

Advanced Master's Degree Blockchain Economics and NFT in Video Games



Advanced Master's Degree Blockchain Economics and NFT in Video Games

- » Modality: online
- » Duration: 2 years
- » Certificate: TECH Global University
- » Accreditation: 120 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/information-technology/advanced-master-degree/advanced-master-degree-blockchain-economics-nft-video-games

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01

Introduction to the Program

The Blockchain economy and NFTs are transforming the way players, developers and companies interact with video games. First of all, Blockchain enables full transparency in transactions and ensures ownership of digital assets. Secondly, NFTs grant players the ability to have real ownership over in-game objects such as weapons, masks, characters and terrains. Consequently, professionals are increasingly specializing in the economic models underlying these systems, as well as in the development of decentralized platforms. In this way, TECH, seeks to provide a wide range of academic content to build professionals to perform in the new business opportunities through the integration of these technologies in the video game environment.





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You are just one step away from being part of the digital revolution that is transforming the entertainment industry forever. Join TECH now”

In traditional games, developers control the internal markets; however, with the Blockchain, transactions and ownership of assets are distributed among participants. As a result, a more open marketplace has resulted, without intermediaries, where players can exchange goods with each other. Moreover, thanks to these technologies, a more autonomous and fluid in-game economy has been created. This decentralization, on the other hand, opens new doors to the creation of dynamic markets, where prices and transactions do not depend on a central authority, but on the free market of the players.

Cryptocurrencies and tokens have driven economic opportunities in regions with limited access to traditional financial services. Players can participate in virtual economies without the need for bank accounts, facilitating financial inclusion and enabling revenue generation through video games. This has led to new forms of employment and global economic interaction. In addition, the interoperability that Blockchain and NFTs offer allows assets to be moved between games, creating a broader and more flexible ecosystem for players. However, managing this expanding sector requires expertise in both technology and its business application. For this reason, TECH has developed a comprehensive program that delves into the development of public blockchains and their application in the Gaming industry. This intensive, theoretical and practical course focuses on advanced tools to create secure and successful projects, combining Blockchain programming with crypto-gaming economics.-

In this way, in just months of intensive learning, the students of this Advanced Master's Degree will be able to update their knowledge through the most effective learning method in the university landscape: the Relearning. This approach adapts to the learning pace of each student, since the content is available 24 hours a day and is accessible from any device with an Internet connection.

This **Advanced Master's Degree in Blockchain Economics and NFT in Video Games** contains the most complete and up-to-date educational program on the market. Its most notable features are:

- ♦ The development of case studies presented by experts in Blockchain Economics and NFT in Video Games
- ♦ 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 self-assessment can be used to improve learning
- ♦ Its special emphasis on innovative methodologies in Blockchain Economics and NFT in Video Games
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



This Advanced Master's Degree is your ticket to turn your passion for video games into your dream, innovative and profitable career"

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Lead the virtual world learning with the most updated and enriching didactic methodology in the current academic panorama”

It includes in its teaching staff professionals belonging to the field of Blockchain Economics and NFT in Video Games, who pour into this program the experience of their work, in addition to recognized specialists from reference companies 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 an immersive learning experience designed to prepare for real-life situations.

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

Invest in yourself and build the best professional future with TECH, the world's largest online university.

Through a 100% online methodology you will begin to master the most important technological knowledge from anywhere in the world.



02

Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs, available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it has a huge faculty of more than 6,000 professors of the highest international prestige.



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Study at the largest online university in the world and ensure your professional success. The future begins at TECH”

The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future"

Forbes
Mejor universidad
online del mundo

Plan
de estudios
más completo

The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

Profesorado
TOP
Internacional



La metodología
más eficaz

A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in eleven different languages, making us the largest educational institution in the world.

nº1
Mundial
Mayor universidad
online del mundo

The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.



Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.



The top-rated university by its students

The main review websites have positioned TECH as the best rated university in the world by its students. These review portals, recognized for their reliability and prestige due to the rigorous verification and validation of the authenticity of each opinion, have given TECH highly favorable ratings. These ratings place TECH as the absolute international university reference.



03 Syllabus

The Advanced Master's Degree in Blockchain Economics and NFTs in Video Games curriculum is designed as a comprehensive academic opportunity to acquire an advanced specialization. During the program, students will explore everything from the fundamentals of Blockchain technology and the principles of NFTs to their application in the creation and management of digital economies. The modules cover topics such as architecture design, the use of popular platforms for the creation of NFTs and other key content. In addition, aspects such as cybersecurity and emerging industry trends will be delved into, allowing students to develop essential skills.

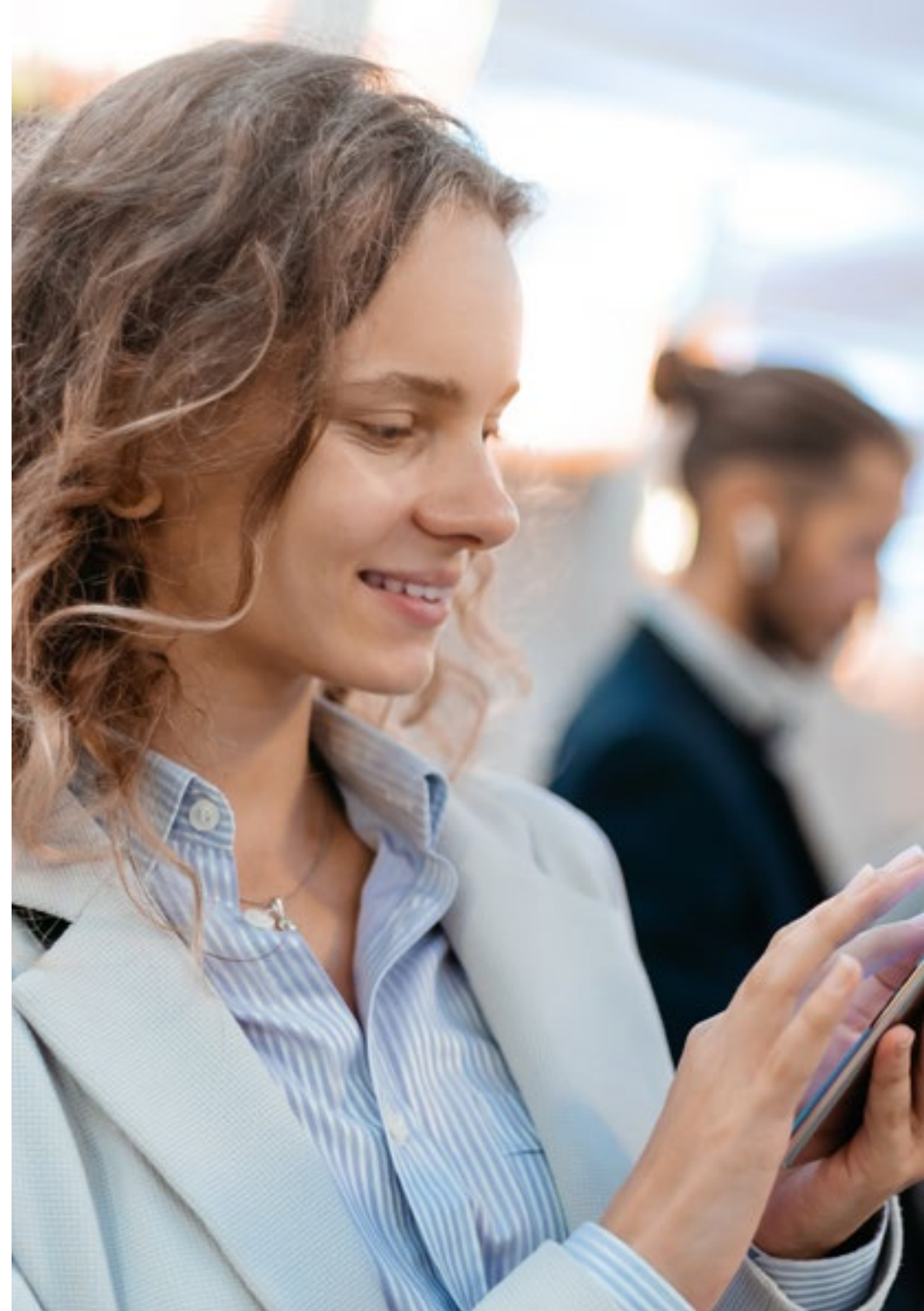


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TECH offers you more than an Advanced Master's Degree, it's your chance to be part of a global transformation in technology and art”

Module 1. Development with Public Blockchain: Ethereum, Stellar and Polkadot

- 1.1. Ethereum. Public Blockchain
 - 1.1.1. Ethereum
 - 1.1.2. EVM and GAS
 - 1.1.3. Etherscan
- 1.2. Running Ethereum: Solidity
 - 1.2.1. Solidity
 - 1.2.2. Remix
 - 1.2.3. Compilation and Execution
- 1.3. Ethereum Framework: Brownie
 - 1.3.1. Brownie
 - 1.3.2. Ganache
 - 1.3.3. Brownie Deployment
- 1.4. Testing Smart Contracts
 - 1.4.1. Test Driven Development (TDD)
 - 1.4.2. Pytest
 - 1.4.3. Smart Contracts
- 1.5. Web Connection
 - 1.5.1. Metamask
 - 1.5.2. web3.js
 - 1.5.3. Ether.js
- 1.6. Real Project: Fungible Token
 - 1.6.1. ERC20
 - 1.6.2. Creating Our Token
 - 1.6.3. Deployment and Validation
- 1.7. Stellar Blockchain
 - 1.7.1. Stellar Blockchain
 - 1.7.2. Ecosystem
 - 1.7.3. Compared to Ethereum
- 1.8. Programming in Stellar
 - 1.8.1. Horizon
 - 1.8.2. Stellar SDK
 - 1.8.3. Fungible Token Project



- 1.9. Polkadot Project
 - 1.9.1. Polkadot Project
 - 1.9.2. Ecosystem
 - 1.9.3. Interaction with Ethereum and Other Blockchain
- 1.10. Programming Polkadot
 - 1.10.1. Substrate
 - 1.10.2. Creating Parachain on Substrate
 - 1.10.3. Polkadot Integration

Module 2. Blockchain Technology. Cryptography and Security

- 2.1. Cryptography in Blockchain
- 2.2. A Hash in Blockchain
- 2.3. Private Sharing Multi-Hashing (PSM Hash)
- 2.4. Digital Signatures in Blockchain
- 2.5. Key Management. Wallets
- 2.6. Encryption
- 2.7. On-Chain and Off-Chain Data
- 2.8. Security and Smart Contracts

Module 3. Corporate Blockchain Development: Hyperledger Besu

- 3.1. Besu Configuration
 - 3.1.1. Key Configuration Parameters in Production Environments
 - 3.1.2. Finetuning for Connected Services
 - 3.1.3. Good Configuration Practices
- 3.2. Blockchain Configuration
 - 3.2.1. Key Configuration Parameters for PoA
 - 3.2.2. Key Configuration Parameters for PoW
 - 3.2.3. Genesis Block Configurations
- 3.3. Securing Besu
 - 3.3.1. Secure the RPC with TLS
 - 3.3.2. RPC Securitization with NGINX
 - 3.3.3. Securitization by Means of a Node Scheme

- 3.4. Besu in High Availability
 - 3.4.1. Node Redundancy
 - 3.4.2. Balancers for Transactions
 - 3.4.3. Transaction Pool over Messaging Queue
- 3.5. Offchain Tools
 - 3.5.1. Privacy - Tessera
 - 3.5.2. Identidad - Alastria ID
 - 3.5.3. Data Indexing - Subgraph
- 3.6. Applications Developed on Besu
 - 3.6.1. ERC20 Token-Based Applications
 - 3.6.2. ERC 721 Token-Based Applications
 - 3.6.3. ERC 1155 Token-Based Applications
- 3.7. Besu Deployment and Automation
 - 3.7.1. Besu over Docker
 - 3.7.2. Besu over Kubernetes
 - 3.7.3. Besu in Blockchain as a Service
- 3.8. Besu Interoperability with Other Clients
 - 3.8.1. Interoperability with Geth
 - 3.8.2. Interoperability with Open Ethereum
 - 3.8.3. Interoperability with Other DLTs
- 3.9. Plugins for Besu
 - 3.9.1. Most Common Plugins
 - 3.9.2. Plugin Development
 - 3.9.3. Installation of Plugins
- 3.10. Configuration of Development Environments
 - 3.10.1. Creation of a Developing Environment
 - 3.10.2. Creation of a Customer Integration Environment
 - 3.10.3. Creating a Pre-Production Environment for Load Testing

Module 4. Corporate Blockchain Development: Hyperledger Fabric

- 4.1. Hyperledger
 - 4.1.1. Hyperledger Ecosystem
 - 4.1.2. Hyperledger Tools
 - 4.1.3. Hyperledger Frameworks
- 4.2. Hyperledger Fabric – Components of Its Architecture. State of the Art
 - 4.2.1. State of the Art of Hyperledger Fabric
 - 4.2.2. Nodes
 - 4.2.3. Orderers
 - 4.2.4. CouchDB and LevelDB
 - 4.2.5. CA
- 4.3. Hyperledger Fabric-Components of Its Architecture. Process of a Transaction
 - 4.3.1. Process of a Transaction
 - 4.3.2. Chain Codes
 - 4.3.3. MSP
- 4.4. Enabling Technologies
 - 4.4.1. Go
 - 4.4.2. Docker
 - 4.4.3. Docker Compose
 - 4.4.4. Other Technologies
- 4.5. Pre-Requisite Installation and Environment Preparation
 - 4.5.1. Server Preparation
 - 4.5.2. Download Prerequisites
 - 4.5.3. Download from Official Hyperledger Repository
- 4.6. First Deployment
 - 4.6.1. Automatic Test-Network Deployment
 - 4.6.2. Guided Test-Network Deployment
 - 4.6.3. Review of Deployed Components
- 4.7. Second Deployment
 - 4.7.1. Deployment of Private Data Collection
 - 4.7.2. Integration against a Fabric Network
 - 4.7.3. Other Projects

- 4.8. Chain Codes
 - 4.8.1. Structure of a Chaincode
 - 4.8.2. Deployment and Upgrade of Chaincodes
 - 4.8.3. Other Important Chaincode Functions
- 4.9. Connection to Other Hyperledger Tools (Caliper and Explorer)
 - 4.9.1. Hyperledger Explorer Installation
 - 4.9.2. Hyperledger Caliper Installation
 - 4.9.3. Other Important Tools
- 4.10. Certification
 - 4.10.1. Types of Official Certifications
 - 4.10.2. Preparation for CHFA
 - 4.10.3. Developer vs. Administrator Profiles

Module 5. Sovereign Identity Based on Blockchain

- 5.1. Digital Identity
 - 5.1.1. Personal Data
 - 5.1.2. Social Networks
 - 5.1.3. Control Over Data
 - 5.1.4. Authentication
 - 5.1.5. Identification
- 5.2. Blockchain Identity
 - 5.2.1. Digital Signature
 - 5.2.2. Public Networks
 - 5.2.3. Permitted Networks
- 5.3. Sovereign Digital Identity
 - 5.3.1. Requirements
 - 5.3.2. Components
 - 5.3.3. Applications
- 5.4. Decentralized Identifiers (DIDs)
 - 5.4.1. Layout
 - 5.4.2. DID Methods
 - 5.4.3. DID Documents

- 5.5. Verifiable Credentials
 - 5.5.1. Components
 - 5.5.2. Flows
 - 5.5.3. Security and Privacy
 - 5.5.4. Blockchain to Register Verifiable Credentials
 - 5.6. Blockchain Technologies for Digital Identity
 - 5.6.1. Hyperledger Indy
 - 5.6.2. Sovrin
 - 5.6.3. uPort
 - 5.6.4. IDAlastria
 - 5.7. European Blockchain and Identity Initiatives
 - 5.7.1. eIDAS
 - 5.7.2. EBSI
 - 5.7.3. ESSIF
 - 5.8. Digital Identity of Things (IoT)
 - 5.8.1. IoT Interactions
 - 5.8.2. Semantic Interoperability
 - 5.8.3. Data Security
 - 5.9. Digital Identity of the Processes
 - 5.9.1. Date:
 - 5.9.2. Codes
 - 5.9.3. Interfaces
 - 5.10. Blockchain Digital Identity Use Cases
 - 5.10.1. Health
 - 5.10.2. Educational
 - 5.10.3. Logistics
 - 5.10.4. Public Administration
- Module 6. Blockchain and Its New Applications: DeFi and NFT**
- 6.1. Financial Culture
 - 6.1.1. Evolution of Money
 - 6.1.2. FIAT Money vs. Decentralized Money
 - 6.1.3. Digital Banking vs. Open Finance
 - 6.2. Ethereum
 - 6.2.1. Technology
 - 6.2.2. Decentralized Money
 - 6.2.3. Stable Coins
 - 6.3. Other Technologies
 - 6.3.1. Binance Smart Chain
 - 6.3.2. Polygon
 - 6.3.3. Solana
 - 6.4. DeFi (Decentralized Finance)
 - 6.4.1. DeFi
 - 6.4.2. Challenges
 - 6.4.3. Open Finance vs. DeFi
 - 6.5. Information Tools
 - 6.5.1. Metamask and Decentralized Wallets
 - 6.5.2. CoinMarketCap
 - 6.5.3. DefiPulse
 - 6.6. Stable Coins
 - 6.6.1. Protocol Maker
 - 6.6.2. USDC, USDT, BUSD
 - 6.6.3. Forms of Collateralization and Risks
 - 6.7. Exchanges and Decentralized Exchanges and Platforms (DEX)
 - 6.7.1. Uniswap
 - 6.7.2. SushiSwap
 - 6.7.3. AAVE
 - 6.7.4. dYdX / Synthetix
 - 6.8. NFT Ecosystem (Non-Fungible Tokens)
 - 6.8.1. The NFT
 - 6.8.2. Typology
 - 6.8.3. Features
 - 6.9. Capitulation of Industries
 - 6.9.1. Design Industry
 - 6.9.2. Fan Token Industry
 - 6.9.3. Project Financing

- 6.10. NFT Markets
 - 6.10.1. Opensea
 - 6.10.2. Rarible
 - 6.10.3. Customized Platforms

Module 7. Blockchain. Legal Implications

- 7.1. Bitcoin
 - 7.1.1. Bitcoin
 - 7.1.2. Whitepaper Analysis
 - 7.1.3. Operation of the Proof of Work
- 7.2. Ethereum
 - 7.2.1. Ethereum. Origins
 - 7.2.2. Proof of Stake Operation
 - 7.2.3. DAO Case
- 7.3. Current Status of the Blockchain
 - 7.3.1. Growth of Cases
 - 7.3.2. Blockchain Adoption by Large Companies
- 7.4. MiCA (Market in Cryptoassets)
 - 7.4.1. Birth of the Standard
 - 7.4.2. Legal Implications (Obligations, Obligated Parties, etc.)
 - 7.4.3. Summary of the Standard
- 7.5. Prevention of Money Laundering
 - 7.5.1. Fifth Directive and its Transposition
 - 7.5.2. Obligated Parties
 - 7.5.3. Intrinsic Obligations
- 7.6. Tokens
 - 7.6.1. Tokens
 - 7.6.2. Types
 - 7.6.3. Applicable Regulations in Each Case
- 7.7. ICO/STO/IEO: Corporate Financing Systems
 - 7.7.1. Types of Financing
 - 7.7.2. Applicable Regulations
 - 7.7.3. Success Stories

- 7.8. NFT (Non-Fungible Tokens)
 - 7.8.1. NFT
 - 7.8.2. Applicable Regulations
 - 7.8.3. Use Cases and Success (Play to Earn)
- 7.9. Taxation and Cryptoassets
 - 7.9.1. Taxation
 - 7.9.2. Income from Work
 - 7.9.3. Income from Economic Activities
- 7.10. Other Applicable Regulations
 - 7.10.1. General Data Protection Regulation
 - 7.10.2. DORA (Cybersecurity)
 - 7.10.3. EIDAS Regulations

Module 8. Blockchain Architecture Design

- 8.1. Blockchain Architecture Design
 - 8.1.1. Architecture
 - 8.1.2. Infrastructure Architecture
 - 8.1.3. Software Architecture
 - 8.1.4. Integration Deployment
- 8.2. Types of Networks
 - 8.2.1. Public Networks
 - 8.2.2. Private Networks
 - 8.2.3. Permitted Networks
 - 8.2.4. Differences
- 8.3. Participant Analysis
 - 8.3.1. Company Identification
 - 8.3.2. Customer Identification
 - 8.3.3. Consumer Identification
 - 8.3.4. Interaction Between Parties
- 8.4. Proof-of-Concept Design
 - 8.4.1. Functional Analysis
 - 8.4.2. Implementation Phases

- 8.5. Infrastructure Requirements
 - 8.5.1. Cloud
 - 8.5.2. Physical
 - 8.5.3. Hybrid
- 8.6. Security Requirements
 - 8.6.1. Certification
 - 8.6.2. HSM
 - 8.6.3. Encryption
- 8.7. Communications Requirements
 - 8.7.1. Network Speed Requirements
 - 8.7.2. I/O Requirements
 - 8.7.3. Transaction Requirements Per Second
 - 8.7.4. Affecting Requirements with the Network Infrastructure
- 8.8. Software Testing, Performance and Stress Testing
 - 8.8.1. Unit Testing in Development and Pre-Production Environments
 - 8.8.2. Infrastructure Performance Testing
 - 8.8.3. Pre-Production Testing
 - 8.8.4. Production Testing
 - 8.8.5. Version Control
- 8.9. Operation and Maintenance
 - 8.9.1. Support: Alerts
 - 8.9.2. New Versions of Infrastructure Components
 - 8.9.3. Risk Analysis
 - 8.9.4. Incidents and Changes
- 8.10. Continuity and Resilience
 - 8.10.1. Disaster Recovery
 - 8.10.2. Backup
 - 8.10.3. New Participants

Module 9. Blockchain Applied to Logistics

- 9.1. Operational AS IS Mapping and Possible Gaps
 - 9.1.1. Identification of Manually Executed Processes
 - 9.1.2. Identification of Participants and Their Particularities
 - 9.1.3. Case Studies and Operational Gaps
 - 9.1.4. Presentation and Mapping Executive Staff
- 9.2. Map of Current Systems
 - 9.2.1. Current Systems
 - 9.2.2. Master Data and Information Flow
 - 9.2.4. Governance Model
- 9.3. Application of Blockchain to Logistics
 - 9.3.1. Blockchain Applied to Logistics
 - 9.3.2. Traceability-Based Architectures for Business Processes
 - 9.3.3. Critical Success Factors in Implementation
 - 9.3.4. Practical Advice
- 9.4. TO BE Model
 - 9.4.1. Operational Definition for Supply Chain Control
 - 9.4.2. Structure and Responsibilities of the Systems Plan
 - 9.4.3. Critical Success Factors in Implementation
- 9.5. Construction of the Business Case
 - 9.5.1. Cost Structure
 - 9.5.2. Projected Benefits
 - 9.5.3. Approval and Acceptance of the Plan by the Owners
- 9.6. Creation of Proof of Concept (POC)
 - 9.6.1. Importance of a POC for New Technologies
 - 9.6.2. Key Aspects
 - 9.6.3. Examples of POCs with Low Cost and Effort
- 9.7. Project Management
 - 9.7.1. Agile Methodology
 - 9.7.2. Decision of Methodologies Among All Participants
 - 9.7.3. Strategic Development and Deployment Plan

- 9.8. Integration of Systems: Opportunities and Needs
 - 9.8.1. Structure and Development of the Systems Planning
 - 9.8.2. Data Master Model
 - 9.8.3. Roles and Responsibilities
 - 9.8.4. Integrated Management and Monitoring Model
- 9.9. Development and Implementation with Supply Chain Team
 - 9.9.1. Active Participation of the Customer (Business)
 - 9.9.2. Systemic and Operational Risk Analysis
 - 9.9.3. Event Key: Test Models and Post-Production Support
- 9.10. Change Management: Follow-Up and Updating
 - 9.10.1. Management Implications
 - 9.10.2. Rollout Plan and Training Program
 - 9.10.3. KPI Tracking and Management Models

Module 10. Blockchain and Business

- 10.1. Applying Technology throughout the Company
 - 10.1.1. Applying Blockchain
 - 10.1.2. Blockchain Benefits
 - 10.1.3. Common Implementation Mistakes
- 10.2. Blockchain Implementation Cycle
 - 10.2.1. From P2P to Distributed Systems
 - 10.2.2. Key Aspects for Proper Implementation
 - 10.2.3. Improving Current Implementations
- 10.3. Blockchain vs. Traditional Technologies. Basics
 - 10.3.1. APIs Data and Flows
 - 10.3.2. Tokenization as a Cornerstone for Projects
 - 10.3.3. Incentives
- 10.4. Selecting Blockchain Type
 - 10.4.1. Public Blockchain
 - 10.4.2. Private Blockchain
 - 10.4.3. Consortia

- 10.5. Blockchain and the Public Sector
 - 10.5.1. Blockchain in the Public Sector
 - 10.5.2. Central Bank Digital Currency (CBDC)
 - 10.5.3. Conclusions
- 10.6. Blockchain and the Financial Sector. Start
 - 10.6.1. CBDC and Finance
 - 10.6.2. Native Digital Assets
 - 10.6.3. Where It Does Not Fit
- 10.7. Blockchain and the Pharmaceutical Sector
 - 10.7.1. Searching for Meaning in the Field
 - 10.7.2. Logistics or Pharma
 - 10.7.3. Application
- 10.8. Pseudo Private Blockchains. Consortia: Meaning of Consortia
 - 10.8.1. Reliable Environments
 - 10.8.2. Analysis and Delving Deeper
 - 10.8.3. Valid Implementations
- 10.9. Blockchain. Use Case in Europe: EBSI
 - 10.9.1. EBSI (European Blockchain Services Infrastructure)
 - 10.9.2. The Business Model
 - 10.9.3. Future
- 10.10. The Future of Blockchain
 - 10.10.1. Trilemma
 - 10.10.2. Automation
 - 10.10.3. Conclusions

Module 11. Blockchain

- 11.1. Blockchain
 - 11.1.1. Blockchain
 - 11.1.2. The New Blockchain Economy
 - 11.1.3. Decentralization as the Foundation of the Blockchain Economy
- 11.2. Blockchain Technologies
 - 11.2.1. Bitcoin Blockchain
 - 11.2.2. Validation Process, Computational Power
 - 11.2.3. Hash

- 11.3. Types of Blockchain
 - 11.3.1. Public Chain
 - 11.3.2. Private Chain
 - 11.3.3. Hybrid or Federated Chain
- 11.4. Types of Networks
 - 11.4.1. Centralized Network
 - 11.4.2. Distributed Network
 - 11.4.3. Decentralized Network
- 11.5. Smart Contracts
 - 11.5.1. Smart Contracts
 - 11.5.2. Process of Generating a Smart Contract
 - 11.5.3. Examples and Applications of Smart Contract
- 11.6. Wallets
 - 11.6.1. Wallets
 - 11.6.2. Usefulness and Importance of a Wallet
 - 11.6.3. Hot & Cold Wallet
- 11.7. The Blockchain Economy
 - 11.7.1. Advantages of the Blockchain Economy
 - 11.7.2. Risk Level
 - 11.7.3. Gas Fee
- 11.8. Security
 - 11.8.1. Revolution in Security Systems
 - 11.8.2. Absolute Transparency
 - 11.8.3. Attacks to the Blockchain
- 11.9. Tokenization
 - 11.9.1. Tokens
 - 11.9.2. Tokenization
 - 11.9.3. Tokenized Models

Module 12. DeFi

- 12.1. DeFi
 - 12.1.1. DeFi
 - 12.1.2. Origin
 - 12.1.3. Criticism
- 12.2. Market Decentralization
 - 12.2.1. Economic Advantages
 - 12.2.2. Creation of Financial Products
 - 12.2.3. Loans of DeFi
- 12.3. Components DeFi
 - 12.3.1. Layer 0
 - 12.3.2. Software Protocol Layer
 - 12.3.3. Application Layer and Aggregation Layer
- 12.4. Decentralized Exchanges
 - 12.4.1. Exchange of Tokens
 - 12.4.2. Adding Liquidity
 - 12.4.3. Eliminating Liquidity
- 12.5. DeFi Markets
 - 12.5.1. MarketDAO
 - 12.5.2. Argus Prediction Market
 - 12.5.3. Ampleforth
- 12.6. Keys
 - 12.6.1. Yield Farming
 - 12.6.2. Liquidity Mining
 - 12.6.3. Componibility
- 12.7. Differences with Other Systems
 - 12.7.1. Traditional
 - 12.7.2. Fintech
 - 12.7.3. Comparison
- 12.8. Risk to Consider
 - 12.8.1. Incomplete Decentralization
 - 12.8.2. Security
 - 12.8.3. Usage Errors

- 12.9. DeFi Applications
 - 12.9.1. Lending
 - 12.9.2. Trading
 - 12.9.3. Derivatives
- 12.10. Projects Under Development
 - 12.10.1. AAVE
 - 12.10.2. DydX
 - 12.10.3. Money on Chain

Module 13. NFT

- 13.1. NFT
 - 13.1.1. NFTs
 - 13.1.2. NFT Linkage and Blockchain
 - 13.1.3. Creation of NFT
- 13.2. Creating an NFT
 - 13.2.1. Design and Content
 - 13.2.2. Generation
 - 13.2.3. Metadata and Freeze Metada
- 13.3. NFT Sales Options in Gamified Economies
 - 13.3.1. Direct Sales
 - 13.3.2. Auction
 - 13.3.3. Whitelist
- 13.4. NFT Market Research
 - 13.4.1. Opensea
 - 13.4.2. Immutable Marketplace
 - 13.4.3. Gemini
- 13.5. NFT Monetization Strategies in Gamified Economies
 - 13.5.1. Value in Use
 - 13.5.2. Aesthetic Value
 - 13.5.3. Actual Value
- 13.6. NFT Monetization Strategies in Gamified Economies: Mining
 - 13.6.1. NFT Mining
 - 13.6.2. Merge
 - 13.6.3. Burn

- 13.7. NFT Monetization Strategies in Gamified Economies: Consumables
 - 13.7.1. NFT Consumable
 - 13.7.2. NFT Envelopes
 - 13.7.3. Quality of NFT
- 13.8. Analysis of Gamified Systems Based on NFT
 - 13.8.1. Alien Worlds
 - 13.8.2. Gods Unchained
 - 13.8.3. R-Planet
- 13.9. NFT as an Investment and Labor Incentive
 - 13.9.1. Investment Participation Privileges
 - 13.9.2. Collections Linked to Specific Dissemination Work
 - 13.9.3. Sum of Forces
- 13.10. Areas of Innovation in Development
 - 13.10.1. Music at NFT
 - 13.10.2. NFT Video
 - 13.10.3. NFT Books

Module 14. Cryptocurrency Analysis

- 14.1. Bitcoin
 - 14.1.1. Bitcoins
 - 14.1.2. Bitcoin as a Market Indicator
 - 14.1.3. Advantages and Disadvantages for Gamified Economies
- 14.2. Altcoins
 - 14.2.1. Main Characteristics and Differences with Respect to Bitcoin
 - 14.2.2. Market Impact
 - 14.2.3. Analysis of Binding Projects
- 14.3. Ethereum
 - 14.3.1. Main Features and Operation
 - 14.3.2. Hosted Projects and Market Impact
 - 14.3.3. Advantages and Disadvantages for Gamified Economies
- 14.4. Binance Coin
 - 14.4.1. Main Features and Operation
 - 14.4.2. Hosted Projects and Market Impact
 - 14.4.3. Advantages and Disadvantages for Gamified Economies

- 14.5. Stablecoins
 - 14.5.1. Features
 - 14.5.2. Projects in Operation as of Stablecoins
 - 14.5.3. Uses of Stablecoins in Gamified Economies
- 14.6. Main Stablecoins
 - 14.6.1. USDT
 - 14.6.2. USDC
 - 14.6.3. BUSD
- 14.7. Trading
 - 14.7.1. Trading in Gamified Economies
 - 14.7.2. Balanced Portfolio
 - 14.7.3. Unbalanced Portfolio
- 14.8. Trading: DCA
 - 14.8.1. DCA
 - 14.8.2. Positional Trading
 - 14.8.3. Daytrading
- 14.9. Risk
 - 14.9.1. Price Formation
 - 14.9.2. Liquidity
 - 14.9.3. Global Economy

Module 15. Networks

- 15.1. The Revolution of the Smart Contract
 - 15.1.1. The Birth of the Smart Contract
 - 15.1.2. Application Hosting
 - 15.1.3. Security in IT Processes
- 15.2. Metamask
 - 15.2.1. Aspects
 - 15.2.2. Impact on Accessibility
 - 15.2.3. Asset Management at Metamask
- 15.3. Tron
 - 15.3.1. Aspects
 - 15.3.2. Hosted Applications
 - 15.3.3. Disadvantages and Benefits
- 15.4. Ripple
 - 15.4.1. Aspects
 - 15.4.2. Hosted Applications
 - 15.4.3. Disadvantages and Benefits
- 15.5. Ethereum
 - 15.5.1. Aspects
 - 15.5.2. Hosted Applications
 - 15.5.3. Disadvantages and Benefits
- 15.6. Polygon MATIC
 - 15.6.1. Aspects
 - 15.6.2. Hosted Applications
 - 15.6.3. Disadvantages and Benefits
- 15.7. Wax
 - 15.7.1. Aspects
 - 15.7.2. Hosted Applications
 - 15.7.3. Disadvantages and Benefits
- 15.8. ADA Cardano
 - 15.8.1. Aspects
 - 15.8.2. Hosted Applications
 - 15.8.3. Disadvantages and Benefits
- 15.9. Solana
 - 15.9.1. Aspects
 - 15.9.2. Hosted Applications
 - 15.9.3. Disadvantages and Benefits
- 15.10. Projects and Migrations
 - 15.10.1. Networks Suitable for the Project
 - 15.10.2. Migration
 - 15.10.3. Crosschain

Module 16. Metaverse

- 16.1. Metaverse
 - 16.1.1. Metaverse
 - 16.1.2. Impact on the World Economy
 - 16.1.3. Impact on the Development of Gamified Economies
- 16.2. Forms of Accessibility
 - 16.2.1. VR
 - 16.2.2. Computers
 - 16.2.3. Mobile Devices
- 16.3. Metaverse Types
 - 16.3.1. Traditional Metaverse
 - 16.3.2. Centralized Blockchain Metaverse
 - 16.3.3. Decentralization Blockchain Metaverse
- 16.4. Metaverse as a Workspace
 - 16.4.1. Idea of the Work within the Metaverse
 - 16.4.2. Creation of Services within the Metaverse
 - 16.4.3. Critical Points to Consider in Job Generation
- 16.5. Metaverse as a Space for Socialization
 - 16.5.1. User Interaction Systems
 - 16.5.2. Mechanics of Socialization
 - 16.5.3. Forms of Monetization
- 16.6. Metaverse as an Entertainment Space
 - 16.6.1. Training Spaces in the Metaverse
 - 16.6.2. Forms of Training Space Management
 - 16.6.3. Categories of Training Spaces in the Metaverse
- 16.7. System for Purchase and Lease of Spaces in the Metaverse
 - 16.7.1. Lands
 - 16.7.2. Auctions
 - 16.7.3. Direct Sales
- 16.8. Second Life
 - 16.8.1. Second Life as a Pioneer in the Metaverse Industry
 - 16.8.2. Game Mechanics
 - 16.8.3. Profitability Strategies Employed

- 16.9. Decentraland
 - 16.9.1. Decentraland as the Most Profitable Metaverse on Record
 - 16.9.2. Game Mechanics
 - 16.9.3. Profitability Strategies Employed
- 16.10. Goals
 - 16.10.1. Meta: The Company with the Greatest Impact on Developing a Metaverse
 - 16.10.2. Market Impact
 - 16.10.3. Project Details

Module 17. External Platforms

- 17.1. DEX
 - 17.1.1. Features
 - 17.1.2. Utilities
 - 17.1.3. Implementation in Gamified Economies
- 17.2. Swaps
 - 17.2.1. Features
 - 17.2.2. Main Swaps
 - 17.2.3. Implementation in Gamified Economies
- 17.3. Oracles
 - 17.3.1. Features
 - 17.3.2. Main Swaps
 - 17.3.3. Implementation in Gamified Economies
- 17.4. Staking
 - 17.4.1. Liquidity Pool
 - 17.4.2. Staking
 - 17.4.3. Farming
- 17.5. Blockchain Development Tools
 - 17.5.1. Geth
 - 17.5.2. Mist
 - 17.5.3. Truffle
- 17.6. Blockchain Development Tools: Embark
 - 17.6.1. Embark
 - 17.6.2. Ganache
 - 17.6.3. Blockchain Testnet

- 17.7. Marketing Studies
 - 17.7.1. DefiPulse
 - 17.7.2. Skew
 - 17.7.3. Trading View
- 17.8. Tracking
 - 17.8.1. CoinTracking
 - 17.8.2. CryptoCompare
 - 17.8.3. Blackfolio
- 17.9. Trading Bots
 - 17.9.1. Aspects
 - 17.9.2. SFOX Trading Algorithms
 - 17.9.3. AlgoTrader
- 17.10. Mining Tools
 - 17.10.1. Aspects
 - 17.10.2. NiceHash
 - 17.10.3. What to Mine

Module 18. Analysis of Variables in Gamified Economies

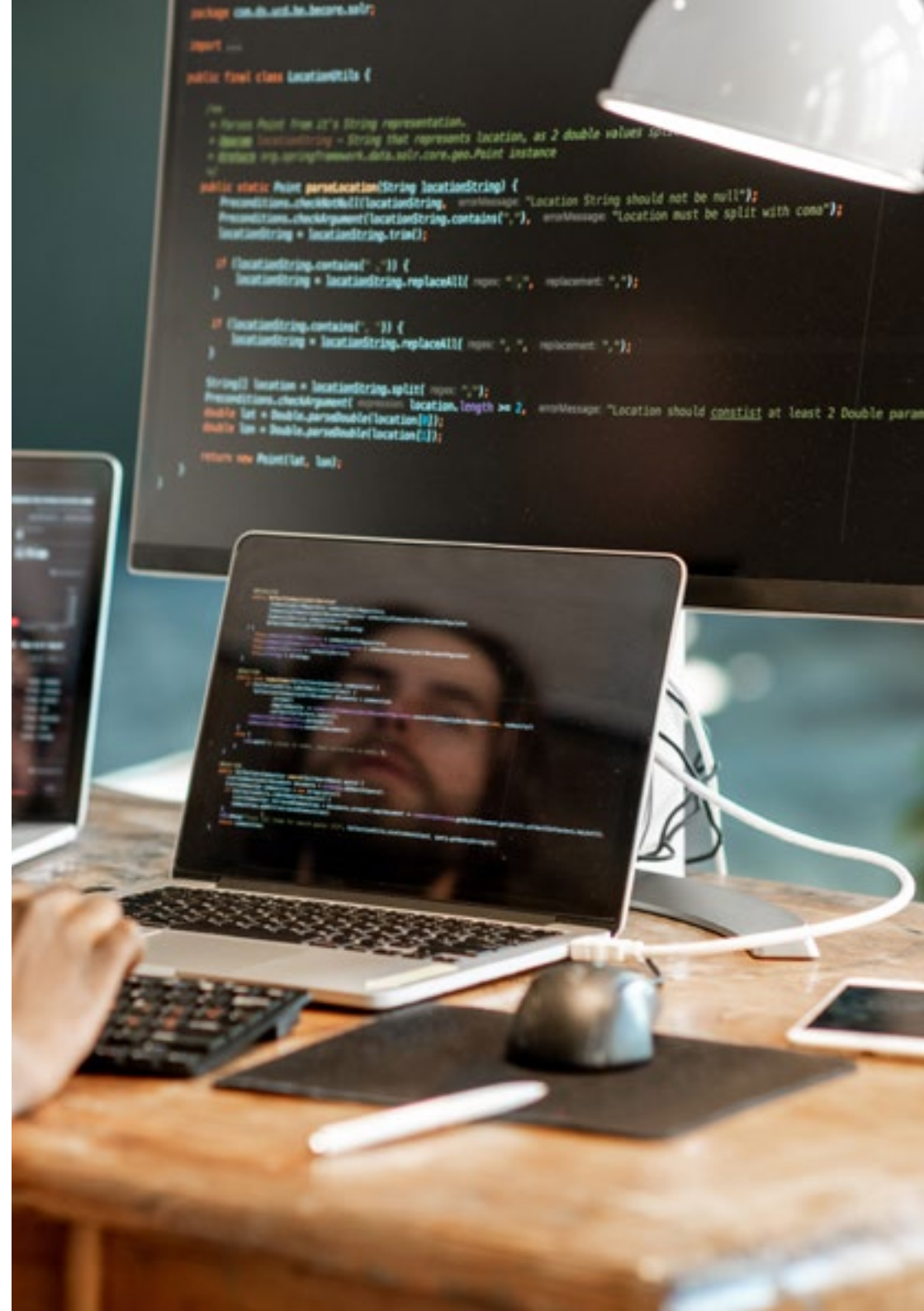
- 18.1. Gamified Economic Variables
 - 18.1.1. Advantages of Fragmentation
 - 18.1.2. Similarities with the Real Economy
 - 18.1.3. Division Criteria
- 18.2. Search
 - 18.2.1. Individual
 - 18.2.2. By Group
 - 18.2.3. Global
- 18.3. Resources
 - 18.3.1. By Game - Design
 - 18.3.2. Tangibles
 - 18.3.3. Intangibles
- 18.4. Entities
 - 18.4.1. Players
 - 18.4.2. Single Resource Entities
 - 18.4.3. Multiple Resource Entities

- 18.5. Sources
 - 18.5.1. Generation Conditions
 - 18.5.2. Localization
 - 18.5.3. Production Ratio
- 18.6. Exits
 - 18.6.1. Consumables
 - 18.6.2. Maintenance Costs
 - 18.6.3. Time Out
- 18.7. Converters
 - 18.7.1. NPC
 - 18.7.2. Manufacture
 - 18.7.3. Special Circumstances
- 18.8. Exchange
 - 18.8.1. Public Markets
 - 18.8.2. Private Stores
 - 18.8.3. External Markets
- 18.9. Experience
 - 18.9.1. Acquisition Mechanics
 - 18.9.2. Apply Experience Mechanics to Economic Variables
 - 18.9.3. Penalties and Experience Limits
- 18.10. Deadlocks
 - 18.10.1. Resource Cycle
 - 18.10.2. Linking Economy Variables with Deadlocks
 - 18.10.3. Applying Deadlocks to Game Mechanics

Module 19. Gamified Economic Systems

- 19.1. Free to Play Systems
 - 19.1.1. Characterization of Free to Play Economies and Main Monetization Points
 - 19.1.2. Architectures in Free to Play Economies
 - 19.1.3. Economical Design
- 19.2. Freemium Systems
 - 19.2.1. Characterization of Freemium Economies and Main Monetization Points
 - 19.2.2. Play to Earn Economy Architectures
 - 19.2.3. Economical Design

- 19.3. Pay to Play Systems
 - 19.3.1. Characterization of Pay to Play Economies and Main Monetization Points
 - 19.3.2. Architectures in Free to Play Economies
 - 19.3.3. Economical Design
- 19.4. PvP-Based Systems
 - 19.4.1. Characterization of Economies Based on Pay to Play and Main Monetization Points
 - 19.4.2. Architecture in PvP Economies
 - 19.4.3. Economic Design Workshop
- 19.5. Seasons System
 - 19.5.1. Characterization of Seasons-Based Economies and Main Points of Profitability
 - 19.5.2. Architecture in Season Economies
 - 19.5.3. Economical Design
- 19.6. Economic Systems in Sandbox or Mmorpq
 - 19.6.1. Characterization of Sandbox-Based Economies and Main Cost-Effectiveness Points
 - 19.6.2. Architecture in Sandbox Economies
 - 19.6.3. Economical Design
- 19.7. Trading Card Game System
 - 19.7.1. Characterization of Trading Card Game-Based Economies and Main Cost-Effectiveness Points
 - 19.7.2. Architecture in Trading Card Game Economies
 - 19.7.3. Economic Design Workshop
- 19.8. PvE Systems
 - 19.8.1. Characterization of PvE-Based Economies and Main Cost-Effectiveness Points
 - 19.8.2. Architecture in PvE Economies
 - 19.8.3. Economic Design Workshop
- 19.9. Betting Systems
 - 19.9.1. Characterization of Bet-Based Economies and Main Monetization Points
 - 19.9.2. Architecture in Betting Economies
 - 19.9.3. Economical Design
- 19.10. Systems Dependent on External Economies
 - 19.10.1. Characterization of Dependent Economies and Main Monetization Points
 - 19.10.2. Architecture in Dependent Economies
 - 19.10.3. Economical Design



Module 20. Blockchain Video Game Analysis

- 20.1. Star Atlas
 - 20.1.1. Game Mechanics
 - 20.1.2. Economic System
 - 20.1.3. Usability
- 20.2. Anillo Exterior
 - 20.2.1. Game Mechanics
 - 20.2.2. Economic System
 - 20.2.3. Usability
- 20.3. Axie Infinity
 - 20.3.1. Game Mechanics
 - 20.3.2. Economic System
 - 20.3.3. Usability
- 20.4. Splinterlands
 - 20.4.1. Game Mechanics
 - 20.4.2. Economic System
 - 20.4.3. Usability
- 20.5. R-Planet
 - 20.5.1. Game Mechanics
 - 20.5.2. Economic System
 - 20.5.3. Usability
- 20.6. Ember Sword
 - 20.6.1. Game Mechanics
 - 20.6.2. Economic System
 - 20.6.3. Usability
- 20.7. Big Time
 - 20.7.1. Game Mechanics
 - 20.7.2. Economic System
 - 20.7.3. Usability
- 20.8. Gods Unchained
 - 20.8.1. Game Mechanics
 - 20.8.2. Economic System
 - 20.8.3. Usability
- 20.9. Illuvium
 - 20.9.1. Game Mechanics
 - 20.9.2. Economic System
 - 20.9.3. Usability
- 20.10. Upland
 - 20.10.1. Game Mechanics
 - 20.10.2. Economic System
 - 20.10.3. Usability



This is the most comprehensive curriculum with you will learn how to build digital economies that not only entertain, but empower millions of players around the world”

04

Teaching Objectives

This Advanced Master's Degree in Blockchain Economics and NFTs in Video Games has as its main objective to train leaders specialized in the integration of innovative technologies in the digital entertainment industry. The program is designed for students to master the fundamentals of Blockchain and NFTs, while developing key skills to design and manage decentralized ecosystems and understand digital asset-based monetization dynamics. In addition, it is complemented by a comprehensive focus on emerging trends, cyber security and professional ethics.



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Learn how to design and structure Blockchain architectures thanks to the most complete Advanced Master's Degree offered only by TECH”

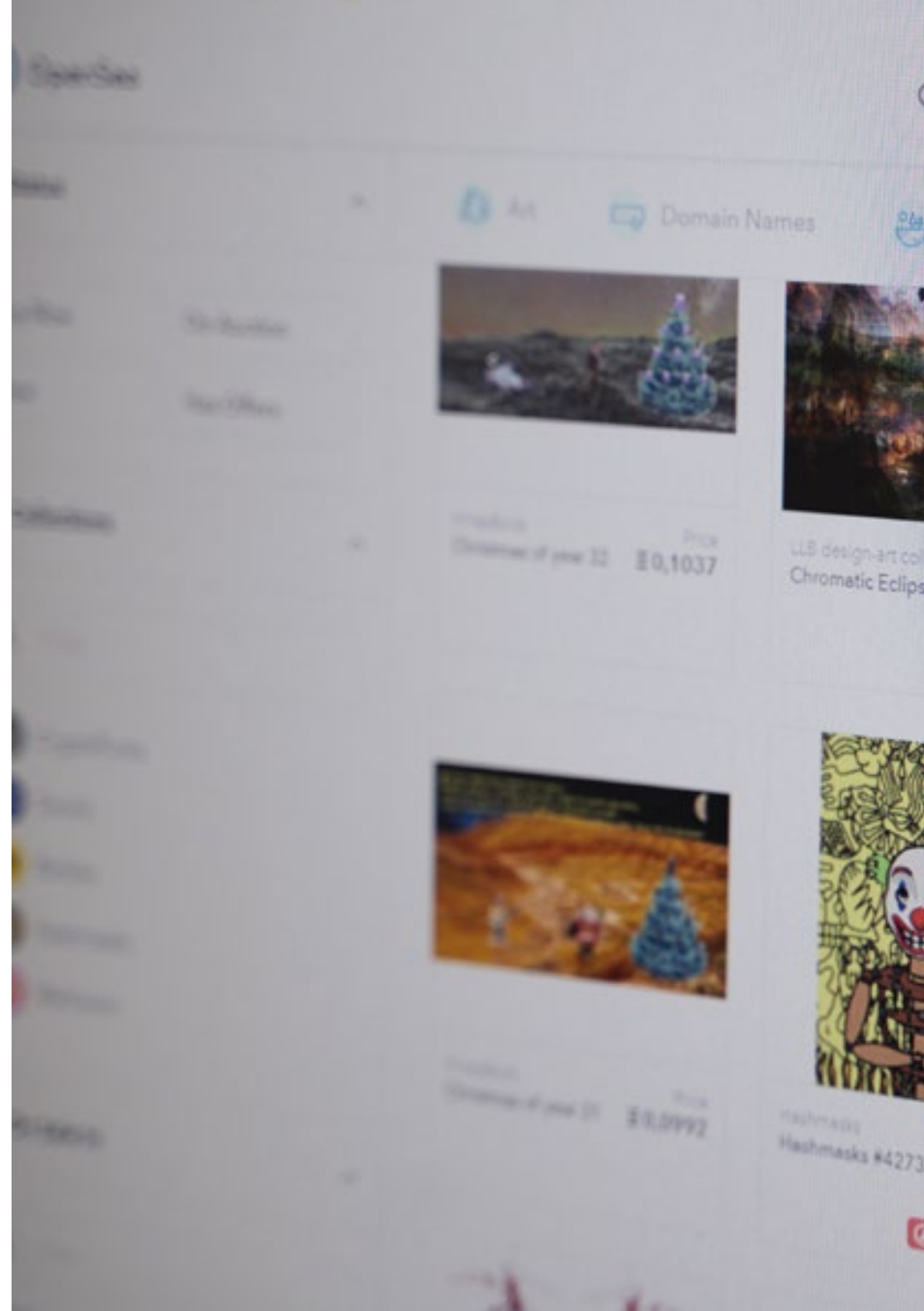


General Objectives

- ♦ Master the key technologies of blockchain and NFTs, understanding how they work and their specific applications in the video game industry
- ♦ Develop skills to design digital economies within video games, using blockchain to create autonomous and sustainable ecosystems that benefit players and developers
- ♦ Implement innovative monetization strategies based on the digital economy, using NFTs and cryptocurrencies to generate new sources of revenue within the video game environment
- ♦ Analyze and apply emerging trends in blockchain technology and their impact on video games, as well as the new opportunities that arise for the creation of virtual worlds and interactive experiences



Develop custom blockchain solutions that facilitate interoperability between different gaming platforms”





Specific Objectives

Module 1. Development with Public Blockchain: Ethereum, Stellar and Polkadot

- ◆ Develop decentralized applications using platforms such as Ethereum, Stellar and Polkadot
- ◆ Analyze the differences and ideal use cases for each public Blockchain platform

Module 2. Blockchain Technology. Cryptography and Security

- ◆ Understand the fundamental principles of cryptography used in Blockchain technology
- ◆ Analyze the essential security techniques to ensure the integrity of transactions in a Blockchain network

Module 3. Corporate Blockchain Development: Hyperledger Besu

- ◆ Explore the Hyperledger Besu platform and its application in enterprise solutions
- ◆ Evaluate the advantages of Hyperledger Besu compared to other enterprise Blockchain platforms

Module 4. Corporate Blockchain Development: Hyperledger Fabric

- ◆ Develop private Blockchain applications using Hyperledger Fabric
- ◆ Implement smart contracts and consensus systems in a permissioned environment with Hyperledger Fabric

Module 5. Sovereign Identity Based on Blockchain

- ◆ Understand the concept of digital sovereign identity and its application through Blockchain
- ◆ Analyze how the Blockchain can be used to ensure security, privacy and control over digital identities

Module 6. Blockchain and Its New Applications: DeFi and NFT

- ◆ Explore how DeFi platforms are redefining financial services without traditional intermediaries
- ◆ Develop and manage unique digital assets such as NFTs, with an emphasis on their implementation on Blockchain

Module 7. Blockchain. Legal Implications

- ♦ Analyze the legal implications of Blockchain technology, including ownership, smart contracts, and privacy
- ♦ Assess the impact of government regulation and policy on the use of Blockchain

Module 8. Blockchain Architecture Design

- ♦ Design efficient and scalable Blockchain architectures adapted to different use cases
- ♦ Evaluate the different consensus models, networks and smart contracts needed for robust Blockchain architectures

Module 9. Blockchain Applied to Logistics

- ♦ Develop Blockchain solutions for inventory management, product authenticity and logistics value chain optimization
- ♦ Evaluate the impact of Blockchain on cost reduction and efficiency improvement in logistics processes

Module 10. Blockchain and Business

- ♦ Explore the impact of Blockchain technology on the digital transformation of enterprises
- ♦ Develop Blockchain applications to improve efficiency, transparency and security in business processes

Module 11. Blockchain

- ♦ Understand the fundamentals of Blockchain technology and its essential components
- ♦ Analyze the different applications of Blockchain in various industries, from data management to the creation of decentralized applications



Module 12. DeFi

- ♦ Develop DeFi solutions and applications such as decentralized exchanges, lending and non-brokered insurance
- ♦ Assess the risks and benefits of DeFi applications, including asset management and yield optimization

Module 13. NFT

- ♦ Understand the concept of non-fungible tokens and their use in the digital world
- ♦ Explore the most common use cases for NFT in art, gaming and digital property

Module 14. Cryptocurrency Analysis

- ♦ Study the analysis of cryptocurrencies, including the assessment of their value and the impact of market factors
- ♦ Learn how to use technical and fundamental analysis tools and techniques to evaluate cryptocurrencies

Module 15. Networks

- ♦ Understand how Blockchain networks ensure the security and integrity of transactions
- ♦ Develop skills to implement and manage Blockchain networks in public and private environments

Module 16. Metaverse

- ♦ Explore how Blockchain can enable ownership and transactions within the metaverse
- ♦ Develop applications and solutions that utilize Blockchain within metaverse platforms

Module 17. External Platforms

- ♦ Explore the features and benefits of platforms such as Binance Smart Chain, Solana and other alternatives
- ♦ Develop solutions that integrate Blockchain with external platforms to enhance interoperability

Module 18. Analysis of Variables in Gamified Economies

- ♦ Study the variables that influence gamified economies, such as tokens and rewards
- ♦ Develop blockchain-based economic models to analyze and optimize the economics of video games and gamified platforms

Module 19. Gamified Economic Systems

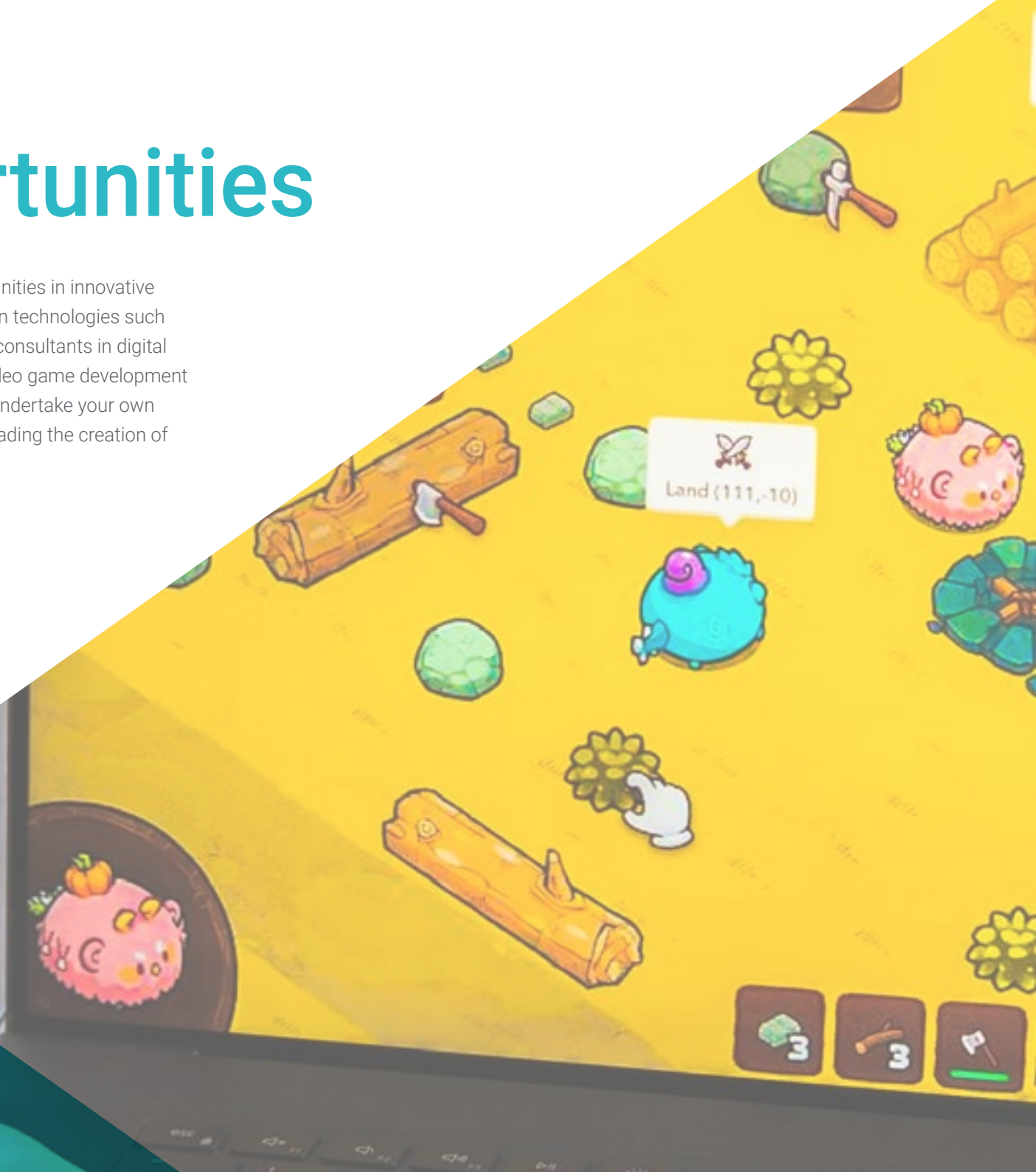
- ♦ Explore how gamified economic systems can be designed using Blockchain and cryptocurrencies
- ♦ Analyze the effects of rewards and player interactions in a gamified economic system

Module 20. Blockchain Video Game Analysis

- ♦ Analyze monetization mechanisms in Blockchain-based video games, such as the creation of NFT and the use of cryptocurrencies
- ♦ Develop and implement Blockchain video game models with a focus on security and interoperability

05 Career Opportunities

Graduates will be ready to access a wide range of career opportunities in innovative and high-demand sectors. Thanks to their advanced knowledge in technologies such as Blockchain and cryptocurrencies, they will be able to work as consultants in digital economy. In addition, they will have the opportunity to work in video game development companies and Gaming platforms. You will also be prepared to undertake your own project in the field of video games and emerging technologies, leading the creation of new virtual worlds with interactive digital economies.





“


The digital economy is here to stay and this Advanced Master's Degree prepares you to be a leader in the convergence of technology and entertainment”

Graduate Profile

Upon completion of the Advanced Master's Degree in Blockchain Economics and NFT in Video Games, graduates will be highly qualified professionals able to lead innovative projects at the intersection of technology, video games and digital economies. They will have a deep understanding of Blockchain technologies, NFTs and cryptocurrencies, and will know how to integrate them effectively in the design and management of virtual economies within video games. In addition, they will have the ability to develop robust architectures, create gamified economic systems and apply decentralized finance solutions. Their profile will make them an expert capable of optimizing and ensuring the security of digital platforms, as well as understanding the legal and ethical aspects of these technologies.

- ♦ **Technical Proficiency in Blockchain and NFTs:** Ability to implement, develop and manage Blockchain-based solutions, as well as understand the use and creation of NFTs within video games
- ♦ **Design of Virtual Economies:** Ability to create and manage complex economic systems, integrating cryptocurrencies, digital assets and sustainable monetization models in gaming environments
- ♦ **Advanced Knowledge of Decentralized Finance (DeFi):** Ability to apply the principles of decentralized finance in the creation of new forms of economic interaction within video games
- ♦ **Ability to Analyze and Optimize Gamified Economies:** Ability to identify key variables and optimize the profitability of economies within blockchain-based video games
- ♦ **Development of Secure Blockchain Architectures:** Knowledge in the design and implementation of robust and secure architectures to support blockchain-based gaming platforms

With this approach, achieve excellence in your professional profile, with which you will access different positions related to Economics in video games.



After completing the program, you will be able to perform your knowledge and skills in the following positions:

- 1. Blockchain Solutions Architect:** Designer and developer of blockchain-based infrastructures and platforms for the gaming industry, ensuring scalability and security.
- 2. Virtual Economies Manager:** In charge of the creation, management and optimization of economies within video games, including the design of economic models based on cryptocurrencies and digital assets.
- 3. Blockchain Video Game Developer:** Creator of video games incorporating blockchain and NFTs, integrating digital economies within the gaming experience.
- 4. Video Game Blockchain Project Manager:** Leader of interdisciplinary teams in the development of video games based on blockchain technologies, from conceptualization to final implementation.
- 5. Cryptocurrency and Blockchain Analyst:** Researching and evaluating cryptocurrencies, tokens and other digital assets, providing detailed analysis on their impact and applications in video games.
- 6. Developer of Smart Contracts for Video Games:** In charge of Programming and managing smart contracts that facilitate automated and secure transactions within blockchain-based video games.

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Get ready to put you on the path to success in an industry where innovation knows no bounds”

06

Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



“

TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”

The student: the priority of all TECH programs

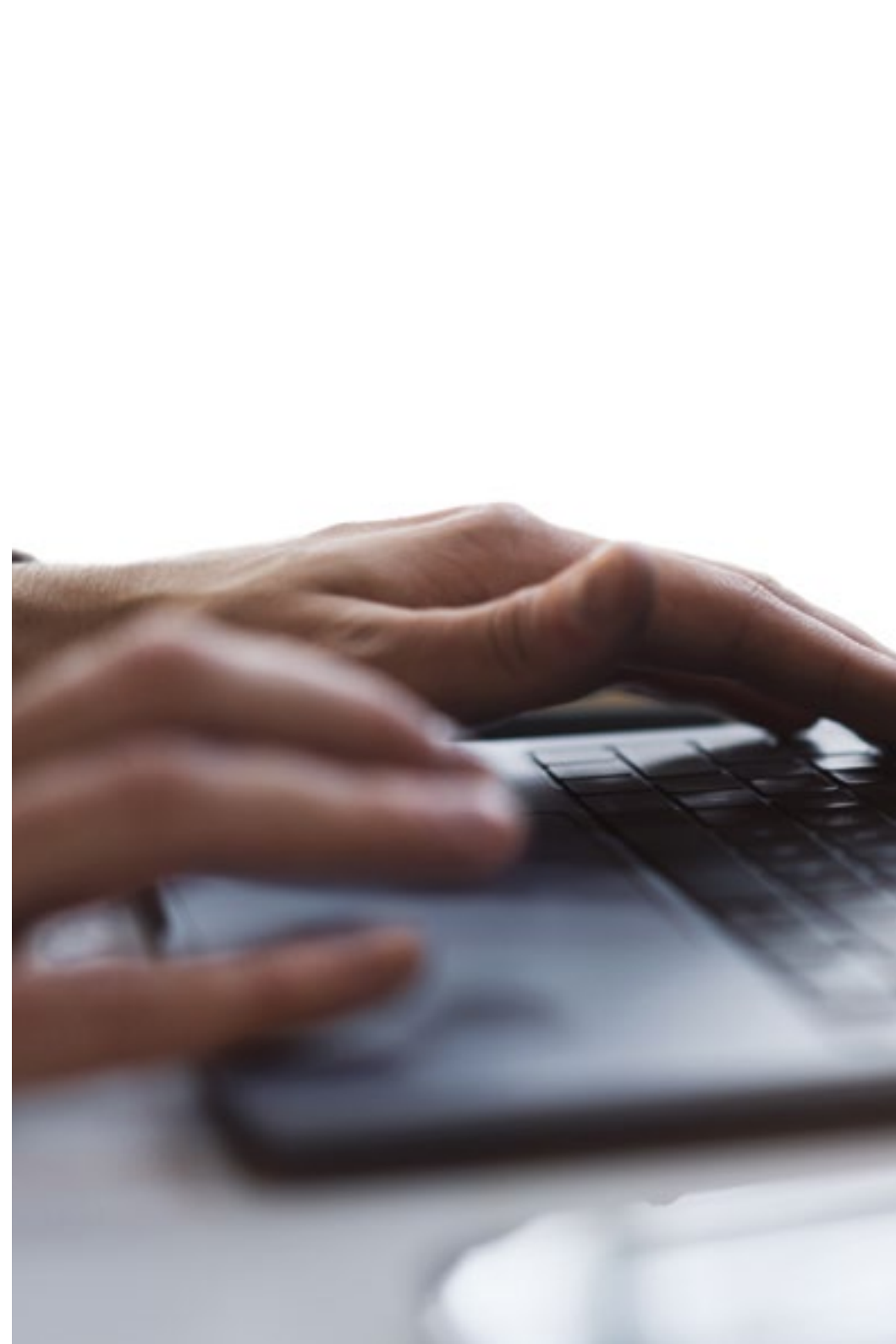
In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

“

*At TECH you will NOT have live classes
(which you might not be able to attend)”*



The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

“

TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want”

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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.



A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule”

The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.



As such, the best educational materials, thoroughly prepared, will be available in this program:



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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



Interactive Summaries

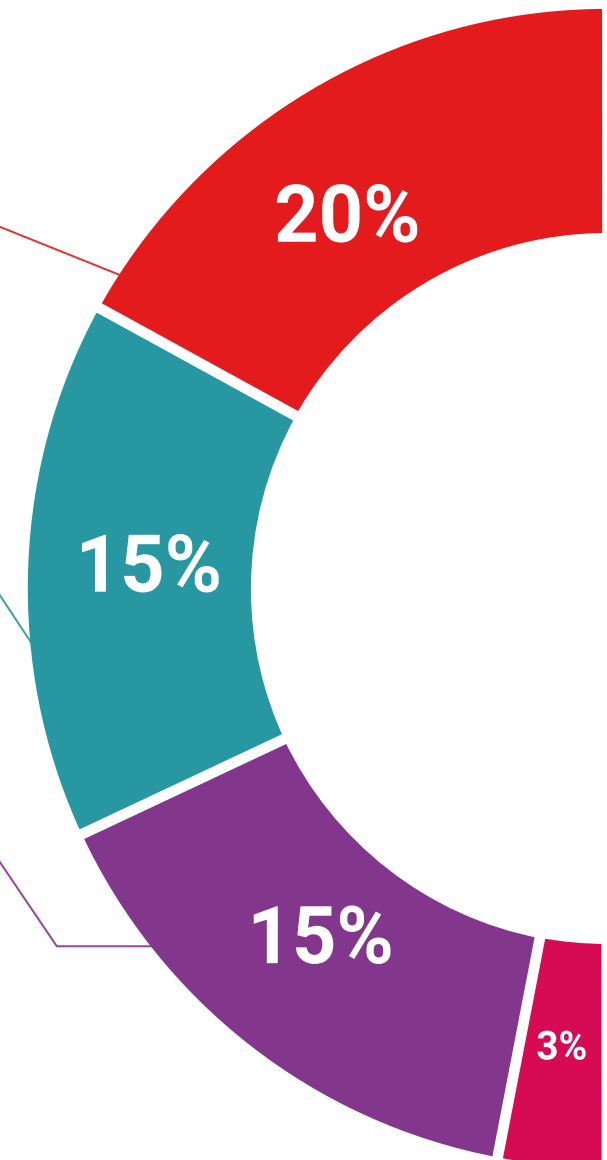
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

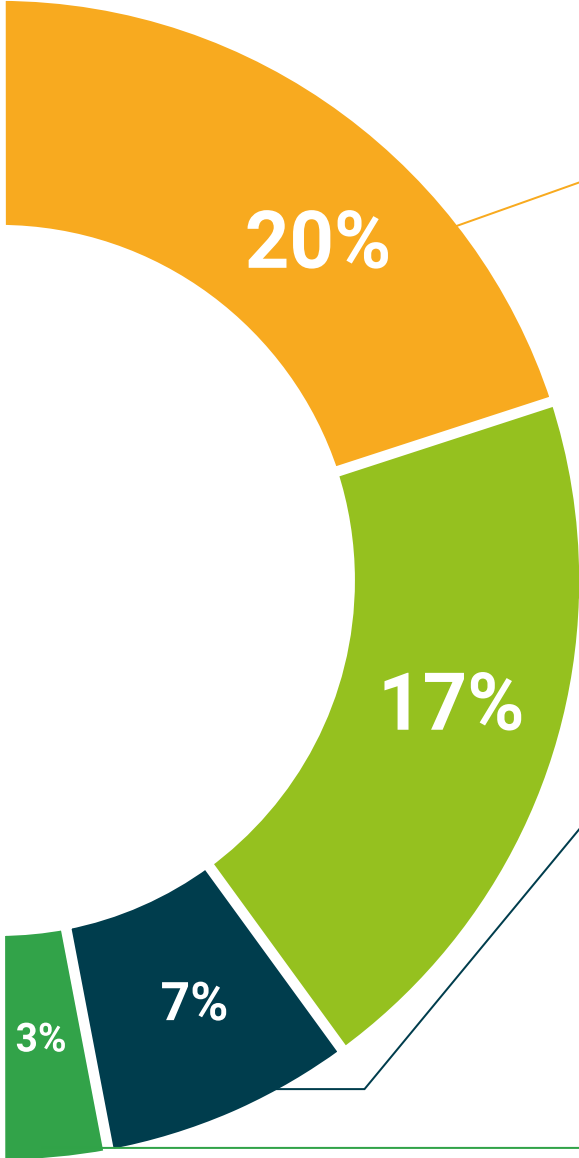
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





Case Studies

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.



Testing & Retesting

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.



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 for future difficult decisions.



Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.



07

Teaching Staff

The teaching staff of this program is made up of professionals with extensive experience in the Blockchain environment, cryptocurrencies and the NFT industry. Authentic active experts who will guide and teach the student the latest developments in the construction of gamified economies, as well as their maintenance and the cybersecurity measures required in each case. For all these reasons, this Advanced Master's Degree is a unique opportunity in the hands of the student who wants to learn from the best.





“

Learn with the best and most complete teaching staff in the academic market”

Management



Mr. Torres Palomino, Sergio

- ♦ IT Engineer with expertise in Blockchain
- ♦ Blockchain Lead at Telefónica
- ♦ Blockchain Architect at Signeblock
- ♦ Blockchain Developer at Blocknitive
- ♦ Writer and Publisher at O'Reilly Media Books
- ♦ Professor in postgraduate studies and Blockchain related courses
- ♦ Degree in Computer Engineering from CEU San Pablo University
- ♦ Master's Degree in Big Data Architecture
- ♦ Master's Degree in Big Data and Business Analytics



Mr. Olmo Cuevas, Alejandro

- ♦ Game and Blockchain economies designer for video games
- ♦ Founder of Seven Moons Studios Blockchain Gaming
- ♦ Founder of the Niide project
- ♦ Writer of fantasy narrative and poetic prose

Professors

Mr. Callejo González, Carlos

- ♦ CEO and Founder of Block Impulse
- ♦ Chief Technology Officer at Stoken Capital
- ♦ Advisor at Crypto Actual Club
- ♦ Advisor in Cryptocurrencies for All Plus
- ♦ Master's Degree in Applied Blockchain
- ♦ Superior Degree in Information Systems and Telecommunications

Ms. Carrascosa Cobos, Cristina

- ♦ Lawyer expert in Technology Law and use of ICTs
- ♦ Director and Founder of ATH21
- ♦ Columnist at CoinDesk
- ♦ Lawyer at Cuatrecasas Law Firm
- ♦ Lawyer at Broseta Law Firm
- ♦ Lawyer at Pinsent Masons Law Firm
- ♦ Master's Degree in Business Consultancy from IE Law School
- ♦ Master's Degree in Taxation and Taxation by CEF
- ♦ Degree in Law from the University of Valencia

Mr. de Araujo, Rubens Thiago

- ♦ Manager of the IT Blockchain for Supply Chain Project at Telefónica Global Technology
- ♦ Logistics Innovation and Projects Manager at Telefónica Brazil
- ♦ Teacher of university programs in his specialty
- ♦ Master's Degree in PMI Project Management from SENAC University. Brazil
- ♦ Graduate in Technological Logistics from SENAC University. Brazil

Mr. Herencia, Jesús

- ♦ Director of Digital Assets at OARO
- ♦ Founder and Blockchain Consultant at Shareyourworld
- ♦ IT Manager at Crédit Agricole Leasing & Factoring
- ♦ CEO of Blockchain Open Lab
- ♦ IT Manager at Mediasat
- ♦ Diploma in Computer Systems Engineering from the Polytechnic University of Madrid.
- ♦ Secretary General of AECHAIN
- ♦ Member of: Academic Committee for the Promotion of Cryptoassets and DLT Technology Research, Ethereum Madrid and AECHAIN

Mr. Olalla Bonal, Martín

- ♦ Senior Blockchain Practice Manager at EY
- ♦ Blockchain Client Technical Specialist for IBM
- ♦ Director of Architecture for Blocknitive
- ♦ Team Coordinator in Non-Relational Distributed Databases for WedoIT, a subsidiary of IBM
- ♦ Infrastructure Architect at Bankia
- ♦ Head of Layout Department at T-Systems
- ♦ Department Coordinator for Bing Data España SL

Mr. Gálvez González, Danko Andrés

- ♦ Commercial advisor at Niide, a Gamified Economy project on Blockchain.
- ♦ HTML and CCS programmer in learning didactics projects
- ♦ Movistar and Virgin Mobile Sales Executive
- ♦ Bachelor's Degree in Education from Playa Ancha Educational Sciences University

Mr. García de la Mata, Íñigo

- ♦ Senior Manager and Software Architect of the Innovation Team at Grant Thornton
- ♦ Blockchain Engineer at Alastria Blockchain Ecosystem
- ♦ Professor in Blockchain University courses at UNIR
- ♦ Professor and Blockchain Bootcamp and Geekshub
- ♦ Consultant at Ascendo Consulting Healthcare & Pharma
- ♦ Engineer at ARTECHE
- ♦ Bachelor's Degree in Industrial Engineering with a Major in Electronics
- ♦ Master's Degree in Electronics and Control from Comillas Pontifical University
- ♦ Degree in Computer Engineering from the Spanish Open University (UNED)
- ♦ TFG tutoring at Comillas Pontifical University

Ms. Foncuberta, Marina

- ♦ Senior Associate Attorney at ATH21, Blockchain, Cybersecurity, IT, Privacy and Data Protection
- ♦ Professor at CEU San Pablo University of Law and New Technologies: Blockchain
- ♦ Attorney Pinsent Masons, Blockchain Cybersecurity, IT, Privacy and Data Protection Department
- ♦ Lawyer as part of Secondment Program, Technology, Privacy and Data Protection Department, Wizink
- ♦ Lawyer as part of the Secondment Program, Cybersecurity, IT, Privacy and Data Protection Department, IBM
- ♦ Degree in Law and Diploma in Business Studies from the Pontifical University of Comillas
- ♦ Master's Degree in Intellectual and Industrial Property from Comillas Pontifical University (ICADE)
- ♦ Program on Blockchain: Legal Implications

Ms. Salgado Iturrino, María

- ♦ Software Engineer with expertise in Blockchain
- ♦ Blockchain Manager Iberia & LATAM at Inetum
- ♦ Identity Comission Core Team Leader at Alastria Blockchain Ecosystem
- ♦ Software Developer at Indra
- ♦ Teacher in postgraduate studies related to Blockchain
- ♦ Degree in Software Engineering from the Complutense University of Madrid
- ♦ Master's Degree in Computer Engineering from the Polytechnic University of Madrid
- ♦ University Expert in Blockchain Application Development

Mr. Vaño Francés, Juan Francisco

- ♦ Engineer in Computer Science
- ♦ Solidity Engineer at Vivatopia
- ♦ Senior Computer Technician at R. Belda Lloréns
- ♦ Computer Science Engineer at the Polytechnic University of Valencia
- ♦ Specialized in DApp programming and Smart Contract development with Solidity
- ♦ Course in Data Science Tools

Ms. Gálvez González, María Jesús

- ♦ Dideco Advisor and Head of the Women's Area of the Municipality of El Tabo.
- ♦ Teacher at the Professional Institute AIEP
- ♦ Head of the Social Department of the Municipality of El Tabo
- ♦ Degree in Social Work from the University of Santo Tomás.
- ♦ Master's Degree in Strategic People Management and Organizational Human Talent Management
- ♦ Postgraduate Certificate in Social Economy from the University of Santiago de Chile.

**Mr. Triguero Tirado, Enrique**

- ♦ Chief Technical Officer of Blockchain Infrastructure 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 Applications to Business by ThreePoints and the Polytechnic University of Valencia

Mr. Olmo Cuevas, Víctor

- ♦ Co-Founder, Game Designer and Game Economist at Seven Moons Studios Blockchain Gaming
- ♦ Web designer and professional video game player
- ♦ Professional Online Poker Player and Teacher
- ♦ Graphic Designer at Arvato Services Bertelsmann
- ♦ Project Analyst and Investor at Crypto Play to Earn Gaming Scene
- ♦ Chemical Laboratory Technician
- ♦ Graphic Designer



Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice”

08

Certificate

The Advanced Master's Degree in Blockchain Economics and NFT in Video Games 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 university qualification without having to travel or fill out laborious paperwork"

This private qualification will allow you to obtain a **Advanced Master's Degree in Blockchain Economics and NFT in Video Games** 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** private qualification 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: **Advanced Master's Degree in Blockchain Economics and NFT in Video Games**

Modality: **online**

Duration: **2 years**

Accreditation: **120 ECTS**



*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.



Advanced Master's Degree Blockchain Economics and NFT in Video Games

- » Modality: **online**
- » Duration: **2 years**
- » Certificate: **TECH Global University**
- » Accreditation: **120 ECTS**
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- » Exams: **online**

Advanced Master's Degree Blockchain Economics and NFT in Video Games

