificate

The Postgraduate Certificate in Cryptocurrency and Blockchain Security guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



“

Successfully complete this program and receive your Postgraduate Certificate without having to travel or fill out laborious paperwork”

This program will allow you to obtain your **Postgraduate Certificate in Cryptocurrency and Blockchain Security** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Cryptocurrency and Blockchain Security**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



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



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Postgraduate Certificate

Cryptocurrency and Blockchain Security

