



## Postgraduate Diploma Security in Crypto Enviroments

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 18 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. In addition, to managers interested in the area of market analytics and digital economic consulting

 $We bsite: {\color{blue}www.techtitute.com/us/business-school/postgraduate-diploma/postgraduate-diploma-security-crypto-environments}$ 

## Index

02 Why Study at TECH? Why Our Program? Objectives Welcome p. 4 p. 6 p. 10 p. 14 06 Our Students' Profiles Methodology Structure and Content p. 20 p. 28 p. 36 80 Course Management Benefits for Your Company Impact on Your Career p. 44 p. 40 p. 48 Certificate

# 01 **Welcome**

Security in crypto environments is essential to guarantee the stability of the entity and its digital assets. As the crypto-economy market grows, cases of fraud and electronic scams increase, due to a lack of solidity in the main structures to protect the ecosystems from the vulnerability of their nature. Because of this, professionals in this field see it as an increasingly necessary requirement to control in detail the strategies and techniques of digital custody. For that reason, TECH has prioritized the launching of a qualification that comes to collect all the information that the graduate needs to master this area. It is a 100% online program with which you will work on the most effective and innovative security and privacy protocols. and privacy protocols, making your projects inviolable in just 6 months of theoretical and practical specialization.









## tech 08 | Why Study at TECH?

#### At TECH Global University



#### **Innovation**

The university offers an online learning model that combines 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.

100,000+

200+

executives trained each year

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:



#### **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 ground-breaking price**. This way, TECH ensures that studying is not as expensive for students as it would be at another university.





#### 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 Harvard Business School case studies"





## tech 12 | Why Our Program?

This program will provide students with a multitude of professional and personal advantages, particularly the following:



#### A significant career boost

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 participants achieve positive career development in less than 2 years.



## Develop a strategic and global vision of companies

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

Our global vision of companies will improve your strategic vision.



#### 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.



#### 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.



#### 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.



### Thoroughly develop business projects

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

20% of our students develop their own business idea.



#### 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.



#### Be part of an exclusive community

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

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

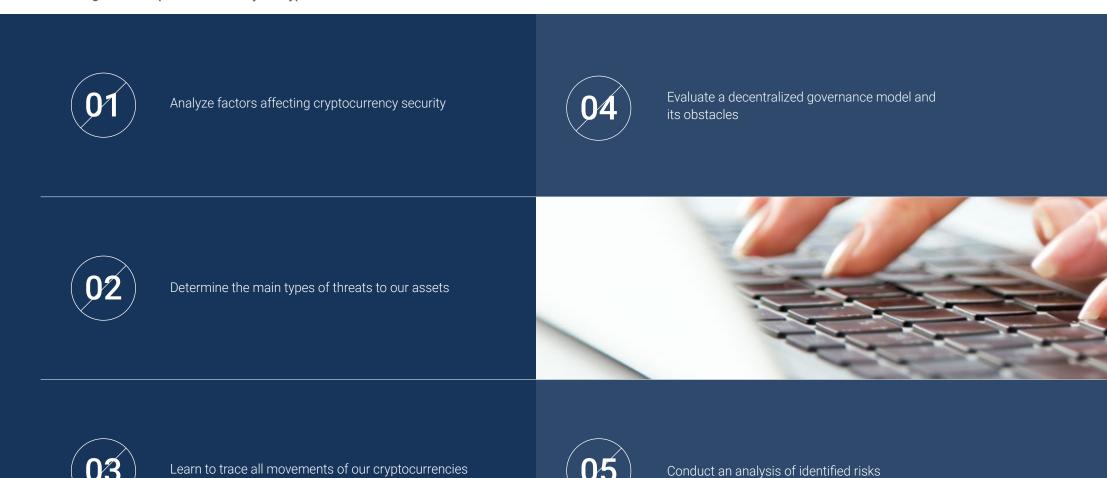


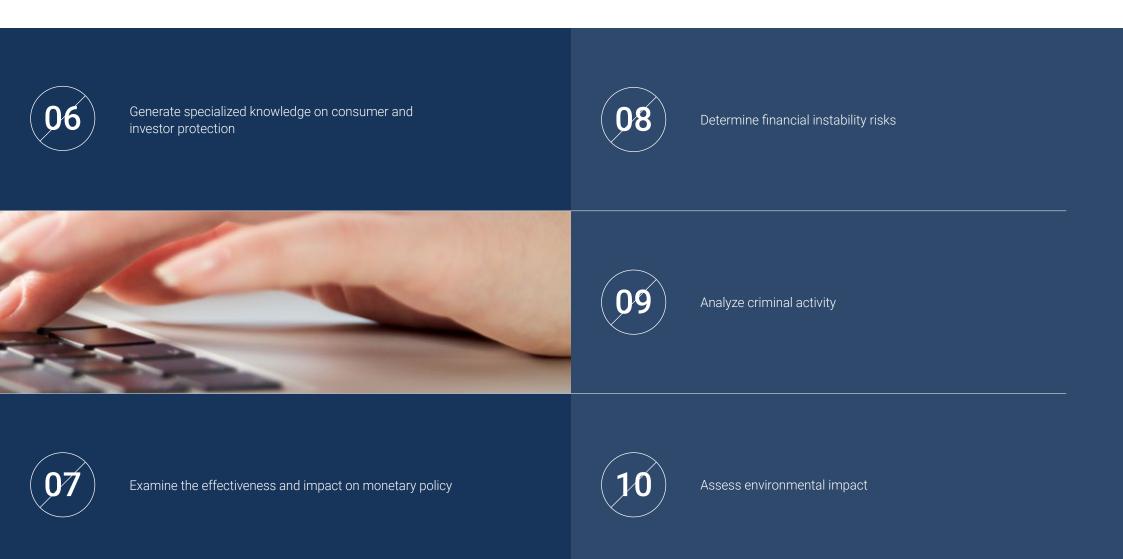


## tech 16 | Objectives

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

The **Postgraduate Diploma in Security in Crypto Environments** will train the student to:







Apply Blockchain Compliance



Determine the Regulatory Standards that Apply to the DTL



Demonstrate the importance of regulations to ensure project security







Analyze the importance of privacy and data configuration in block transactions

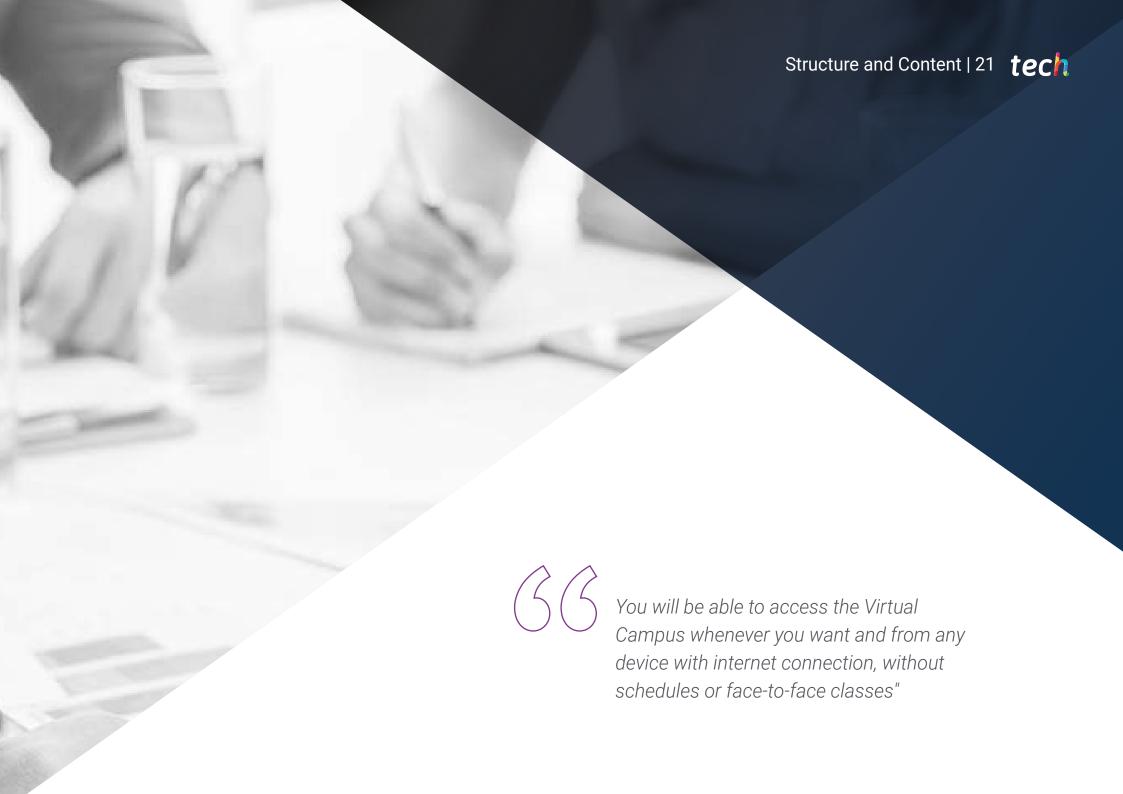
15

Obtain the basic authorizations to start projects

16

Examine project confidence parameters





### tech 22 | Structure and Content

#### **Syllabus**

TECH and its team of experts have spent a long period of time in the development of a curriculum adapted to the latest developments in the crypto sector, more specifically in the area of security. Thanks to the very high level of exigency with which the information has been selected, it has been possible to elaborate an innovative, dynamic and top-level syllabus.

The graduate will have 450 hours of the best theoretical, practical and additional and additional material to delve into the environment of privacy and traceability in operations, in order to ensure the inviolability of its content and prevent possible attacks that violate the stability of the company and its digital assets. You will need to have specialized knowledge of today's cryptoeconomy, which you will work on during the course of module 2. Finally, you will dive into *Compliance* and its keys to perfectly master the rules and regulations of this environment.

All this, 100% online and over 6 months in which, in addition to potentially expanding your knowledge, you will be able to work on perfecting your professional skills. Thus, you will acquire a series of management and leadership skills that will make you stand out in any personnel selection process. It is, therefore, the qualitative and quantitative leap that your career needs to reach the highest prestige position.

This program takes place over 6 months and is divided into 3 modules:

Module 1. Cryptocurrency and Blockchain Security

Module 2. Cryptoeconomics

Module 3. Compliance Regulations and Crypto Privacy



#### Where, When and How is it Taught?

TECH offers the possibility of developing this Postgraduate Diploma in Security in Crypto Environments in a totally online way. Throughout the 6 months of the educational program, you will be able to access all the contents of this program at any time, allowing you to self-manage your study time.

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

## tech 24 | Structure and Content

Module 1. Cryptocurrency and Blockchain Security							
	Cryptocurrency Security Cryptography, Blockchain Basis Hash Functions Public and Private Keys, Uses in Cryptocurrencies	1.2. 1.2.1. 1.2.2. 1.2.3.	Privacy and Traceability in Operations  Analysis and Traceability of Cryptocurrency Transactions Anonymity Techniques (Proxy, VPN) Digital Identity	<b>1.3.</b> 1.3.1. 1.3.2. 1.3.3.	TOR Network. Security/Safety TOR Networks Network Connections and Nodes Freenet and IP2	1.4.2.	VPNs. Security/Safety VPNs. Operation Types, Characteristics and Properties User Profile and Authentication
1.5. 1.5.1. 1.5.2. 1.5.3.	User Management and Permits Access Rights Management Segregation of Roles and Access Functions Implementation of Access Rights in Systems	1.6.2.	Wallet Transaction Security  Hot and Cold Wallets Hardware and Software Wallet Transactions Multi-Signature	1.7. 1.7.1. 1.7.2. 1.7.3.	Cybersecurity and Cryptocurrencies The Pillars of Security in Cryptocurrencies and Tokens Risk, Threat and Vulnerability Assessment Minimum Privileges Law Differences and Similarities between Europe and America	1.8.1. 1.8.2. 1.8.3.	SSO and MFA Single Sign On Logical Access Control. MFA Authentication Passwords. Importance Authentication Attacks
1.9. 1.9.1. 1.9.2. 1.9.3.	Public Keys, Private Keys and Seed or Seed Phrases	1.10.1 1.10.2	Cryptocurrency Hackers  Types of Crypto Attacks Cryptocurrency Security Standards Preventing Attacks on your Cryptocurrencies				

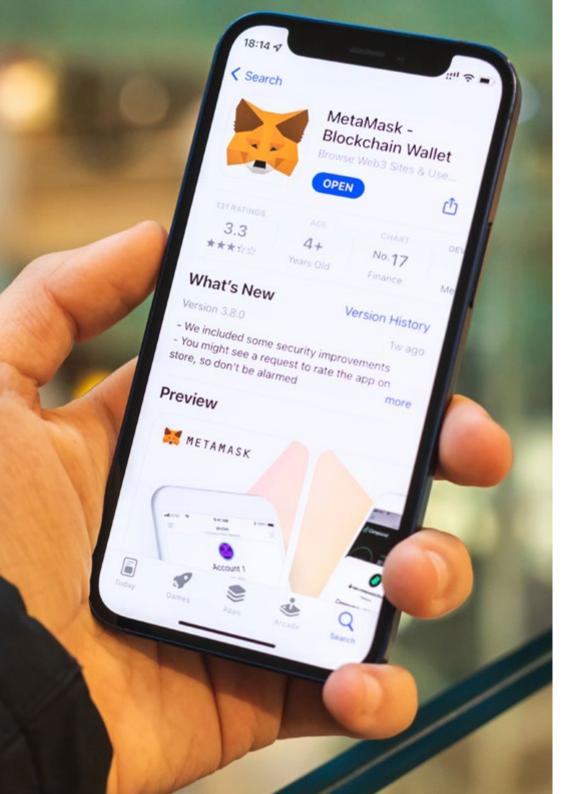
Module 2. Cryptoeconomics							
<ul><li>2.1. Cryptocurrencies and Money</li><li>2.1.1. Fiat Money. Operation</li><li>2.1.2. Bitcoin vs. Ethereum: The Rest</li><li>2.1.3. The Role of Stable Currencies</li></ul>	<ul><li>2.2. Central Banks and CBDCs</li><li>2.2.1. CBDCs</li><li>2.2.2. The Digital Yuan Case</li><li>2.2.3. Bitcoin vs. CBDCs</li><li>2.2.4. El Salvador</li></ul>	<ul> <li>2.3. Evaluation and Valuation of a Blockchain</li> <li>2.3.1. Cash Flow Method</li> <li>2.3.2. Country Method</li> <li>2.3.3. Technical Analysis vs. Fundamental Analysis</li> </ul>	<ul><li>2.4. Wallets</li><li>2.4.1. Wallets. Key Elements</li><li>2.4.2. Protected Wallets</li><li>2.4.3. Unprotected Wallets</li><li>2.4.4. Wallets Promoted by Countries</li></ul>				
<ul><li>2.5. Tokenomics</li><li>2.5.1. Tokenomics. Importance</li><li>2.5.2. NFTs or Tokens</li><li>2.5.3. Type of Tokens Utility vs. Security vs. Governance</li></ul>	<ul> <li>2.6. Economics on Web 3.0</li> <li>2.6.1. Cryptocurrencies. New Economy Basis</li> <li>2.6.2. NFTs and Games</li> <li>2.6.3. NFTs y Communities</li> <li>2.6.4. Combined Models of NFTs and Tokens</li> </ul>	<ul><li>2.7. Digital Identity</li><li>2.7.1. Cryptos as a Paradigm of Digital Identity</li><li>2.7.2. Digital Identity and DeFi</li><li>2.7.3. Soul Bound NFTs</li></ul>	2.8. New Banking 2.8.1. Crypto Banks 2.8.2. Crypto Loans 2.8.3. Crypto Interests 2.8.4. Banking System Evolution				
2.9. Crypto Project Launch 2.9.1. ICO 2.9.2. IDO 2.9.3. ILO 2.9.4. NFTs 2.9.5. Tokenomics and Superfluid	2.10. Medium-Term Paradigms 2.10.1. Quantum Computing 2.10.2. Big Data and Blockchain 2.10.3. Decentralization Utopia						

## tech 26 | Structure and Content

Module 3. Compliance Regulations and Crypto Privacy								
<b>3.1.</b> 3.1.1. 3.1.2. 3.1.3.	9	<b>3.2.</b> 3.2.1. 3.2.2. 3.2.3.	Digital Signature Electronic Signature Digital Certificate Certification Authorities	3.3.1. 3.3.2.	Compliance Compliance Blockchain Compliance Compliance Models	3.4.2.	Cryptos and ICOS Legality Regulatory Framework ICOS Launch From ICOS to IDOS	
<b>3.5.</b> 3.5.1. 3.5.2. 3.5.3.	Crypto Taxation  Tax Treatment of Cryptoassets in the European Union Legal System Crypto-Asset Taxation Consultations Tax Accounting Treatment in the European Union	3.6.1. 3.6.2. 3.6.3. 3.6.4.	International Regulation in the Different Jurisdictions Regarding the Holding of Cryptoassets. Special Treatment in the USA MICA DORA EIDAS The Future of Cryptos According to the European Commission	3.7.1. 3.7.2.	Cybersecurity in Blockchain Decentralization	3.8.2.	Ethics and Digital Errors Good Faith in the Legality of U.S. Projects Digital Transformation Mistakes Structuring Parameters in the Organization	
3.9. 3.9.1. 3.9.2. 3.9.3.	Legaltech Solutions	3.10.1 3.10.2	Blockchain Certificates Blockchain Certification Sector Business Opportunity BlockTac					



A program that will enhance your ability as a professional in the crypto field through a thorough understanding of the keys to the Web economy3"





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.



## tech 30 | Methodology

## 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.





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.

## tech 32 | 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.

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.



### Methodology | 33 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. 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.





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.

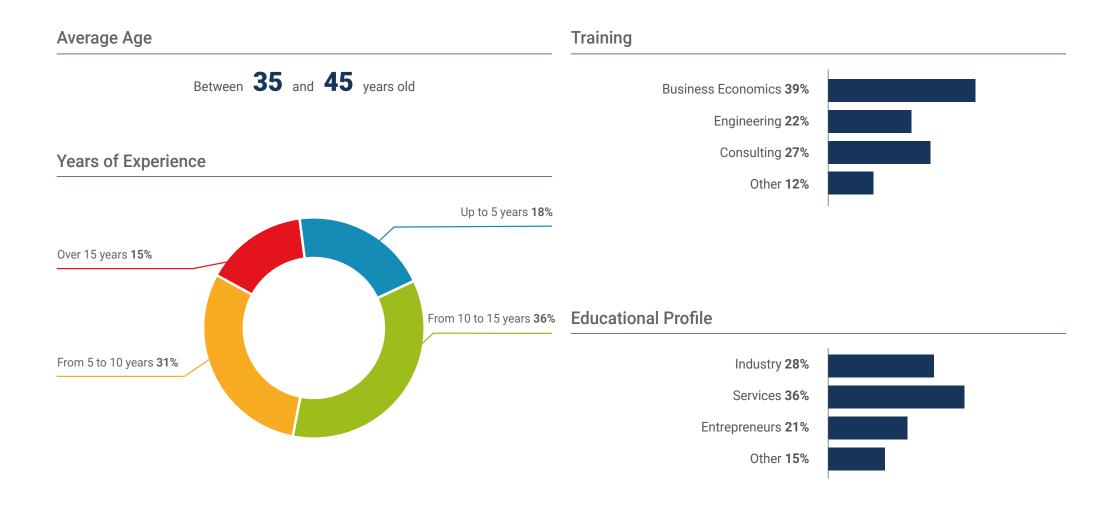




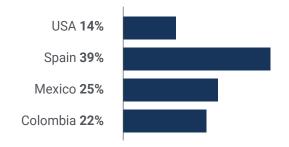
30%







# **Geographical Distribution**



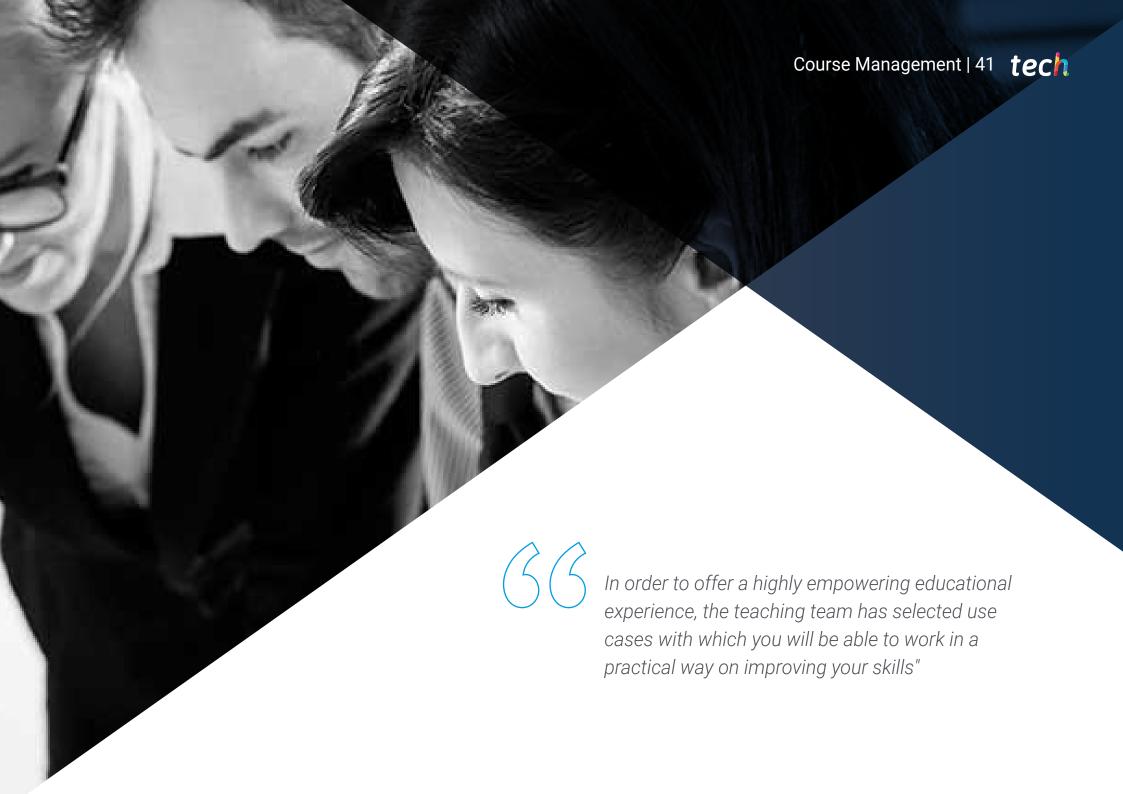


# Antonio de la Care

Telecommunications engineer and security manager of a cryptocurrency company

Society is undergoing constant change. For this reason, having the help of qualifications such as this one is essential for professionals who, like me, carry out such an important function within a company's ecosystem as such an important function within a company's ecosystem as digital security. digital security. That is why I highly recommend this Postgraduate Diploma which, in addition, thanks to its 100% online format, is perfect to combine it with our work. Postgraduate Diploma which, in addition, thanks to its 100% online format is perfect to combine it with our work without any problem"





# tech 42 | Course Management

## 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

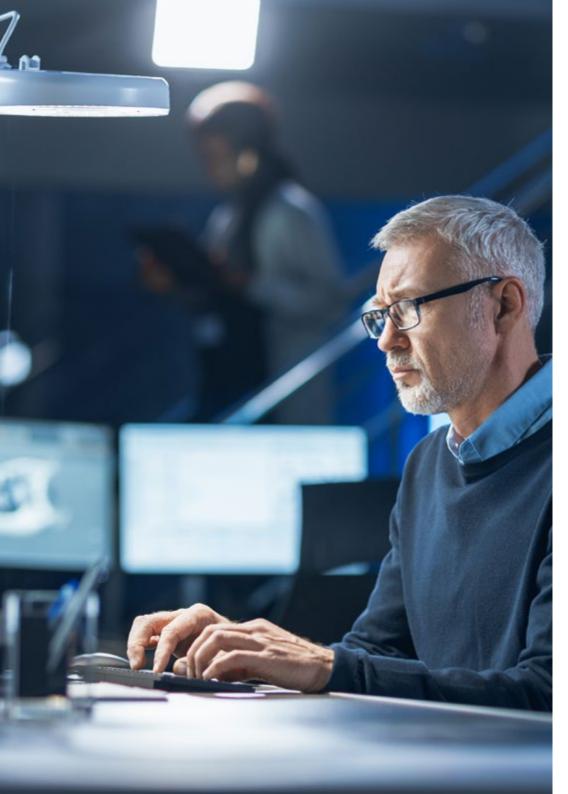
#### **Professors**

#### 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)

#### Mr. Montalvo Aguilera, Hermógenes

- Consultant and legal advisor in Blockchain, legal smart contracts and enterprise tokenization
- Lawyer Expert in Compliance, Blockchain and Tokenomics by Esade Business School.
- Cybersecurity Course
- Master's Degree in Law from the Universidad Oberta de Catalunya
- Master's Degree in Blockchain by Tutellus
- Graduate in Law from the Universidad Oberta de Catalunya



#### Mr. Fernández Ramos, Jesús

- Mangaging Partner at FRK Investments
- 2ndWind Media Partner
- Partner and Tokener at be Token Capital
- Blue Sky Learning Partner
- General Partner of Yara Ventures
- Member of the Board of Directors of ARCHITEChTures
- Independent Expert for the European Commission on R&D Projects
- Telecommunications Engineer by the UPC ETSETB BCN
- Postgraduate Certificate in Optoelectronics from the Vrije Universiteit Brussel





# tech 46 | Impact on Your Career

Thanks to this
Postgraduate Diploma,
you will be able to
implement the most
effective privacy and
traceability strategies
for crypto operations in
your practice.

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

TECH's Postgraduate Diploma in Security in Crypto Environments is an intensive program that prepares you to face challenges and business decisions in the field of digital assets. The Main objective is to promote personal and professional growth. Helping students achieve success.

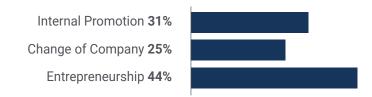
If you want to improve yourself, make a positive change professionally and network with the best, this is the place for you.

With this program, you will perfect your skills to such a level that you will achieve a substantial salary increase in less time than you expect.

# **Time of Change**



## Type of change



# Salary increase

The completion of this program represents a salary increase of more than **27.42%** for our students.

\$58,300

A salary increase of

27.42%

\$74,200





# tech 50 | Benefits for Your Company

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



## 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.



# 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.



## **Building agents of change**

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



# Increased international expansion possibilities

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







# **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.



# Increased competitiveness

This Postgraduate Diploma will equip your professionals with the skills to take on new challenges and therefore drive the organization forward.





# tech 54 | Certificate

This program will allow you to obtain your **Postgraduate Diploma in Security in Crypto Environments** 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 Diploma in Security in Crypto Environments

Modality: online

Duration: 6 months

Accreditation: 18 ECTS



Mr./Ms. \_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

#### Postgraduate Diploma in Security in Crypto Environments

This is a program of 450 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



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



# Postgraduate Diploma Security in Crypto Enviroments

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 18 ECTS

» Schedule: at your own pace

» Exams: online

