



## Postgraduate Certificate DeFi & NFT Applications on Blockchain

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Credits: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/information-technology/postgraduate-certificate/defi-nft-applications-blockchain

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Certificate





## tech 06 Introduction

Blockchain technology has proven to be very flexible, as it adapts to a large number of fields and sectors, providing a solution to many existing problems. As such, the world of finance is constantly looking for new ways to do business effectively. The Blockchain offers the possibility of performing operations and transactions through smart contracts without the need for intermediaries. And it does so in a decentralized way, since these transactions can be approved from the rest of the users that make up the blockchain and Smart Contracts.

Additionally, a new product with enormous economic potential has emerged. NFTs, short for Non-Fungible Token, are items of varied content that use Blockchain technology to validate their purchase and sale and verify who owns their rights at the time. This Postgraduate Certificate in DeFi & NFT Applications on Blockchain therefore delves into these two issues, and offers the computer scientist the possibility to specialize in this very new field.

This qualification is developed over 6 weeks through a 100% online teaching system that allows students to balance their professional life with their studies, while taking advantage of the numerous multimedia teaching contents available, such as explanatory videos, master classes or interactive summaries.

This **Postgraduate Certificate in DeFi & NFT Applications on Blockchain** contains the most complete and up-to-date educational program on the market. Its most notable features are:

- The development of practical cases presented by experts in DeFi, NFT and Blockchain.
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection work
- Content that is accessible from any fixed or portable device with an internet connection





The Blockchain world is complex.

Add to this the area of finance and it becomes even more complicated.

With this program, these issues will no longer be a secret for you"

The program's teaching staff includes professionals from the sector who contribute their work experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive training programmed to train in real situations.

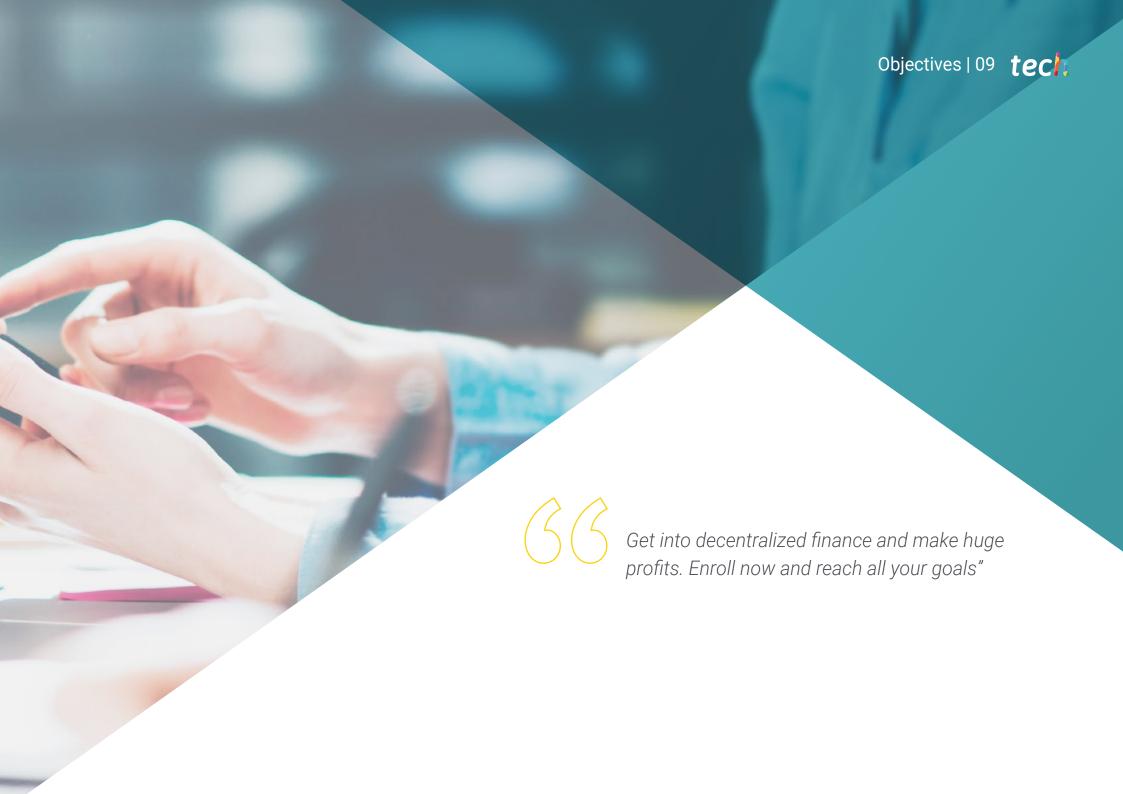
This program is designed around Problem-Based Learning, whereby the professionals must try to solve the different professional practice situations that arise throughout the program. For this purpose, students will be assisted by an innovative, interactive video system created by renowned and experienced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

Delve into the financial applications of Blockchain technology and achieve the career advancement you are looking for.

Apply the latest developments in decentralized finance to the business world.







## tech 10 | Objectives



## **General Objectives**

- Analyze the different DeFi tools
- Evaluate new forms of passive income
- Determine what Open Finance is
- Examine the characteristics of NFTs



Don't wait any longer: professional success is just around the corner when you specialize in Blockchain technology"





## Objectives | 11 tech

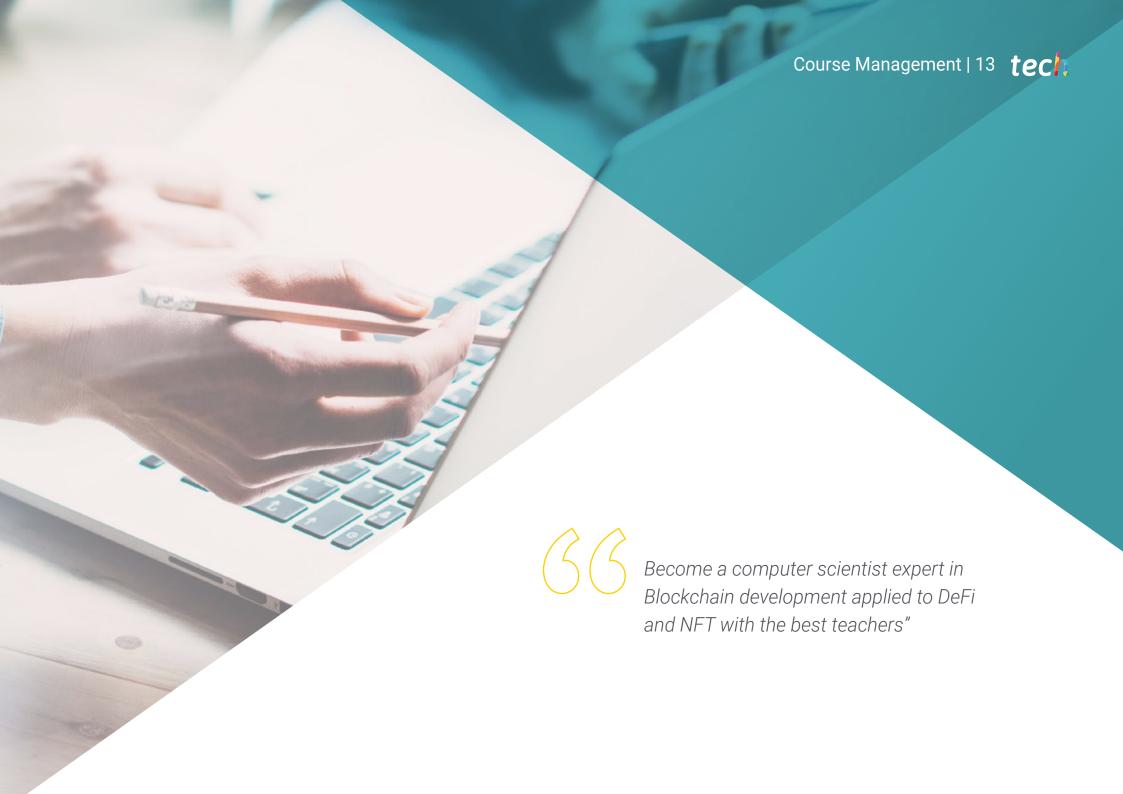


## **Specific Objectives**

- Evaluate the importance of Stablecoins
- Examine Maker, Augur and Gnosis protocol
- Determine the AAVe protocol
- Identify the importance of Uniswap
- Study the Sushiswap philosophy in depth
- Analyze dY/dX and Synthetix
- Identifying the best markets for NFT exchange



This Postgraduate Certificate has an expert teaching staff that will guide the students throughout the learning process, ensuring that they will obtain the latest and deepest knowledge on Blockchain technology applied to decentralized finance and NFT. Therefore, at the end of this program, the computer scientists or engineers will be in a position to immediately apply everything they have learned throughout their program to their professional careers.



#### **International Guest Director**

Chris Sutton is a leading professional with extensive experience in the field of technology and finance, specializing in the Blockchain area. In fact, he has held the senior position of Director of the Blockchain and Digital Assets Department at Mastercard. In addition, he has been the Founder of the consulting firm N17 Capital, in which he offers advice to companies in the field of Blockchain and digital assets. So, one of his functions has been to identify the components that make up these new tools, analyze them and create working strategies.

His professional experience has included high-level roles in leading companies in the sector, such as Oasis Pro Market, where he has performed duties as Director of Blockchain Services. In addition, he has worked as Mergers and Acquisitions Product Manager at Cisco, and as Product Manager at IBM. These positions have allowed him to stand out internationally for his ability to lead teams, develop innovative strategies and manage large-scale projects.

Throughout his career, he has participated in important technological and financial events. In this sense, Chris Sutton has given presentations and has been part of international panels, along with other leading experts in this sector. In this way, on the occasion of the 15th anniversary of the white paper on Bitcoin, he participated in the events of the FinTech week in Hong Kong. He also presented his expertise at a conference organized by Mastercard in Dubai on banking in the digital age and the impact of digital assets. Likewise, his analyses have focused on delving into the history, principles and future of the Blockchain.

In short, his strategic vision and outstanding skills in programming and algorithms have been key to his success in the international market, consolidating him as a leader in his field.

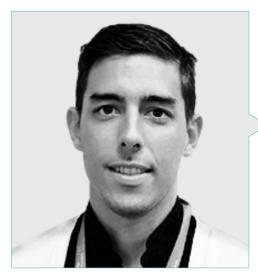


## D. Sutton, Chris

- Director of Blockchain and Digital Assets at Mastercard, Miami, U.S.A.
- Founder of N17 Capital
- Director of Blockchain Services at Oasis Pro Market
- Mergers and Acquisitions Product Manager at Cisco
- Product Manager at IBN
- Contributor at Cointelegraph
- Master's degree in Financial Systems Engineering from University College London
- Bachelor's Degree in Computer Science from Florida International University



#### 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. Callejo, Carlos

- Academic Director for 5 editions of the Master's Degree in Applied Blockchain at UEMC and UCAM
- CEO Block Impulse
- CTO Stocken Capital
- Master's Degree in Applied Blockchain
- FP2 Information Systems and Telecommunications
- Co-author of the book Cryptocurrencies For Dummies
- Trainer in the infoproduct Cryptocurrencies for everyone Plus

#### 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







### tech 20 | Structure and Content

#### Module 1. Blockchain and its New Applications: DeFi and NFT

- 1.1. Financial Culture
  - 1.1.1. Evolution of Money
  - 1.1.2. Fiat money vs. Decentralized Money
  - 1.1.3. Digital Bank vs. Open Finance
- 1.2. Ethereum
  - 1.2.1. Technology
  - 1.2.2. Decentralized Money
  - 1.2.3. Stablecoins
- 1.3. Other Technology
  - 1.3.1. Binance Smart Chain
  - 1.3.2. Polygon
  - 1.3.3. Solana
- 1.4. DeFi (Decentralized Finance)
  - 1.4.1. DeFi
  - 1.4.2. Challenges
  - 1.4.3. Open Finance vs. DeFi
- 1.5. Information Tools
  - 1.5.1. Metamask and Decentralized Wallets
  - 1.5.2. CoinMarketCap
  - 1.5.3. DefiPulse
- 1.6. Stablecoins
  - 1.6.1. Protocol Maker
  - 1.6.2. USDC, USDT, BUSD
  - 1.6.3. Forms of Collateralization and Risks
- 1.7. Exchanges and Decentralized Exchanges and Platforms (DEX)
  - 1.7.1. Uniswap
  - 1.7.2. SushiSwap
  - 1.7.3. AAVe
  - 1.7.4. dYdX/Synthetix

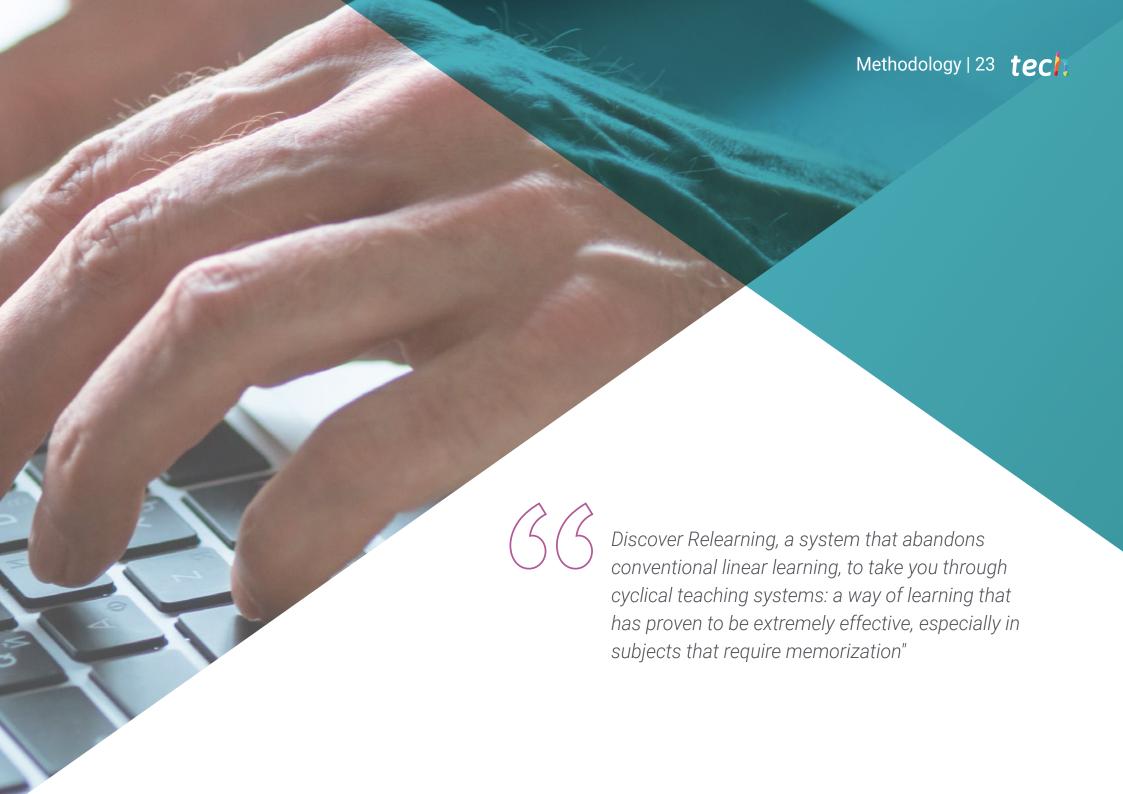
- 1.8. NFT Ecosystem (Non-Fungible Tokens)
  - 1.8.1. NFTs
  - 1.8.2. Typology
  - 1.8.3. Features
- 1.9. Capitulation of Industries
  - 1.9.1. Design Industry
  - 1.9.2. Fan Token Industry
  - 1.9.3. Project Financing
- 1.10. NFT Markets
  - 1.10.1. Opensea
  - 1.10.2. Rarible
  - 1.10.3. Customized Platforms



Blockchain technology has changed the world. Adapt and progress professionally by deepening your applications in NFT and DeFi"







## tech 24 | Methodology

#### Case Study to contextualize all content

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



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



You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.



The student will learn to solve complex situations in real business environments through collaborative activities and real cases.

#### A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and professional reality is taken into account.



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

The case method has been the most widely used learning system among the world's leading Information Technology schools for as long as they have existed. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question that you are presented with in the case method, an action-oriented learning method. Throughout the course, students will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.

#### Relearning Methodology

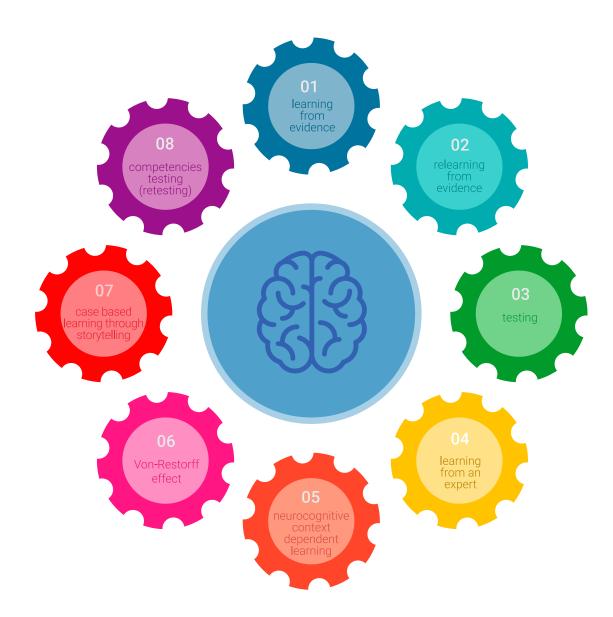
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

In 2019, we obtained the best learning results of all online universities in the world.

At TECH, you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our university is the only one in the world authorized to employ this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



### Methodology | 27 tech

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically. This methodology has trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, and financial markets and instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.

#### 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 adapted in audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high-quality pieces in each and every one of the materials that are made available to the student.



#### **Classes**

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **Practising Skills and Abilities**

They will carry out activities to develop specific competencies and skills in each thematic area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



#### **Additional Reading**

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.



Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best specialists in the world.



#### **Interactive Summaries**

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

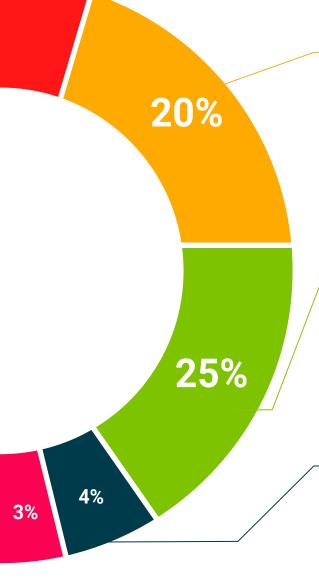


This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

#### **Testing & Retesting**

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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.







## tech 32 | Certificate

The Postgraduate Diploma in **DeFi & NFT Applications on Blockchain** guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by **TECH Global 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 DeFi & NFT Applications on Blockchain

ECTS: 6

Official No of Hours: 150 h.



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leducation information tutors
guarantee accreditation teaching
institutions teaching



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- » Schedule: at your own pace
- » Exams: online

