





Hybrid Master's DegreeVideo Game Narrative

Modality: Hybrid (Online + Internship)

Duration: 12 months

Certificate: TECH Global University

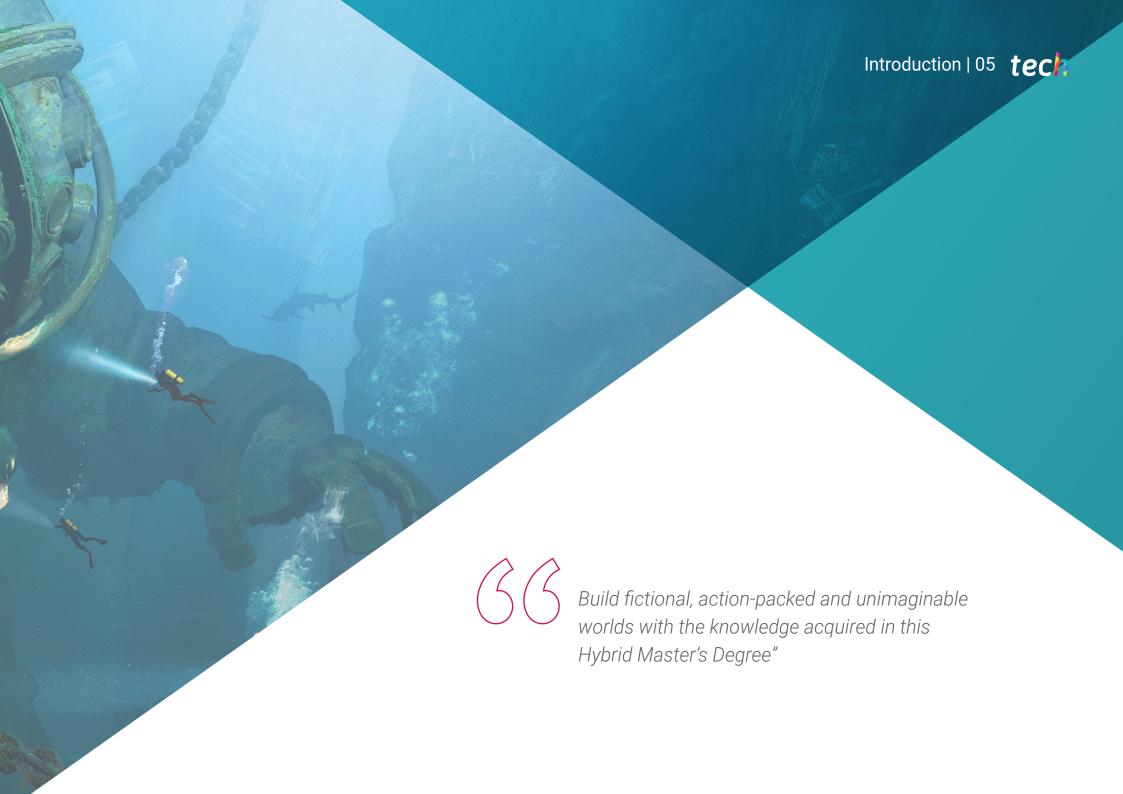
Credits: 60 + 4 ECTS

We bsite: www.techtitute.com/us/videogames/hybrid-master-degree-hybrid-master-degree-video-game-narrative

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tech 06 | Introduction

The video game industry moves millions around the world, and within this industry new professional profiles emerge to meet the demands of the most demanding gamers. Therefore, arises the figure of the scriptwriter, who develops a complete narrative of the game which is the creative basis of the title. This professional figure requires a high professional qualification that facilitates the handling of complex software and computer applications such as those that enhance the 3D modeling of characters and landscapes. They must also be familiar with the most innovative design strategies in this sector. In this context, TECH has created an educational program of excellence in which students will acquire all these skills in a practical and theoretical way.

In general, this Hybrid Master's Degree responds to the revolution in the gaming industry and caters to professionals seeking specialization in an expanding sector with vast career opportunities. For this reason, within the theoretical framework of this program, which is entirely delivered online, students will gain an in-depth understanding of video game design, the key elements of scriptwriting, as well as the various types of devices for video games and the engines on which they are developed. At the same time, this program includes highly specialized Masterclasses that delve into the most innovative tools for scriptwriting and the development of interactive narratives. It offers an unparalleled academic experience for TECH students, guided by a highly respected expert, serving as the International Guest Director.

An excellent opportunity for the professional who wishes to acquire an updated education in the field of storytelling in the video game sector, and at the same time make learning compatible with their work or personal responsibilities. This qualification provides flexibility as it is taught online, without fixed timetables and with access to all the content of the syllabus from the first day. You will only need a device with internet connection to have the most modern multimedia material in the academic field. At the same time, this education will be completed with an Internship Program that will bring students closer to one of the leading companies in the video game sector.

This **Hybrid Master's Degree in Video Game Narrative** contains the most complete and up-to-date program on the market. The most important features include:

- The development of over 100 practical cases presented by experts 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
- The development of practical cases presented by experts in Video Game Storytelling and Narrative
- 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
- All of this will be complemented by 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
- Furthermore, you will be able to do an internship in one of the best videogame creative studios of the world



Enroll now in this Hybrid Master's

Degree, where TECH will enhance your
training through the most exhaustive
and exclusive Masterclasses in the
university academic landscape"

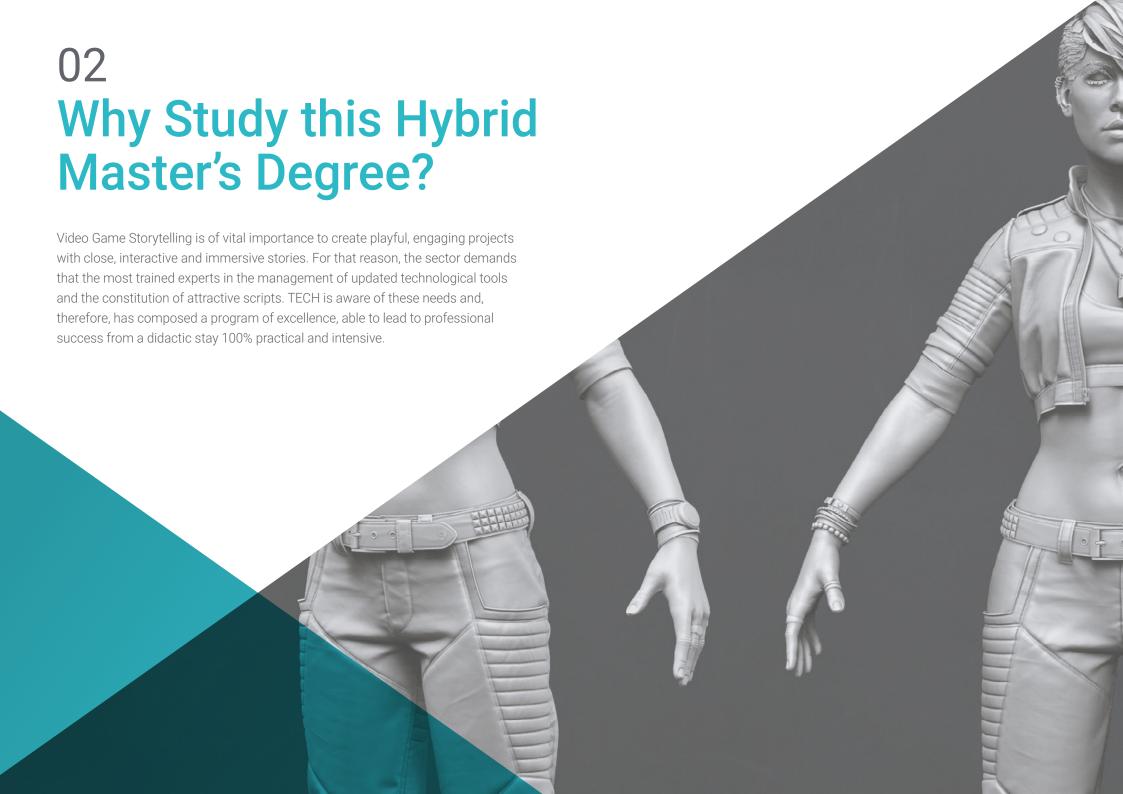
In this Hybrid Master's Degree, with a vocational nature and hybrid learning modality, the program is aimed at updating videogame professionals who require a high level of qualification. The contents are based on the latest scientific evidence, and oriented in a didactic way to integrate theoretical knowledge in the practice of creating video games and all the components necessary to create successful and high quality titles.

Thanks to its multimedia content developed with the latest educational technology, they will allow the Video Games professional to learn in a contextual and situated learning environment, i.e., a simulated environment that will provide immersive learning programmed to train in real situations. The design of this program is based on Problem-Based Learning, by means of which the student must try to solve the different professional practice situations that arise during the program. This will be done with the help of an innovative system of interactive videos made by renowned experts.

You will have a library with multimedia content, essential readings and practical cases at your disposal, in order for you to obtain a complete learning.

Access the main keys that make up a success story in the video game industry.







tech 10 | Why Study this Hybrid Master's Degree?

1. Update using the latest available technology

The most innovative technologies for the development of gaming narratives and the best methodologies for implementing them are covered in this top-tier Hybrid Master's Degree. Therefore, after 1,800 hours of theoretical learning, the student will enjoy 3 weeks of hands-on training with the most complex technologies at their disposal.

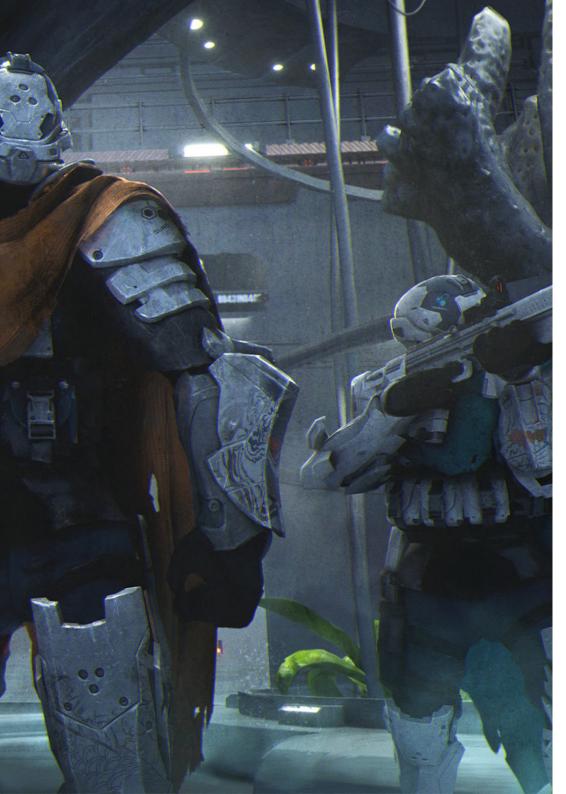
2. Learn from the best specialists

During this intensive in-person phase, students will have direct contact with the most prominent professors in the video game industry and the development of their narratives. Additionally, during the practical phase, they will have a designated tutor who will provide them with updated knowledge and help them develop the most complex skills.

3. Enter premium environments for video game development

Through a thorough analysis of the academic landscape, TECH has selected prestigious centers to host its students during the professional practice phase. These companies stand out in the video game industry for their application of innovative techniques and technologies in creating interactive and immersive products. At the same time, they employ the most highly skilled specialists in this field of knowledge.





Why Study this Hybrid Master's Degree? | 11 tech

4. Combine the best theory with advanced practical training

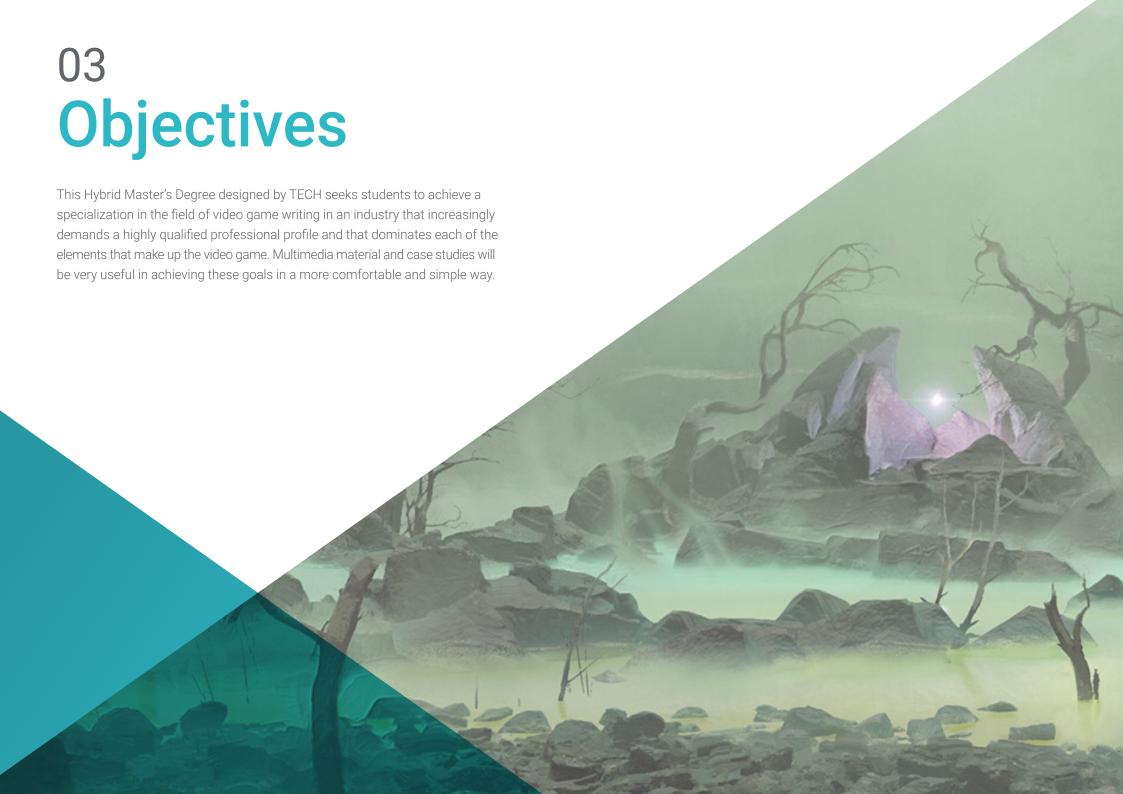
TECH aims for its students to quickly and flexibly learn the most sought-after skills in this professional field. To achieve this, it has designed a learning model that combines theoretical education with a high-level practical internship. By developing skills in both stages, students will acquire an essential qualification for their future career.

5. Expand the boundaries of your knowledge

TECH offers the opportunity to undertake the professional practice of this Hybrid Master's Degree at cutting-edge centers internationally. In this way, the specialist can broaden their horizons and stay up-to-date with the best professionals who are highly qualified in the video game industry.



You will have full practical immersion at the center of your choice"



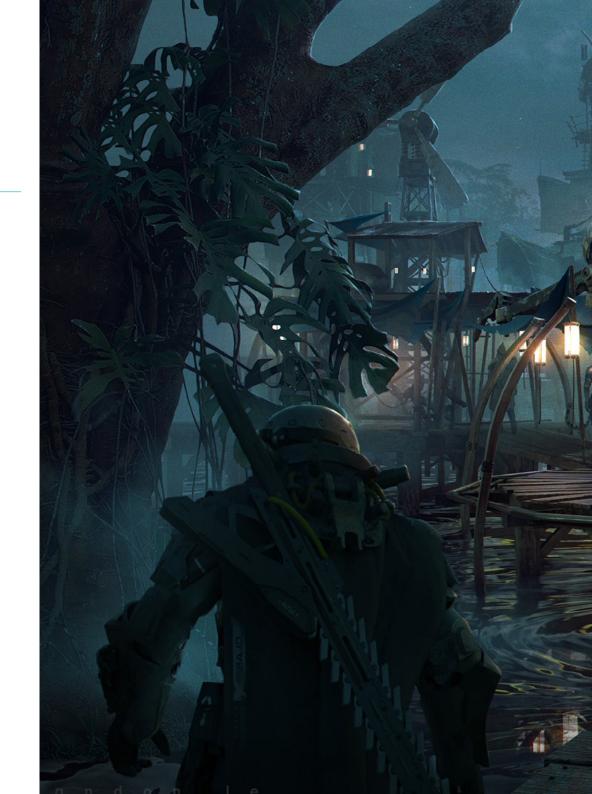


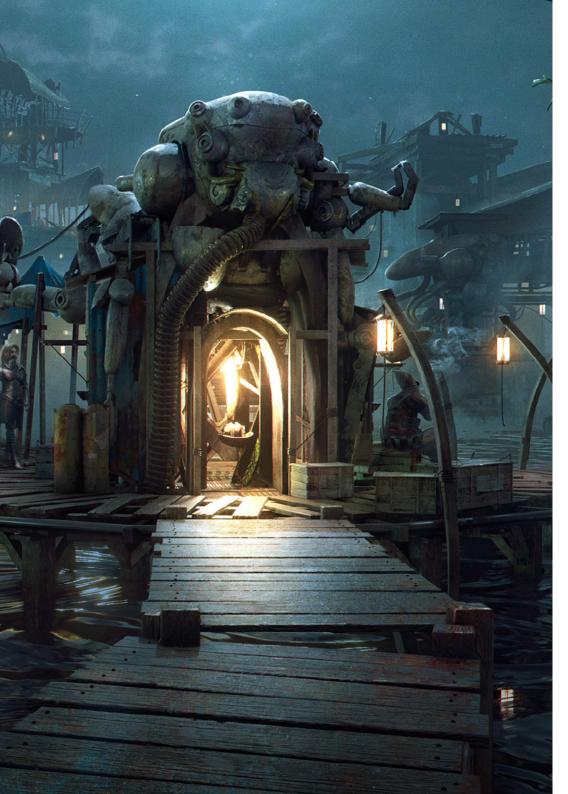
tech 14 | Objectives



General Objective

• The professional who delves into a specialization of storytelling in video games will achieve in this teaching a high learning in the creation of stories for all types of games. At the end of this hybrid program you will be able to create scripts and storyboards for any video game, taking into account the elements that make up the game, such as characters, the different stages of development, dialogue, narrative genres and the key concepts to be taken into account to achieve a quality narrative







Specific Objectives

Module 1. Video Game Design

- Get to know the theory of video game design
- Delve into the elements of design and gamification
- Learn about the types of players, their motivations and characteristics
- Gain knowledge of game mechanics, knowledge of MDA and other game design theories
- Learn the critical foundations for video game analysis with theory and examples
- Learn about game level design, how to create puzzles within these levels and how to place the design elements in the environment

Module 2. Design Document

- Write and illustrate a professional design document
- Know each one of the parts of design: general idea, market, *gameplay*, mechanics, levels, progression, elements of the game, HUD and interface
- * Know the design process of a design document or GDD to be able to represent the idea of the game in an understandable, professional and well-elaborated document

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Module 3. Video Game Narrative

- Determine the narrative pulses in certain audiovisual formats
- Develop own ideas in a creative and structured way in different texts
- * Develop characters and dialogues that can be used in the script of a video game

Module 4. Video Game Design: Script and Storyboarding

- Gain in-depth knowledge of the history of video games, the main sources of ideas and the narrative through images
- Study the different elements that make up a script, the protagonists, antagonists and setting
- * Address Pitching and how to effectively sell a script to a development group
- Review the history and evolution of Storyboarding, focusing on its specific use in the scripting of video games
- Delve into the narrative of arcade, FPS, RPGs, adventure and platform games
- Evaluate the use of love, humor, fear, horror and surrealism within narrative dialogues

Module 5. Consoles and Devices for Video Games

- Know the basic functioning of the main input and output peripherals
- Understand the main implications of design for different platforms
- Study the structure, organization, functioning and interconnection of devices and systems
- Understand the function of the operative system and the development kits for mobile devices and video game platforms

Module 6. Modeling

- * Ascertain the internal structure of a video game engine
- Establish the elements of a modern video game architecture
- Understand the functions of each one of the video game components
- * Examine examples of video games made with 2D and 3D graphics

Module 7. Video Game Engines

- * Discover how a video game engine works and its architecture
- Understand the basic features of existing game engines
- * Correctly and efficiently program applications applied to video game engines
- Choose the most appropriate paradigm and programming languages to program applications applied to video game engines

Module 8. Human-Computer Interaction

- Explore the different accessibility guidelines, the standards that establish them and the tools to evaluate them, as well as the different methods of interaction with the computer, through peripherals and devices
- Understand the importance of application usability and the different types of human diversity, the limitations they imply and how to adapt interfaces according to the specific needs of each of them
- Learn the process of interface design, from requirements analysis to evaluation
- Go through the various intermediate steps necessary to make a proper interface



Module 9. Video Games and Simulation for Research and Education

- Examine the main characteristics of representative serious games in the fields of education and research
- Understanding how video games can affect people's emotional state
- Obtain the ability to evaluate video games from different approaches

Module 10. Multiplayer Networks and Systems

- Describe the Transmission Control Protocol/Internet Protocol (TCP/IP) architecture and the basic operation of wireless networks
- Analyze Video Games Security
- * Acquire the ability to develop online games for multiple players



This program gives you a practical teaching where you will take everything learned in the theoretical framework to the reality of the gaming industry"



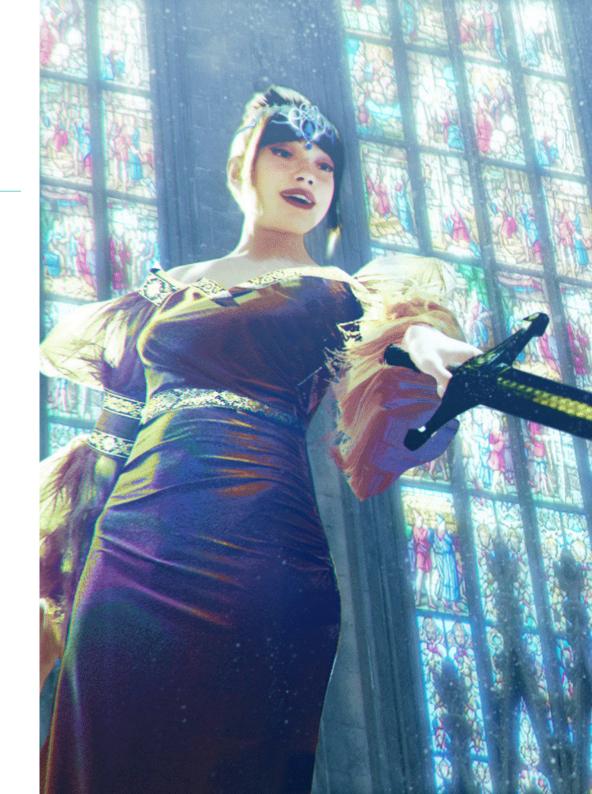


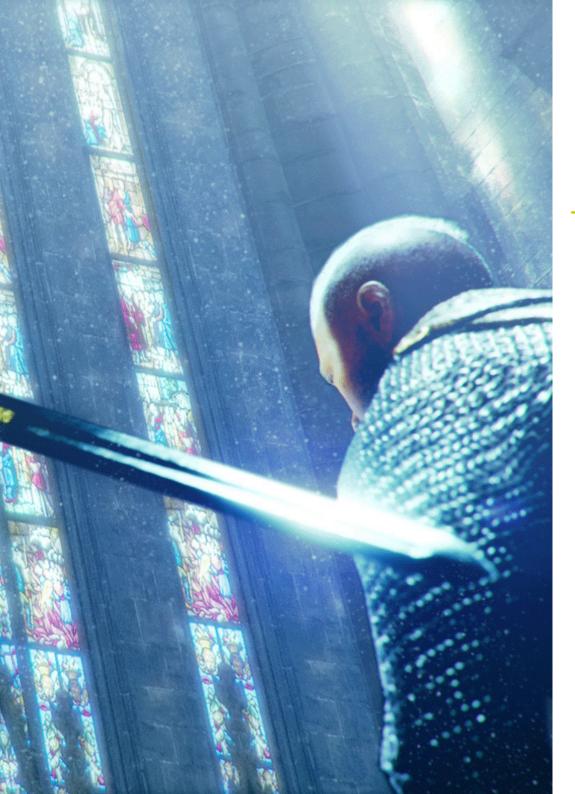
tech 20 | Skills



General Skills

- Understand what makes a good story
- Know how to apply creative writing techniques to the creation of video game scripts
- Specialize as a video game script writer
- Gain in-depth knowledge of all parts of the development of a video game script, knowing, to perfection, all the phases involved
- Obtain an overall vision of the project, being able to provide solutions to the different problems and challenges that arise in the design of a video game.
- Provide the project with creativity to achieve its objectives







Specific Skills

- Write video game scripts quickly and efficiently
- Write literary and technical scripts applied to this discipline
- Know tools such as Storyboard to develop the project in a correct way
- Respond to all the problems that may arise in the creative phase of the video game
- Understand the player's experience and know how to analyze video game gameplay
- Understand all the theoretical and practical procedures involved in the process of creating a video game in order to be able to integrate the work of scriptwriting appropriately



From this degree, the videogame professional will be able to write scripts quickly and efficiently"





International Guest Director

Virginie Mosser, also known as Navie or Mademoiselle Navie, is a leading global figure in the **literary**, **television** and **multimedia scene**. Her passion for storytelling has merged in an exceptional way with her love for **video games**, where she has found fertile ground to explore **new** forms of storytelling and interactive entertainment.

In this way, this expert has been responsible for leading multidisciplinary teams and taking on different challenges in prestigious entities of international recognition. In particular, she has overseen the generation of unique universes and brand coherence through scripts and staging. Other responsibilities have included reviewing the company's editorial content for internal promotion and external marketing of products.

Furthermore, Virginie Mosser has said that her professional success is linked to an early interest in storytelling. As a child, she began writing and soon came to shape funny and quirky stories, such as that of Nelly C, one of her most original characters, which has never left her. To these magnetic personalities of his narratives, she has incorporated originality and inclusive elements.

After years of giving free rein to her imagination on paper, she has ventured into **different means of expression**. From scripts for **television**, **digital** and **print media**, to **graphic novels**, **comics** and **board games** such as *The Geek Culture Box*, her career has touched most creative terrains. Also, her versatility and talent led her to work as a freelance author, tackling issues such as **feminism**, the fight against **fatphobia**, **gender equality** and support for the **LGBTQIA+ community**.

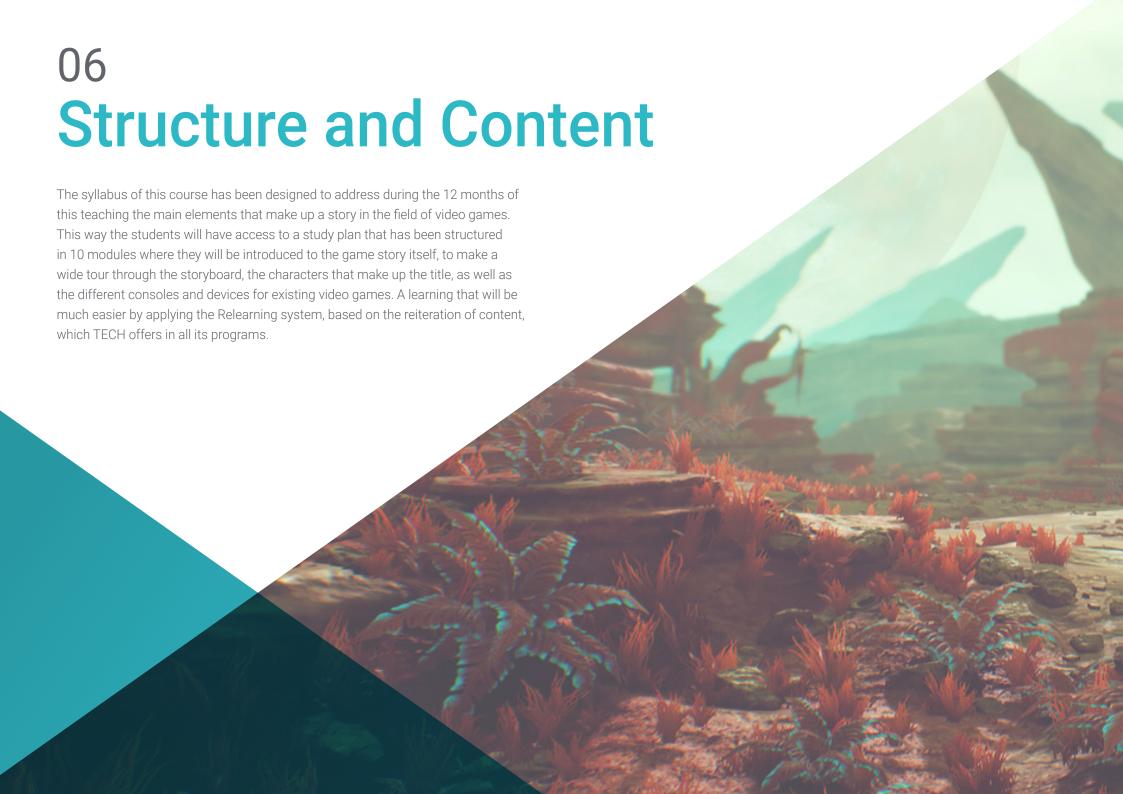


Ms. Mosser, Virginie

- Narrative Director of the R&D unit focused on Gen Al
- Creative Director for the Mobvil Project at Ubisoft
- Consultant for the Video Game Assistance Fund of the National Center for Cinema and the Moving Image
- Freelance Comics Scriptwriter at Editions Delcourt
- Audiovisual Scriptwriter at Arena Films
- Television Scriptwriter at France Télévisions
- Audiovisual Producer at FIRR Productions
- Columnist at Lagardere Active
- Co-founder and Editor at Un Beau Jour
- Social Media Content Creator at Proximity BBDO
- Community Manager at ArtFX Training
- Columnist and Reviewer at FHM Magazine
- Master's Degree in Contemporary History at La Sorbonne University



Thanks to TECH, you will be able to learn with the best professionals in the world"





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Module 1. Video Game Design

- 1.1. The Design
 - 1.1.1. Design
 - 1.1.2. Types of Design
 - 1.1.3. Design Process
- 1.2. Elements of Design
 - 1.2.1. Rules
 - 1.2.2. Balance
 - 1.2.3. Fun
- 1.3. Types of Players
 - 1.3.1. Explorer and Social
 - 1.3.2. Killer and Achievers
 - 1.3.3. Differences
- 1.4. Player Skills
 - 1.4.1. Role Skills
 - 1.4.2. Action Skills
 - 1.4.3. Platform Skills
- 1.5 Game Mechanics L
 - 1.5.1. Elements
 - 1.5.2. Physics
 - 1.5.3. Items
- 1.6. Game Mechanics II
 - 1.6.1. Keys
 - 1.6.2. Platforms
 - 1.6.3. Enemies
- 1.7. Other Elements
 - 1.7.1. Mechanisms
 - 1.7.2. Dynamics
 - 1.7.3. Aesthetics
- 1.8. Video Game Analysis
 - 1.8.1. Gameplay Analysis
 - 1.8.2. Artistic Analysis
 - 1.8.3. Style Analysis

- 1.9. Level Design
 - 1.9.1. Designing Interior Levels
 - 1.9.2. Designing Exteriors Levels
 - 1.9.3. Designing Mixed Levels
- 1.10. Advanced Level Design
 - 1.10.1. Puzzles
 - 1.10.2. Enemies
 - 1.10.3. Environment

Module 2. Design Document

- 2.1. Structure of the Document
 - 2.1.1. Design Document
 - 2.1.2. Basic Structure
 - 2.1.3. Style
- 2.2. General Idea, Market and References
 - 2.2.1. General Idea
 - 2.2.2. Market
 - 2.2.3. References
- 2.3. Setting, Story and Characters
 - 2.3.1. Environment
 - 2.3.2. History
 - 2.3.3. Characters
- 2.4. Gameplay, Mechanisms and Enemies
 - 2.4.1. Gameplay
 - 2.4.2. Mechanisms
 - 2.4.3. Enemies and NPC
- 2.5. Controls
 - 2.5.1. Controller
 - 2.5.2. Laptop
 - 2.5.3. Computer
- 2.6. Levels and Progression
 - 2.6.1. Levels
 - 2.6.2. Journey
 - 2.6.3. Progression

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- 2.7. Items, Skills and Elements
 - 2.7.1. Items
 - 2.7.2. Skills
 - 2.7.3. Elements
- 2.8. Achievements
 - 2.8.1. Medals
 - 2.8.2. Secret Characters
 - 2.8.3. Extra Points
- 2.9 HUD and Interface
 - 2.9.1. HUD
 - 2.9.2. Interface
 - 2.9.3. Structure
- 2.10. Save and Annex
 - 2.10.1. Saving
 - 2.10.2. Annex Information
 - 2.10.3. Final Details

Module 3. Video Game Narrative

- 3.1. Why Tell a Story?
 - 3.1.1. Introduction
 - 3.1.2. Narration and Sense
 - 3.1.3. Narrative Video Games vs. Action-Based Video Games
 - 3.1.4. Subtleties in the Narrative
- 3.2. The Idea of Audiovisual Storytelling
 - 3.2.1 Video Game Narrative
 - 3.2.2. Video Game Script
 - 3.2.3. Main Arguments in Different Video Game Plots
 - 3.2.4. Structure, Characters and Dialogues Developed in the Video Game Script
- 3.3. The Structure of Audiovisual Storytelling
 - 3.3.1. The Idea
 - 3.3.2. The Structure of Storytelling
 - 3.3.3. Genre, Format and Tone
 - 3 3 4 Narrative Point of View

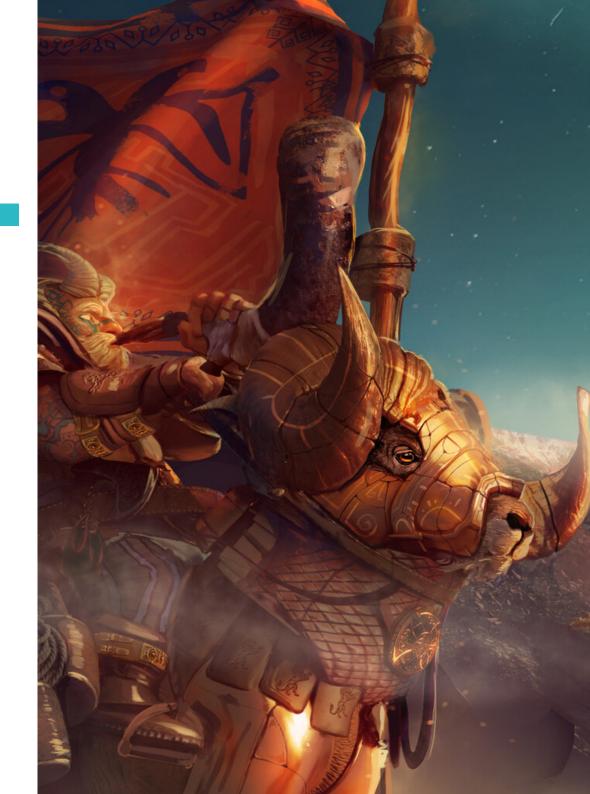
- 3.4. Content of the Story: Action Nodes and Types
 - 3.4.1. Examples of Action Nodes
 - 3.4.2. Practical Narrative Example I
 - 3.4.3. Practical Examples Narrative II
 - 3.4.4. Practical Examples Narrative III
- 3.5. Storytelling in a Video Game: Interaction
 - 3.5.1. Introduction
 - 3.5.2. Playable Nodes and Open Structures
 - 3.5.3. Narration and Interaction
 - 3.5.4. Applications of Interactive Narrative
- 3.6. Storytelling in a Video Game: Immersion
 - 3.6.1. Introduction
 - 3.6.2. Environmental Narrative
 - 3.6.3. Visual Narrative of Characters
 - 3.6.4. Evolution of the Narrative in Video Games
- 3.7. Creating Characters
 - 3.7.1. Defining the Character
 - 3.7.2. Pre-Production, Briefing, Submission Dates, Milestone
 - 3.7.3. Basic Structure of the Character with Geometric Shapes. Understanding of the Canon and Proportions
 - 3.7.4. Body Expression. Torsions. Giving Them Personality
 - 3.7.5. Basic Structure of the Face, Facial Expressions and Variants in the Structure
 - 3.7.6. Character Design Finishes According to the Needs of the Project
 - 3.7.7. Preparation of the Character Sheet for Production
- 3.8. Principles of Interactive Narrative
 - 3.8.1. Pragmatics of the Design. Persuasion and Seduction
 - 3.8.2. Conflict and Idea in Interactive Speech
 - 3.8.3. Character Building. Avatar and Player Representation
 - 3.8.4. Narrative and Ludic Structures. Narrative Spaces in Video Games. Dialogue Tree and Ramifications
- 3.9. Theories of Interactive Narrative
 - 3.9.1. Introduction to the Narrative and Interaction
 - 3.9.2. Hypertext and Cybertext. Digital and Procedural Rhetoric
 - 3.9.3. Ludonarrative and Ludofiction. Fictional Interactive Worlds
 - 3.9.4. Applications of Interactive Narrative

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- 3.10. History of the Narrative in Video Games
 - 3.10.1. 1980-1990
 - 3.10.2. 1990-2000
 - 3.10.3. 2000-2010
 - 3.10.4. 2010- Present Day

Module 4. Video Game Design: Script and Storyboarding

- 4.1. Script and Storyboard
 - 4.1.1. History of the Video Game
 - 4.1.2. Product Sheet
 - 4.1.3. Ideas Source
 - 4.1.4. Narrative through Images
- 4.2. Key Components in Scripts and Storyboard
 - 4.2.1. The Conflict
 - 4.2.2. Protagonist: Defining Keys
 - 4.2.3. Antagonists, NPCs
 - 4.2.4. The Scene
- 4.3. The Script: Key Concepts
 - 4.3.1. The History
 - 4.3.2. Argument
 - 4.3.3. Literary Script
 - 4.3.4. Outline
 - 4.3.5. The Technical Script
- 4.4. The Script: Fundamentals of the Narrative
 - 4.4.1. Dialogue: The Rightful Importance of the Word
 - 4.4.2. Types of Characters
 - 4.4.3. How to Create a Character?
 - 4.4.4. Transformation Arches
 - 4.4.5. Pitching Selling a script
- 4.5. The Script: The Hero's Journey and the Aristotelian Figure
 - 4.5.1. What is the Hero's Journey??
 - 4.5.2. Stages of the Hero According to Vogler
 - 4.5.3. How to Apply the Hero's Journey to Our Stories?
 - 4.5.4. Examples of Applied Hero's Journey



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4.6.	The	Story	board

- 4.6.1. Introduction, History and Evolution of the Art of the Storyboard
- 4.6.2. Functionality and Art
- 4.6.3. Writing and Drawings in Storyboard
- 4.6.4. Choice of Framing, Continuity, Angulation, Clarity
- 4.6.5. Staging of Characters: Preposing
- 4.6.6. Environments, Backgrounds and Shading
- 4.6.7. Written Information and Conventional Signs

4.7 The Animatic

- 4.7.1. Use of Animatic
- 4.7.2. Precursors to Animatic in Storyboard
- 4.7.3. How to Make an Animatic?
- 4.7.4. Timing

4.8. Genres and Polyhedral Narrative

- 4.8.1. Character Design
- 4.8.2. Adventure
- 4.8.3. Narrative Adventures
- 4.8.4. RPGs

4.9. Lineal Narratives

- 4.9.1. Arcades, FPS and Platform Games
- 4.9.2. Alternative Narratives
- 4.9.3. Serious Games and Simulators
- 4.9.4. Sport and Driving Games

4.10. Dialogue through a Script

- 4.10.1. Love, Humor and Surrealism
- 4.10.2. Fear, Horror and Disgust
- 4.10.3. Realistic Dialogues
- 4.10.4. Interpersonal Relationships

Module 5. Consoles and Devices for Video Games

- 5.1. History of Programming in Video Games
 - 5.1.1. Atari (1977-1985)
 - 5.1.2. Nintendo and Super Nintendo Entertainment Systems (NES and SNES) (1985-1995)
 - 5.1.3. PlaysStation / PlayStation 2 Era (1995-2005)
 - 5.1.4. *Xbox 360*, PlayStation 3 and Nintendo *Wii* Era (2005-2013)
 - 5.1.5. Xbox One, PS4 and Wii U-Switch Era (2013-Present)
 - 5.1.6. The Future
- 5.2. History of Gameplay in Video Games
 - 5.2.1. Introduction
 - 5.2.2. The Social Context
 - 5.2.3. Structural Diagram
 - 5.2.4. The Future
- 5.3. Adapting to Modern Times
 - 5.3.1. Games Based on Movement
 - 5.3.2. Virtual Reality
 - 5.3.3. Augmented Reality
 - 5.3.4. Mixed Reality
- 5.4. Unity: Scripting I and Examples
 - 5.4.1. What Is a Script?
 - 5.4.2. Our First Script
 - 5.4.3. Adding a Script
 - 5.4.4. Opening a Script
 - 5.4.5. MonoBehaviour
 - 5.4.6. Debugging
- 5.5. Unity: Scripting II and Examples
 - 5.5.1. Keyboard and Mouse Input
 - 5.5.2. Raycast
 - 5.5.3. Installation
 - 5.5.4. Variables
 - 5.5.5. Public and Serialized Variables

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5.6.	Unity: Scripting III and Examples			
	5.6.1.	Obtaining Components		
	5.6.2.	Modifying Components		
	5.6.3.	Testing		
	5.6.4.	Multiple Objects		
	5.6.5.	Colliders and Triggers		
	5.6.6.	Quaternions		
5.7.	Peripherals			
	5.7.1.	Evolution and Classification		
	5.7.2.	Peripherals and Interfaces		
	5.7.3.	Current Peripherals		
	5.7.4.	Near Future		
5.8.	Video Games: Future Perspectives			
	5.8.1.	Cloud-Based Games		
	5.8.2.	Absence of Controllers		
	5.8.3.	Immersive Reality		
	5.8.4.	Other Alternatives		
5.9.	Architecture			
	5.9.1.	Special Needs in Video Games		
	5.9.2.	Evolution of Architecture		
	5.9.3.	Current Architecture		
	5.9.4.	Differences Between Architecture		
5.10.	Development Kits and Their Evolution			
	5.10.1.	Introduction		
	5.10.2.	Third Generation of Development Kits		
	5.10.3.	Fourth Generation of Development Kits		
	5.10.4.	Fifth Generation of Development Kits		

5.10.5. Sixth Generation of Development Kits

Module 6. Modeling

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- 6.1.1. What is POO?
- 6.1.2. Visual Studio Environment
- 6.1.3. Types of Data
- 6.1.4. Type Conversions
- 6.1.5. Conditionals
- 6.1.6. Objects and Classes
- 6.1.7. Modularity and Encapsulation
- 6.1.8. Inheritance
- 6.1.9. Abstract Classes
- 6.1.10 Polymorphism

6.2. Mathematical Foundations

- 6.2.1. Mathematical Tools in Physics: Scalar and Vector Quantities
- 6.2.2. Mathematical Tools in Physics: Scalar Product
- 6.2.3. Mathematical Tools in Physics: Vector Product
- 6.2.4. Mathematics Tools in OOP

6.3. Physical Principles

- 6.3.1. Rigid Solids
- 6.3.2. Kinematics
- 6.3.3. Dynamics
- 6.3.4. Collisions
- 6.3.5. Projectiles
- 6.3.6. Flying

6.4. Fundamentals of Computer Graphics

- 6.4.1. Graphics Systems
- 6.4.2. 2D Graphics
- 6.4.3. 3D Graphics
- 6.4.4. Raster Systems
- 6.4.5. Geometric Modeling
- 6.4.6. Elimination of Hidden Parts
- 6.4.7. Realistic Visualization
- 6.4.8. OpenGL Graphics Library

- 6.5. Unity: Introduction and Installation
 - 6.5.1. What Is Unity?
 - 6.5.2. Why Unity?
 - 6.5.3. Features of Unity
 - 6.5.4. Installation
- 6.6. Unity: 2D and 3D
 - 6.6.1. 2D Gameplay: Sprites y Tilemaps
 - 6.6.2. 2D Gameplay: 2D Physics
 - 6.6.3. Unity 2D Video Game Examples
 - 6.6.4. Introduction to Unity 3D
- 6.7. Unity: Installation and Object Creation
 - 6.7.1. Adding Components
 - 6.7.2. Deleting Components
 - 6.7.3. Importing Assets and Textures
 - 6.7.4. Supplies and Maps for Materials
- 6.8. Unity: Interactions and Physics
 - 6.8.1. Rigidbody
 - 6.8.2. Colliders
 - 6.8.3. Joints
 - 6.8.4. Character Controllers
 - 6.8.5. Continous Collision Detection (CCD)
 - 6.8.6. Physics Debug Visualization
- 6.9. Unity: Basic Artificial Intelligence (AI) for NPCs
 - 6.9.1. Pathfinding in Unity: Navmesh
 - 6.9.2. Al Enemies
 - 6.9.3 NPC Action Tree
 - 6.9.4. NPC Hierarchy and Scripts
- 6.10. Unity: Animation Fundamentals and Implementation
 - 6.10.1. Animation Controller: Character Association
 - 6 10 2 Blend Tree: Combination Tree
 - 6.10.3. State Transitions
 - 6 10 4 Transition Threshold Modification

Module 7. Video Game Engines

- 7.1. Video Games and Information Communication Technology (ICT)
 - 7.1.1. Introduction
 - 7.1.2. Opportunities
 - 7.1.3. Challenges
 - 7.1.4. Conclusions
- 7.2. History of Video Game Engines
 - 7.2.1. Introduction
 - 7.2.2. Atari
 - 7.2.3. The 80s
 - 7.2.4. First Engines: The 90s
 - 7.2.5. Current Engines
- 7.3. Video Game Engines
 - 7.3.1. Types of Engines
 - 7.3.2. Video Game Engine Parts
 - 7.3.3. Current Engines
 - 7.3.4. Selecting an Engine
- 7.4. Motor Game Maker
 - 7.4.1. Introduction
 - 7.4.2. Scenario Design
 - 7.4.3. Sprites and Animations
 - 7.4.4. Collisions
 - 7.4.5. Scripting in Game Maker Languages (GML)
- 7.5. Unreal Engine 4: Introduction
 - 7.5.1. What Is Unreal Engine 4? What Is Its Philosophy?
 - 7.5.3. Materials
 - 7.5.4. UI
 - 7.5.5. Animations
 - 7.5.6. Particle Systems
 - 7.5.7. Artificial Intelligence
 - 7.5.8. Frames Per Second (FPS)

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- 7.6. Unreal Engine 4: Visual Scripting
 - 7.6.1. Blueprints and Visual Scripting Philosophy
 - 7.6.2. Debugging
 - 7.6.3. Types of Variables
 - 7.6.4. Basic Flow Control
- 7.7. Unity 5 Engine
 - 7.7.1. C# y Visual Studio Programming
 - 7.7.2. Creating Prefabs
 - 7.7.3. Using Gizmos to Control Video Games
 - 7.7.4. Adaptive Engine: 2D and 3D
- 7.8. Godot Engine
 - 7.8.1. Godot Design Philosophy
 - 7.8.2. Object-Oriented Design and Composition
 - 7.8.3. All in One Package
 - 7.8.4. Open and Community-Driven Software
- 7.9. RPG Maker Engine
 - 7.9.1. RPG Maker Philosophy
 - 7.9.2. Taking as a Reference
 - 7.9.3. Creating a Game with Personality
 - 7.9.4. Commercially Successful Games
- 7.10. Source 2 Engine
 - 7.10.1. Source 2 Philosophy
 - 7.10.2. Source and Source 2: Evolution
 - 7.10.3. Community Use: Audiovisual Content and Video Games
 - 7.10.4. Future of Source 2 Engine
 - 7.10.5. Successful Mods and Games

Module 8. Human-Computer Interaction

- 8.1. Introduction to Human-Computer Interaction
 - 8.1.1. What is Human-Computer Interaction?
 - 8.1.2. Relationship of Human-Computer Interaction with Other Disciplines
 - 8.1.3. The User Interface
 - 8.1.4. Usability and Accessibility
 - 8.1.5. User Experience and User-Centered Design





Structure and Content | 35 tech

- 8.2. The Computer and Interaction: User Interface and Interaction Paradigms
 - 8.2.1. Interaction
 - 8.2.2. Paradigms and Styles of Interaction
 - 8.2.3. Evolution of User Interfaces
 - 8.2.4. Classic User Interfaces: WIMP/GUI, Commands, Voice, Virtual Reality
 - 8.2.5. Innovative User Interfaces: Mobile, Wearable, Collaborative, BCI
- 8.3. The Human Factor: Psychological and Cognitive Aspects
 - 8.3.1. The Importance of the Human Factor in Interaction
 - 8.3.2. Human Information Processing
 - 8.3.3. The Input and Output of Information: Visual, Auditory, and Tactile
 - 8.3.4. Perception and Attention
 - 8.3.5. Knowledge and Mental Models: Representation, Organization, and Acquisition
- 8.4. The Human Factor: Sensory and Physical Limitations
 - 8.4.1. Functional Diversity, Disability and Impairment
 - 8.4.2. Visual Diversity
 - 8.4.3. Hearing Diversity
 - 8.4.4. Cognitive Diversity
 - 8.4.5. Motor Diversity
 - 3.4.6. The Case of Digital Immigrants
- 8.5. The Design Process (I): Requirements Analysis for User Interface Design
 - 8.5.1. User-Centered Design
 - 8.5.2. What is Requirements Analysis??
 - 8.5.3. Information Gathering
 - 8.5.4. Analysis and Interpretation of the Information
 - 8.5.5. Usability and Accessibility Analysis
- 8.6. The Design Process (II): Prototyping and Task Analysis
 - 8.6.1. Conceptual Design
 - 8.6.2. Prototyping
 - 8.6.3. Hierarchical Task Analysis
- 8.7. The Design Process (III): Evaluation
 - 8.7.1. Evaluation in the Design Process: Objectives and Methods
 - 8.7.2. Evaluation Methods Without Users
 - 8.7.3. Evaluation Methods with Users
 - 8.7.4. Evaluation Standards and Norms

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9.4.4. Gamification Applied to Work

8.8.8.9.8.10.	8.8.1. 8.8.2. 8.8.3. Access 8.9.1. 8.9.2. The Cor 8.10.1. 8.10.2. 8.10.3.	ibility: Definition and Guidelines Accessibility and Universal Design The WAI Initiative and the WCAG Guidelines WCAG 2.0 and 2.1 Guidelines ibility: Evaluation and Functional Diversity Web Accessibility Evaluation Tools Accessibility and Functional Diversity mputer and Interaction: Peripherals and Devices Traditional Devices and Peripherals Alternative Devices and Peripherals Cell Phones and Tablets Functional Diversity, Interaction and Peripherals
Mod	ule 9. \	/ideo Games and Simulation for Research and Education
9.1.	9.1.1. 9.1.2. 9.1.3. 9.1.4. Motivat 9.2.1. 9.2.2. 9.2.3.	What Does a Serious Game Involve? Characteristics Highlights Advantages of Serious Games ion and Objectives of Serious Games Creation of Serious Games Motivation of Serious Games Objectives of Serious Games Conclusions
9.3.	9.3.1. 9.3.2. 9.3.3. 9.3.4. Training	ion Games Introduction Game- Simulation Video Games and ICT Games, Simulations and Management g-Oriented Design Gamification Model
	9.4.2. 9.4.3.	Rewards Incentives

9.5.	How to	Carry Out Effective Gamification
	9.5.1.	The Theory of Diversion
	9.5.2.	Gamification and Willpower
	9.5.3.	Gamification and New Technologies
	9.5.4.	Famous Examples
9.6.	Learnin	g: Game Flow and Progress
	9.6.1.	Game Flows
	9.6.2.	Feeling of Progress
	9.6.3.	Feedback
	9.6.4.	Degree of Completion
9.7. Learning Process: Game-Based Evaluation		g Process: Game-Based Evaluation
	9.7.1.	Kahoot!
	9.7.2.	Methodology
	9.7.3.	Results
	9.7.4.	Conclusions Extracted
9.8. Fields of Study: Educational Application		of Study: Educational Application
	9.8.1.	Case Study: Application of Gamification Techniques in Class
	9.8.2.	Step 1: User and Context Analysis
	9.8.3.	Step 2: Learning Objectives Definition
	9.8.4.	Step 3: Designing the Experience
	9.8.5.	Step 4: Identifying Resources
	9.8.6.	Step 5: Application of Gamification Elements
9.9.	Field of	Study: Simulation and Mastery of Skills
	9.9.1.	Gamification, Simulators and Orientation Towards the Entrepreneurial Attitude
	9.9.2.	Sample
	9.9.3.	Data Collection
	9.9.4.	Data Analysis and Results
	9.9.5.	Conclusions
9.10.	Field of	Study: Therapy Tools (Real Cases)
	9.10.1.	Therapeutic Gamification: Main Objectives
	9.10.2.	Virtual Reality Therapies
	9103	Theranies with Adapted Peripherals

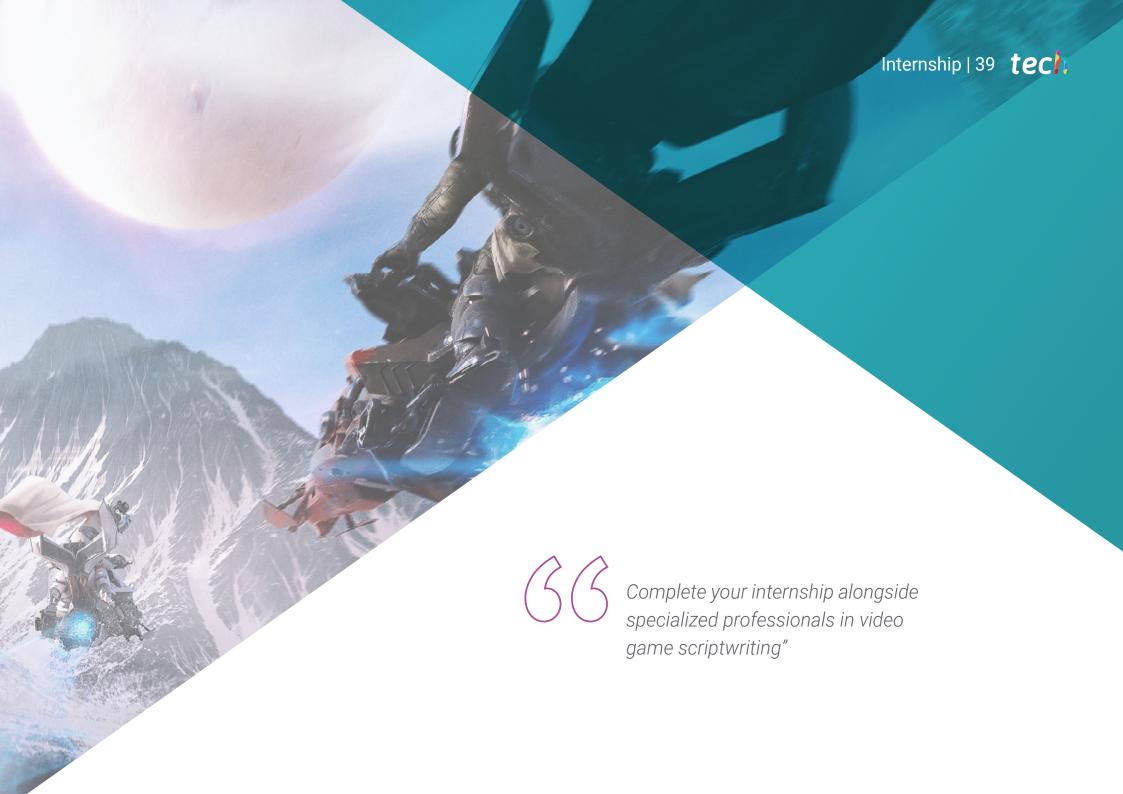
9.10.4. Conclusions Extracted

Module 10. Multiplayer Networks and Systems

- 10.1. History and Evolution of Multiplayer Video Games
 - 10.1.1. The 1970s: First Multiplayer Games
 - 10.1.2. The 90s: Duke Nuke, Doom and Quake
 - 10.1.3. Rise of Multiplayer Video Games
 - 10.1.4. Local and Online Multiplayer
 - 10.1.5. Party Games
- 10.2. Multiplayer Business Games
 - 10.2.1. Origin and Function of Emerging Business Models
 - 10.2.2. Online Sales Services
 - 10.2.3. Free to Play
 - 10.2.4. Micropayments
 - 10.2.5. Advertising
 - 10.2.6. Monthly Payment Subscription
 - 10.2.7. Pay to Play
 - 10.2.8. Try before You Buy
- 10.3. Local and Network Games
 - 10.3.1. Local Games: Beginnings
 - 10.3.2. Party Games: Nintendo and Family Union
 - 10.3.3. Networks Games: Beginnings
 - 10.3.4. Network Games Evolution
- 10.4. OSI Model: Layers I
 - 10.4.1. OSI Model: Introduction
 - 10.4.2. Physical Layer
 - 10.4.3. Data Link Layer
 - 10.4.4. Network Layer
- 10.5. OSI Model: Layers II
 - 10.5.1. Transport Layer
 - 10.5.2. Session Layer
 - 10.5.3. Presentation Layer
 - 10.5.4. Application Layer

- 10.6. Computer Networks and the Internet
 - 10.6.1. What Are Computer Networks?
 - 10.6.2. Software
 - 10.6.3. Hardware
 - 10.6.4. Servers
 - 10.6.5. Network Storage
 - 10.6.6. Network Protocols
- 10.7. Mobile and Wireless Networks
 - 10.7.1. Mobile Networks
 - 10.7.2. Wireless Networks
 - 10.7.3. How Mobile Networks Work
 - 10.7.4. Digital Technology
- 10.8. Safety
 - 10.8.1. Personal Security
 - 10.8.2. Video Game Hacks and Cheats
 - 10.8.3. Anti-Cheating Safety
 - 10.8.4. Anti-Cheating Security Systems Analysis
- 10.9. Multiplayer Systems: Servers
 - 10.9.1. Server Hosting
 - 10.9.2. Massively Multiplayer Online (MMO) Video Games
 - 10.9.3. Dedicated Video Game Servers
 - 10.9.4. Local Area Network (LAN) Parties
- 10.10. Multiplayer Video Game Design and Programming
 - 10.10.1. Multiplayer Video Game Design Fundamentals in Unreal
 - 10.10.2. Multiplayer Video Game Design Fundamentals in Unity
 - 10.10.3. How to Make a Multiplayer Game Fun?
 - 10.10.4. Beyond a Controller: Innovation in Multiplayer Controls





tech 40 | Internship

The Internship Program period of this Video Game Narrative program consists of a 3-week stay in one of the most relevant creative and graphic design studios in the video game industry. In it, the students will be present from Monday to Friday, in days of 8 consecutive hours, together with highly qualified professionals with experience in the creation of games.

The attendance to this stay will give the students a learning closer to the reality of the industry and will know in detail how is the daily work of the writers and creators, applying all the techniques and strategies necessary to create a story of a game that has the quality and expected success in this sector.

In this training proposal, each activity is designed to strengthen and refine the key competencies required for specialized practice in this field. In this way, the professional profile will be enhanced, driving a strong, efficient, and highly competitive performance.

This Internship Program, which consists of a minimum of hours to complete, is an excellent opportunity for students who want to enter one of the industries that has had the most expansion in recent years and has promoted the emergence of new professional profiles.



Create the best video game story for different multiplayer business models"





Internship | 41 tech

The procedures described below will be the basis of the practical part of the Internship Program, and its realization will be subject to the center's own availability and workload, being the proposed activities the following:

Module	Practical Activity
Video Games Design Techniques	Practice the different types and methods of design
	Design at different levels, including the advanced level
	Analyze the gameplay and features of different video games
	Manage the interface and structure of a video game
	Know the different mechanisms of video games
	Create the script and storyboard of the videogame
	Work in the Elaboration of a design document
Trends in video game Narratives	Know the methods of video game structure and narrative
	Apply the key concepts of scripting
	Adapt the importance of immersion in video game storytelling
	Delve into the importance of interaction
	Establish narrative through Images
Technologies and creative tools associated with video game development	Delve into the mathematical fundamentals of 3D modeling
	Apply different 3D modeling skills
	Handle Unity software
	Work on the different existing video game engines
Networks and multiplayer systems in the video game	Handle different multiplayer business models
	Exercise the operation of the different existing servers
	Delve into the narrative and operation of educational games (Serious Games)

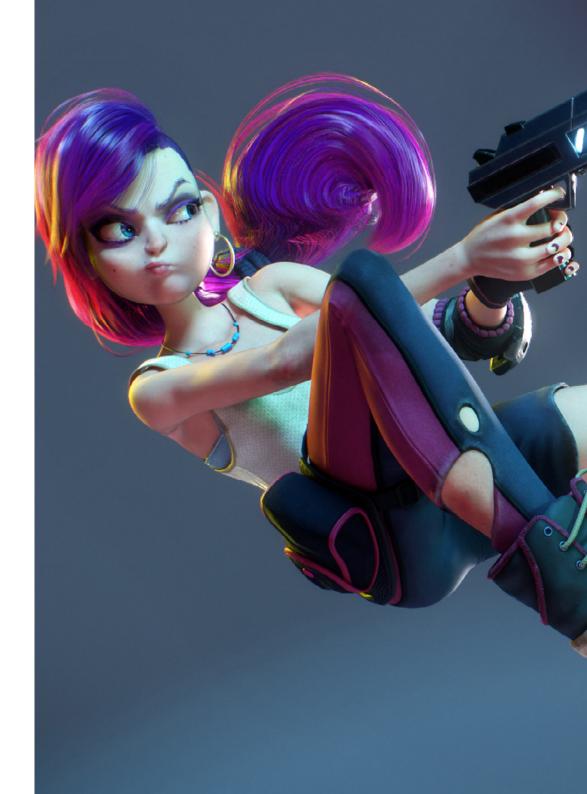


Civil Liability Insurance

The university's main concern is to guarantee the safety of the interns, other collaborating professionals involved in the internship process at the center. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, the university commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the Internship Program period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



General Conditions of the Internship Program

The general terms and conditions of the internship agreement for the program are as follows:

- 1. TUTOR: During the Hybrid Master's Degree, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.
- 2. DURATION: The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.
- 3. ABSENCE: If the students does not show up on the start date of the Hybrid Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

- **4. CERTIFICATION**: Professionals who pass the Hybrid Master's Degree will receive a certificate accrediting their stay at the center.
- **5. EMPLOYMENT RELATIONSHIP:** The Hybrid Master's Degree shall not constitute an employment relationship of any kind.
- **6. PRIOR EDUCATION** Some centers may require a certificate of prior education for the Hybrid Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.
- 7. DOES NOT INCLUDE: The Hybrid Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

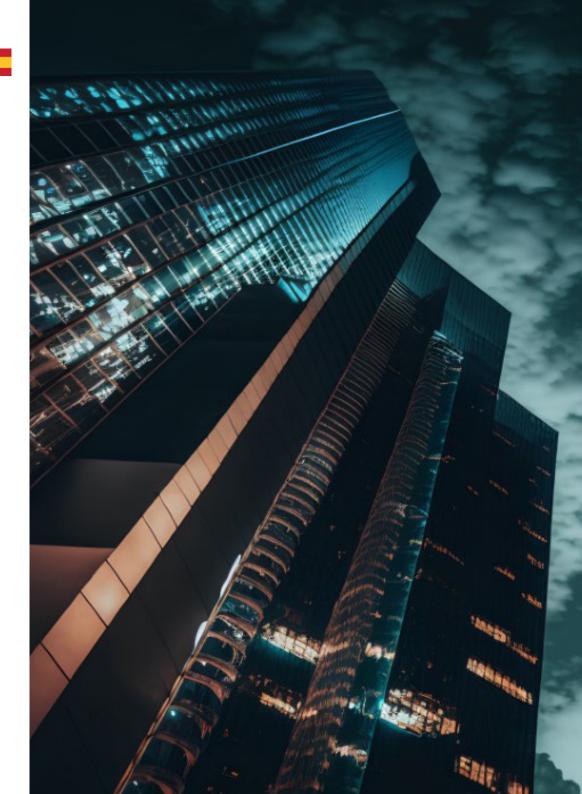




tech 46 | Where Can I Do the Internship?

The student will be able to complete the practical part of this Hybrid Master's Degree at the following centers:









Boost your career path with holistic teaching, allowing you to advance both theoretically and practically"





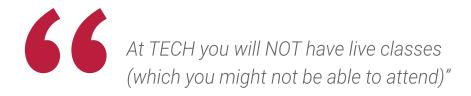


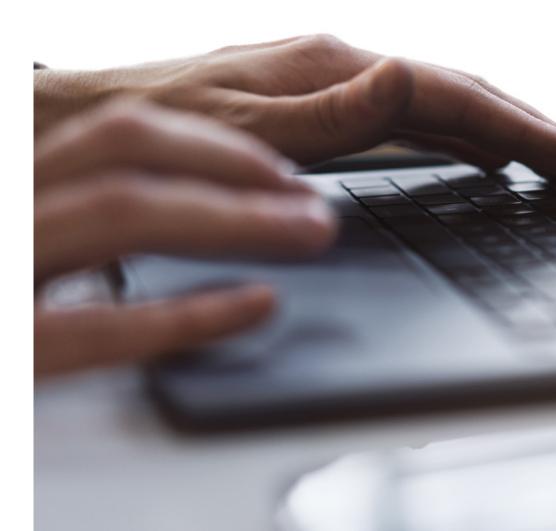
The student: the priority of all TECH programs

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.









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"

tech 52 | Study Methodology

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.



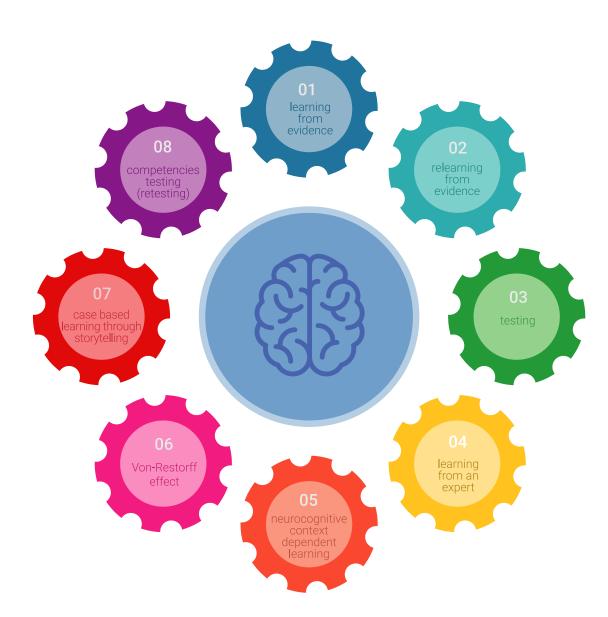
Relearning Methodology

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.

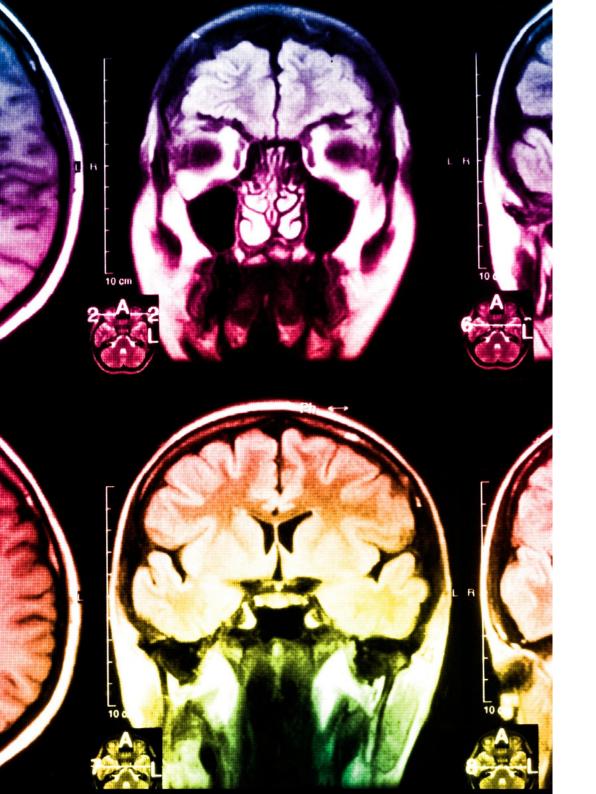
The university methodology top-rated by its students

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

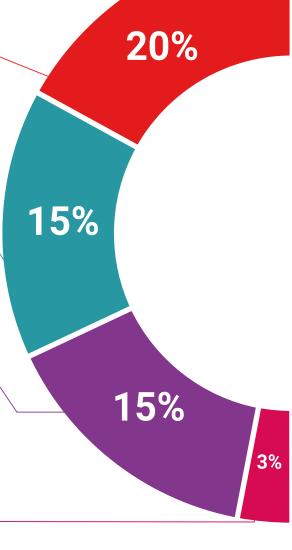
You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



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.

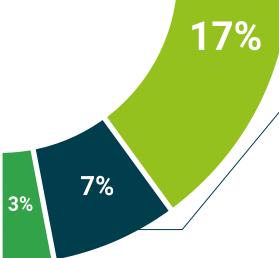


Learning from an expert strengthens knowledge and memory, and generates confidence for future difficult decisions.

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.









tech 60 | Certificate

This private qualification will allow you to obtain a diploma for the **Hybrid Master's Degree in Video Game Narrative** 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.

Mr./Ms. ______ with identification document _____ has successfully passed and obtained the title of:

Hybrid Master's Degree in Video Game Narrative

This is a private qualification of 1,920 hours of duration equivalent to 64 ECTS, with a start date of dd/mm/ysyy and an end date of dd/mm/ysyy and an end date of dd/mm/ysyy and an end date of dd/mm/ysyy.

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

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

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: Hybrid Master's Degree in Video Game Narrative

Modality: online

Duration: 12 months

Accreditation: 60 + 4 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.



Hybrid Master's Degree Video Game Narrative

Modality: Hybrid (Online + Internship)

Duration: 12 months

Certificate: TECH Global University

Credits: 60 + 4 ECTS

