

Postgraduate Certificate Blockchain and Business



Postgraduate Certificate Blockchain and Business

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Technological University
- » Schedule: at your own pace
- » Exams: online
- » Target Group: Computer engineers, programmers and others in the digital field. As well as graduates from specializations in economics and related, managers interested in implementing blockchain technology in their companies and people interested in blockchain technology in general

Website: www.techtute.com/pk/school-of-business/postgraduate-certificate/blockchain-business

Index

01

Welcome

p. 4

02

Why Study at TECH?

p. 6

03

Why Our Program?

p. 10

04

Objectives

p. 14

05

Structure and Content

p. 20

06

Methodology

p. 26

07

Our Students' Profiles

p. 34

08

Course Management

p. 38

09

Impact on Your Career

p. 42

10

Benefits for Your Company

p. 46

11

Certificate

p. 50

01 Welcome

Blockchain is no longer a novelty and has quickly become another component in business. Companies around the world have been generating competitive advantages in different areas for years thanks to this technology. Therefore, those who do not adopt it, or do so too late, will find it difficult to stay afloat. Consequently, TECH has prepared a complete and extensive program for managers who intend to introduce blockchain to their businesses. Firstly, by analyzing the technologies involved and cyberspace security, and secondly, by providing a broad vision of how a company can adopt blockchain. All this, through an online modality without schedules that allows students to organize themselves based on their personal situation and needs.



Postgraduate Certificate in Blockchain and Business
TECH Technological University



“

Throughout this program you will learn the essentials of applying blockchain to research into social networks, domains and addresses”

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 centre for intensive managerial skills training.



“

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 Technological 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+
executives trained 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:



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.



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"

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 training of the highest academic level"

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

01

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.

02

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.

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

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 areas 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

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 Technological University community.

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

04 Objectives

Graduates will gain expertise in best security practices and in implementing blockchain solutions for companies. They will also establish methodologies for information analysis and deception detection on the Internet, determine the appropriate tools for attributing a criminal act on the Internet, understand the concept of project-oriented blockchain and examine the challenges when implementing a product based on DLT technology.



“

There are different ways of implementing blockchain technology depending on the field. Get to know them through this program to determine which one best suits yours”

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

The **Postgraduate Certificate in Blockchain and Business** trains students to:

01

Determine to what extent information can be collected from *Wallets* that we physically carry, and to what extent information can be collected only when we have an address

04

Analyze whether or not to implement a blockchain solution and why in our field

02

Draw conclusions regarding good security practices



03

Consider the vulnerabilities associated with blockchain

05

Generate specialized knowledge on the logical concept of distributed technologies as a comparative advantage

06

Explore the capability of certain blockchain implementations and their impact on the financial and pharmaceutical field

08

Establish methodologies for information analysis and deception detection on the Internet



09

Plan an Internet search strategy

07

Analyze the best way to implement a blockchain process focusing on the basics of the technology

10

Determine the most appropriate tools to detect a criminal act on the Internet

11

Deploy an environment with the following tools:
Logstash, Elasticsearch and Kibana

14

Identify possible indications for the use of *Mixers* to
blur the trace of transactions

12

Address the risks faced by analysts in a
research exercise



13

Carry out research processes based on *Wallet*
availability or an address

15

Analyze why we should or should not implement a
blockchain project in our environment

16

Examine the challenges we face when implementing a product based on DLT technology

18

Gather all the possibilities offered by the vast blockchain universe, distributed, DeFi, etc.

19

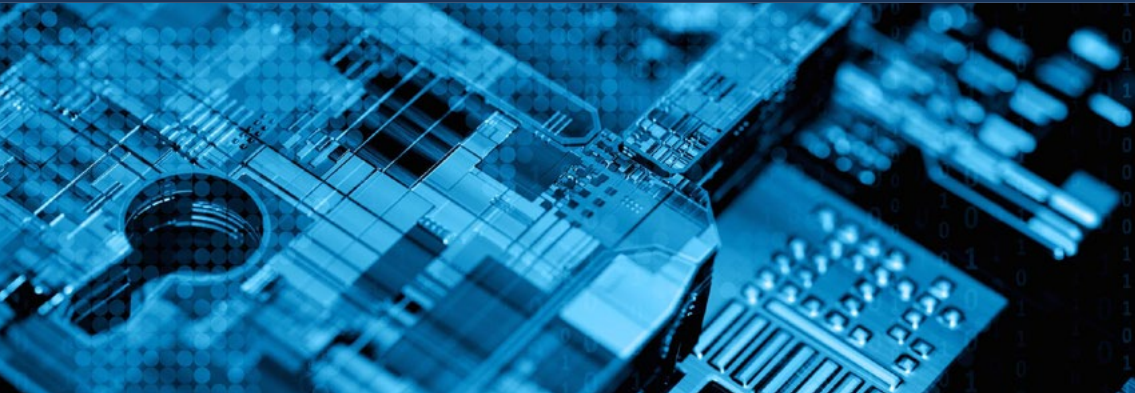
Determine when a blockchain project is right and when it is wrong

17

Adapt knowledge and mental tools to understand the project-oriented blockchain concept

20

Discern between a meaningful project and the *Hype* surrounding this technology



05

Structure and Content

The Postgraduate Certificate in Blockchain and Business is taught in a fully online format and without schedules. So, students can choose the time and place that best suits their availability and interests. A program that takes place over 12 weeks and a 24 hour a day available syllabus that aims to be a unique and stimulating experience to sow the foundations for professional success.



“

Analyze alongside TECH professors how the Central Bank Digital Currency (CBDC) functions in today's economic system”

Syllabus

The Postgraduate Certificate in Blockchain and Business at TECH Technological University is an intensive program that teaches students the most appropriate ways to implement blockchain in their companies.

The program content is designed to promote the development of managerial skills, aimed at making decisions with rigor in a rapidly advancing technological ecosystem.

Over 300 hours in length, students will analyze a multitude of practical cases through individual and teamwork. It is, therefore, a real immersion in the benefits that blockchain and its various applications can bring to a company.

The technologies involved in blockchain and space security will be discussed. By dealing with quite concrete and specific concepts such as the ELK stack, the STIX format, the difference between *bugs*, vulnerabilities and *Exploits* or the tool *Metasploit*. Furthermore, the particularities of introducing blockchain to the company will be defined, explaining the most common mistakes, the different typologies that exist or the fields where it is most appropriate.

The plan focuses on professional improvement to achieve excellence in personal and business management. Understanding the current company needs and, consequently, proposing innovative content. Moreover, the program is supported by an exceptional educational methodology and teaching staff that generate creative and efficient skills.

This Postgraduate Certificate takes place over 12 week and consists of two modules:

Module 1

Blockchain Technology: Technologies Involved and Cyberspace Security

Module 2

Blockchain and Business



Where, When and How is it Taught?

TECH offers you the opportunity to study this Postgraduate Certificate in Blockchain and Business completely online. Throughout the 12 weeks of training, you will be able to access all the program contents 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.

Module 1. Blockchain Technology: Technologies Involved and Cyberspace Security

1.1. Cyber Research Techniques

- 1.1.1. Intelligence Analysis
- 1.1.2. Potential Deception on the Internet
- 1.1.3. Advanced Use of Search Tools

1.2. ELK Stacks

- 1.2.1. Logstash
- 1.2.2. ElasticSearch
- 1.2.3. Kibana

1.3. Internet Attribution Techniques

- 1.3.1. Social Media Research Tools

- 1.3.2. Domain and Address Research Tools
- 1.3.3. VirusTotal

1.4. OPSEC and Privacy in Web Research

- 1.4.1. Identity Management
- 1.4.2. Masking the Analyst

- 1.4.3. Operating Systems

1.5. Structural Analysis Techniques

- 1.5.1. Hypothesis Generation and Testing
- 1.5.2. Hypotheses Generation Techniques
- 1.5.3. Structured Hypothesis Refutation Techniques

1.6. Threat Modeling

- 1.6.1. STIX Format
- 1.6.2. MITRE ATT&CK Framework
- 1.6.3. TLP Information Classification
- 1.6.4. Intelligence Competition Strategies
- 1.6.5. Documenting Threats with OpenCTI

1.7. Researching Wallets and Purses

- 1.7.1. Wallet Operation
- 1.7.2. Cracking Wallets
- 1.7.3. Transaction Monitoring

1.8. Connected Services Vulnerabilities

- 1.8.1. Difference between Bugs, Vulnerabilities and Exploits
- 1.8.2. Vulnerability Assessment Metrics

- 1.8.3. Obligations upon Detecting Personal Data Affection

1.9. Metasploit

- 1.9.1. Object Identification
- 1.9.2. Information Gathering
- 1.9.3. Exploiting Vulnerabilities
- 1.9.4. Malicious App Example

1.10. Smart Contracts Security

- 1.10.1. Tools to Search for Vulnerable Systems
- 1.10.2. Known Ethereum Attack Vectors
- 1.10.3. Exercises on CTF Ethereum

Module 2. Blockchain and Business

2.1. Applying Technology throughout the Company

- 2.1.1. Applying Blockchain
- 2.1.2. Blockchain Benefits
- 2.1.3. Common Implementation Mistakes

2.2. Blockchain Implementation Cycle

- 2.2.1. From P2P to Distributed Systems
- 2.2.2. Key Aspects for Proper Implementation
- 2.2.3. Improving Current Implementations

2.3. Blockchain vs. Traditional

- 2.6.3. Where Does It Not Fit?

2.7. Blockchain and the Pharmaceutical Sector

- 2.7.1. Searching for Meaning in the Field
- 2.7.2. Logistics and Pharma

Technologies: Basis

- 2.3.1. API Data and Flows
- 2.3.2. Tokenization as a Cornerstone for Projects
- 2.3.3. Incentives

2.4. Selecting Blockchain Type

- 2.7.3. Application

2.8. Pseudo Private Blockchains: The Point of Consortiums

- 2.8.1. Reliable Environments
- 2.8.2. Analysis and Delving Deeper

- 2.4.1. Public Blockchain
- 2.4.2. Private Blockchain
- 2.4.3. Consortiums

2.5. Blockchain and the Public Sector

- 2.5.1. Blockchain in the Public Sector
- 2.5.2. Central Bank Digital Currency (CBDC)

2.9. Blockchain: Usage Case in Europe EBSI

- 2.9.1. EBSI (European Blockchain Services Infrastructure)

- 2.5.3. Conclusions

2.6. Blockchain and the Financial Sector Start

- 2.6.1. CBDC and Finance
- 2.6.2. Native Digital Assets

- 2.9.2. Business Models
- 2.9.3. Future

2.10. The Future of Blockchain

- 2.10.1. Trilemma
- 2.10.2. Automization
- 2.10.3. Conclusions



06

Methodology

This training program offers 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"

At TECH Business School we use the Harvard case method

Our program offers a revolutionary method of skills and knowledge development. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

“

At TECH, you will experience a way of learning that is shaking the foundations of traditional universities around the world"



We are the first online university to combine Harvard Business School case studies with a 100% online learning system based on repetition.



A learning method that is different and innovative

This intensive program from TECH Technological University School of Business prepares students to face all the challenges in this area, both nationally and internationally. We are committed to promoting personal and professional growth, the best way to strive for success, that is why TECH uses Harvard case studies, with which we have a strategic agreement that allows us to provide our students with material from the best university the world.

“ *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.

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

Relearning Methodology

Our university is the first in the world to combine Harvard University case studies with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

We enhance Harvard case studies 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

They will complete a selection of the best business cases used at Harvard Business School. Cases that are presented, analyzed, and supervised by the best senior management specialists in Latin America.



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 multimedia content presentation training Exclusive system 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 your goals.



07

Our Students' Profiles

The Postgraduate Certificate is intended for computer engineers, programmers and others in the digital field. Also graduates from specializations in economics and related, managers interested in implementing blockchain technology in their companies and people interested in blockchain technology in general.





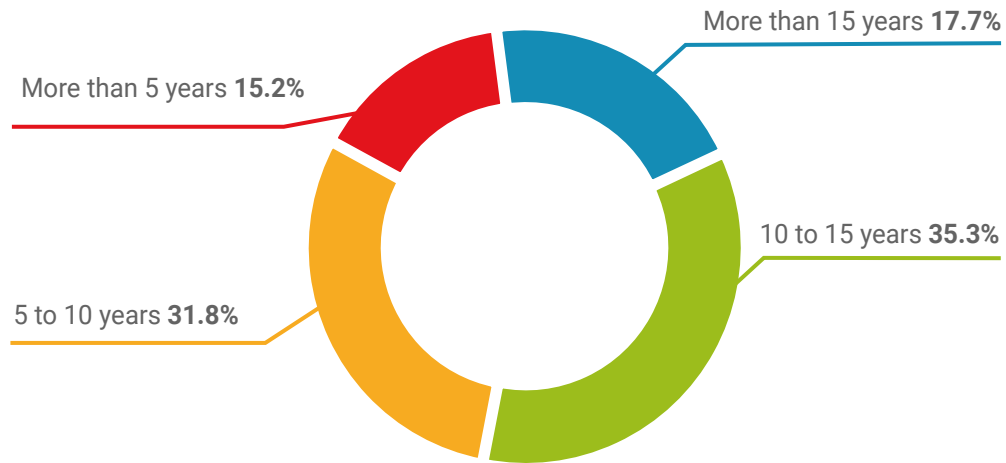
“

In this Postgraduate Certificate you will learn the role of tokens as the cornerstone of projects”

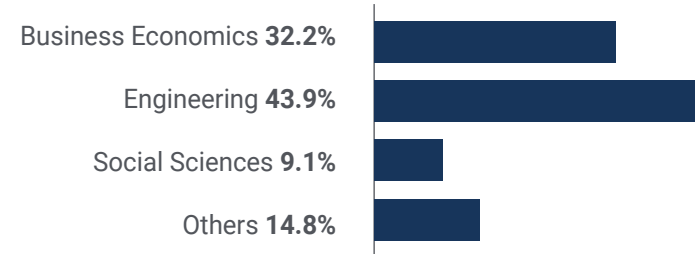
Average Age

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

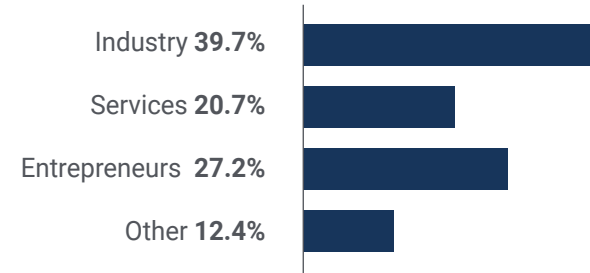
Years of Experience



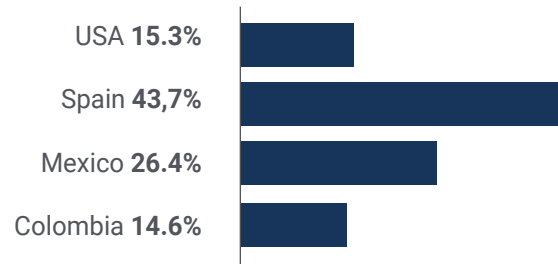
Training



Academic Profile



Geographical Distribution



Juan Alberto Gómez Pérez

CEO

"I had heard about blockchain for a long time, but I was completely unaware of how it works. However, I saw that it worked for companies around me, so I decided to enroll in this program, and the truth is that I've learned a lot. The explanations are clear and the professors closely support you at all times. I've obtained many useful resources that I'll apply in my company"

08

Course Management

The teaching staff is composed of active blockchain technology experts who will share all the essentials needed in this field, so that students can later apply them in their own companies. In this way, it is guaranteed that everything they learn in this program has a practical application that will substantially improve the future prospects of their companies.



“

The leading experts in Programming for Blockchain have come together to offer you a high-level qualification that will be fundamental to your professional development in the field”

Management



Mr. Torres Palomino, Sergio

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

Professors

Mr. Herencia, Jesús

- ◆ Blockchain and DLT Consultant
- ◆ IT Director in Banking (Credit Agricole)
- ◆ Diploma in Computer Systems Engineering UPM
- ◆ Co-Director of Blockchain Specialist Course at the School of Legal Practice at UCM
- ◆ Lecturer at EAE on Cryptoassets and Blockchain

Ms. Salgado Iturrino, María

- ◆ Blockchain Manager Iberia & LATAM Inetum
- ◆ Identity Comission Core Team Leader Alastria
- ◆ Conwet Research Lab Polytechnic University of Madrid
- ◆ Software Developer Internship Indra
- ◆ Professor of Blockchain Applied to Business Polytechnic University of Madrid
- ◆ Degree in Software Engineering from the Complutense University of Madrid (UCM)
- ◆ Master's Degree in Computer Engineering from the Polytechnic University of Madrid (UPM)



Mr. Triguero Tirado, Enrique

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

09

Impact on Your Career

The program proposed by TECH delves into applying blockchain technology to businesses, and the security it affords. The most appropriate tools will be provided and we will work with real cases to bring knowledge to the practical field.





“

Learn how to identify possible signs of Mixer use thanks to the experience of TECH's teaching staff”

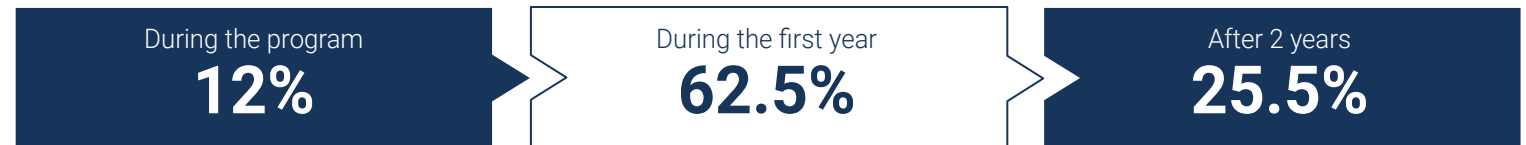
Implementing blockchain technology can present certain difficulties. Nevertheless, the teaching staff at TECH will be at your disposal to solve any problem that may arise.

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

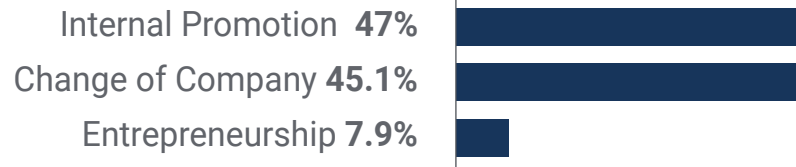
TECH's Postgraduate Certificate in Blockchain and Business is an intensive program that prepares its graduates to face challenges and business decisions in applying blockchain to companies. Its primary objective is to promote personal and business growth by helping you achieve success.

Throughout the program you will learn the differences between bugs, vulnerabilities and Exploits to increase computer security.

When the change occurs



Type of change



Salary increase

This program represents a salary increase of more than **25%** for our students.



10

Benefits for Your Company

The Postgraduate Certificate in Blockchain and Business contributes to raising the organization's talent to its maximum potential through learning directed at high-level leaders.

Applying knowledge regarding blockchain and the potential improvement it offers in each area will undoubtedly increase the company's capabilities. And, therefore, it will allow students to face the needs of a changing market.





“

Alongside TECH's teaching staff, you will learn about public blockchains and the possibilities they offer"

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

01

Intellectual Capital and Talent Growth

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 current project or develop new projects in the field of R&D or Business Development within their company.

06

Increased competitiveness

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

11 Certificate

The Postgraduate Certificate in Blockchain and Business guarantees, in addition to the most rigorous and updated training, access to a Postgraduate Certificate issued by TECH Technological University.



“

Successfully complete this training and receive your university degree without travel or laborious paperwork”

The **Postgraduate Certificate in Blockchain and Business** contains the most complete and updated program on the market.

After the student has passed the evaluations, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** by tracked delivery*.

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

Title: **Postgraduate Certificate in Blockchain and Business**

Official N° of Hours: **300 h.**



*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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- » Modality: **online**
- » Duration: **12 weeks**
- » Certificate: **TECH Technological University**
- » Schedule: **at your own pace**
- » Exams: **online**

Postgraduate Certificate Blockchain and Business

