Postgraduate Diploma Sound and Music Design in Video Games



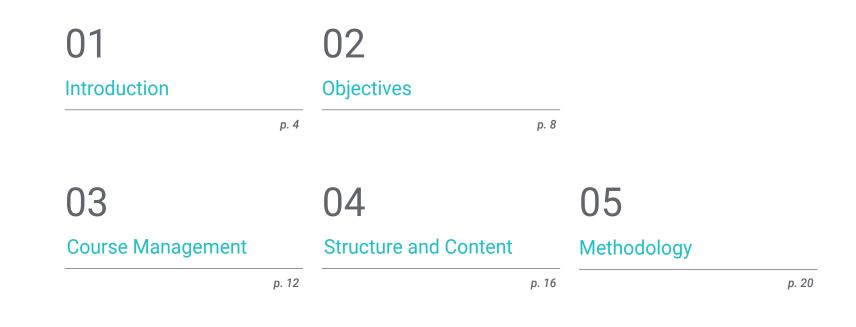


**Postgraduate Diploma** Sound and Music Design in Video Games

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 18 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/design/postgraduate-diploma/postgraduate-diploma-sound-music-design-video-games

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Certificate

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# 01 Introduction

Considerable progress has been made since the appearance of the first video game capable of reproducing sounds. This small detail made a big difference at the time, especially with the release of the Atari 2600 in 1977, which was the first console to incorporate sound effects and an attempt at a music band. It wasn't until a few years later that this technique was perfected with the first delivery of Pac Man with its iconic "waka waka" From that moment on, the soundtrack of a game became its presentation seal and, nowadays, the industry requires specialized designers in this field. Therefore, this program will offer students the opportunity to train as sound professionals.



The sounds of a video game are its letter of introduction. Design a soundtrack that will go down in history thanks to this program"

## tech 06 | Introduction

When people hear words like "Super Mario", "Zelda" "Devil May Cry", it is very likely that in their minds they play the characteristic sounds and music of each title. Therefore, the soundtrack of a video game is much more than the way in which a scene is set. This is its seal of presentation which, if well executed, could go down in history as one of the most economical.

On the other hand, the sound is so important that it allows players to become more involved in the game's kinematics. Everyone tenses up when in Resident Evil 2 (Original and Remake), the music changes drastically at the appearance of Nemesis. These small touches can only be possible if you have an expert designer in this field.

Taking into account all of the above, this Postgraduate Diploma in Sound and Music Design in Video Games has been developed, becoming the answer to the problem of the sector: the lack of specialized professionals in this area. Therefore, students will have a series of contents that will prepare them for the composition and musical development of a game.

All this, with a fully online program, in which students can enter no matter where they are in the world. In addition, thanks to your direct qualification, you will not need to complete a final paper, allowing you to access new professional opportunities immediately after the final class. This **Postgraduate Diploma in Sound and Music Design in Video Games** contains the most complete and up-to-date educational program on the market. The most important features include:

- Specific knowledge in sound design, prepared for future professionals in the sector
- Special focus on the importance of music composition in video games
- The contextualization of sound in the video game industry
- Access to content from any fixed or portable device with an Internet connection

Turn your passion into your profession thanks to this Postgraduate Diploma, in which you will find the necessary material to specialize in sound and music design for video games"

## Introduction | 07 tech

The direct qualification of this Postgraduate Diploma will allow you to start working as a sound designer for video games immediately" Companies are looking for designers capable of creating the soundtrack for any video game.

At TECH you will have the opportunity to take this program online, without schedules or final exams.

The program includes in its teaching staff professionals from the sector who bring to this training the experience of their work, as well as recognized specialists from leading societies and prestigious universities.

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

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

# 02 **Objectives**

This program has a clear objective: To specialize students in the design of epic and emotional soundtracks. For this, they will be provided with an online program in which they will be able to obtain all the knowledge they need to handle different music composition and sound mixing software. They will,therefore, be able to find the tones that bring personality and distinction to a video game. In addition, by allowing a direct qualification, the designer will not need to produce a final paper to complete the program, and will be able to access new professional opportunities immediately.



Enroll now and you will be able to perform an impeccable job for the development of the soundtrack of a video game"

# tech 10 | Objectives



## **General Objectives**

- Know the different genres of video games, the concept of gameplay and features in order to apply them in the analysis of video games and in the creation of the design of the video game
- Deepen understanding of the production of video games and in the SCRUM methodology for project production
- Learn the fundamentals of video game design and the theoretical knowledge that a video game designer should know
- Generate ideas and create entertaining stories, plots and scripts for video games
- Know the theoretical and practical foundations of the artistic design of a video game
- Be able to create an independent digital entertainment startup



There is no better time than now to take your career to the next level: A designer specializing in video game soundtracks"



# Objectives | 11 tech





## Specific Objectives

### Module 1. Video Game Design

- Understand the theory of video game design
- In-depth study of the elements of design and gamification
- Learn about the types of players, their motivations and characteristics
- Learn about game mechanics, 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

### Module 3. Sound & Music Design

- Compose and develop music
- Design music composition software
- Know how to carry out the production and post-production process
- Learn how to do internal mixing and sound design
- Use sound libraries, synthetic sounds and foley
- Know music composition techniques for videogames

# 03 Course Management

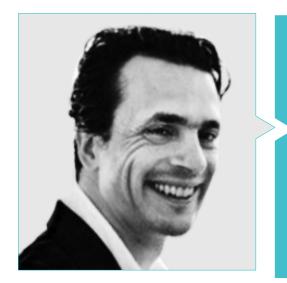
The faculty members in charge of this program are respected and admired professionals in the industry. Their achievements enable them to impart the fundamental knowledge to help students make their way through the design and development of a video game soundtrack. In addition, their academic profiles and work experience have allowed them to participate in several international projects, so they are fully aware of the demands and requirements of large companies.

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This faculty is prepared to help you specialize and motivate you to achieve your goals"

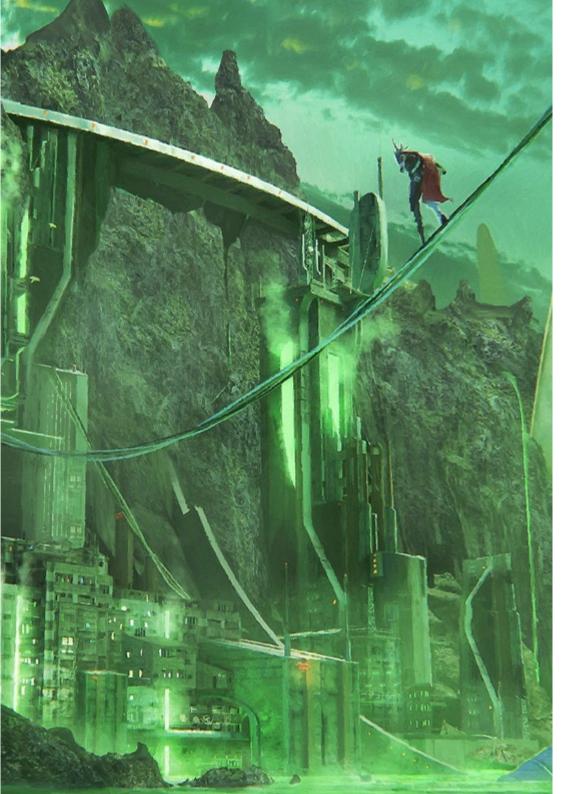
# tech 14 | Course Management

## Management



## Mr. Blasco Vilches, Luis Felipe

- Narrative designer at Stage Clear Studios, developing a confidential product
- Narrative designer at HeYou Games in the "Youturbo" project
- E-learning and serious games product designer and scriptwriter for Telefónica Learning Services, TAK and Bizpills
- · Level designer at Indigo for the "Meatball Marathon" project
- Screenwriting teacher in the Master's Degree in Video Game Creation at the University of Malaga
- Lecturer in Video Game Narrative Design and Production at the TAI Film Department, Madrid
- Narrative Design and Script Workshops teacher, and in the Video Game Design Degree at ESCAV, Granada
- Degree in Hispanic Studies from the University of Granada, Spain
- · Master's Degree in Creativity and Television Screenwriting, Rey Juan Carlos University



## Course Management | 15 tech

## Professors

## Ms. Molas, Alba

- Video Game Design
- Graduate in Film and Media Film School of Catalunya 2015
- Student of 3D animation, video games and interactive environments. Currnet – CEV 2020
- Specialized training in Children's Animation Scriptwriting. Showrunners BCN 2018
- Member of the association Women in Games
- Member of the FemDevs Association of Teachers

## Mr. Carrión, Rafael

- Sound designer and Unity3D audio programmer
- Degree in Industrial Engineering Polytechnic University of Valencia. 2018
- Master's Degree in Video Game Programming Open University, Cataluyna 2021
- Course in Audio Production for Games using WWISE Berklee 2019
- Audio programmer at Women in Games Present

# 04 Structure and Content

The contents of this Postgraduate Diploma have been elaborated taking into account the requirements that large companies request for this type of position. Therefore, the student will be trained to handle different composition and sound mixing software. At the same time, learning the composition techniques used by great exponents to create epic soundtracks. All of this will be taught online, allowing the student to choose where and when to take each class.



This syllabus allows you to study from anywhere in the world"

## tech 18 | Structure and Content

#### 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. Design Elements
  - 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 I
  - 1.5.1. Components
  - 1.5.2. Physical
  - 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. Esthetics

- 1.8. Video Game Analysis
  - 1.8.1. Analysis of Gameplay
  - 1.8.2. Artistic Analysis
  - 1.8.3. Style Analysis
- 1.9. Video Level Design
  - 1.9.1. Designing Interior Levels
  - 1.9.2. Designing Exterior 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. DesignDocumentation

- 2.1. Structure of the Document
  - 2.1.1. Design Document
  - 2.1.2. Structure A
  - 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. Ambience
  - 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

## Structure and Content | 19 tech

2.6. Levels and Progression

- 2.6.1. Levels
- 2.6.2. Journey
- 2.6.3. Progression
- 2.7. Items, Skills and Elements
  - 2.7.1. Items
  - 2.7.2. Skills
  - 2.7.3. Components
- 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. Saved and Attached
  - 2.10.1. Saved
  - 2.10.2. Annexed Information
  - 2.10.3. Final Details

### Module 3. Sound & Music Design

- 3.1. Composition
  - 3.1.1. Lineal Composition
  - 3.1.2. Non-Lineal Composition
  - 3.1.3. Creation of Themes
- 3.2. Musical Development
  - 3.2.1. Instruments
  - 3.2.2. The Orchestra and its Sections
  - 3.2.3. Electronics
- 3.3. Software
  - 3.3.1. Cubase Pro
  - 3.3.2. Virtual Instruments
  - 3.3.3. Plugins

- 3.4. Orchestration
  - 3.4.1. MIDI Orchestration
  - 3.4.2. Synthesizers and Digital Instruments
  - 3.4.3. Pre-Mix
- 3.5. Postproduction
  - 3.5.1. Postproduction
  - 3.5.2. Finale
  - 3.5.3. Plugins
- 3.6. Mixing
  - 3.6.1. Internal Mix
  - 3.6.2. Formats
  - 3.6.3. Sound Design
- 3.7. Production
  - 3.7.1. Sound Libraries
  - 3.7.2. Synthetic Sounds
  - 3.7.3. Foley
- 3.8. Composition Techniques for Video Games
  - 3.8.1. Analysis I
  - 3.8.2. II Analysis
  - 3.8.3. Creation of Loops
- 3.9. Adaptive Systems
  - 3.9.1. Horizontal Re-Sequencing
  - 3.9.2. Vertical Remix
  - 3.9.3. Stinger Transitions
- 3.10. Integration
  - 3.10.1. 3D Unity
  - 3.10.2. FMOD
  - 3.10.3. Master Audio

# 05 **Methodology**

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.** 

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

# tech 22 | Methodology

## Case Study to contextualize all content

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



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



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

# Methodology | 23 tech



A learning method that is different and innovative

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

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

The case method is the most widely used learning system in the best faculties in the world. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

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

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

# tech 24 | Methodology

## **Relearning Methodology**

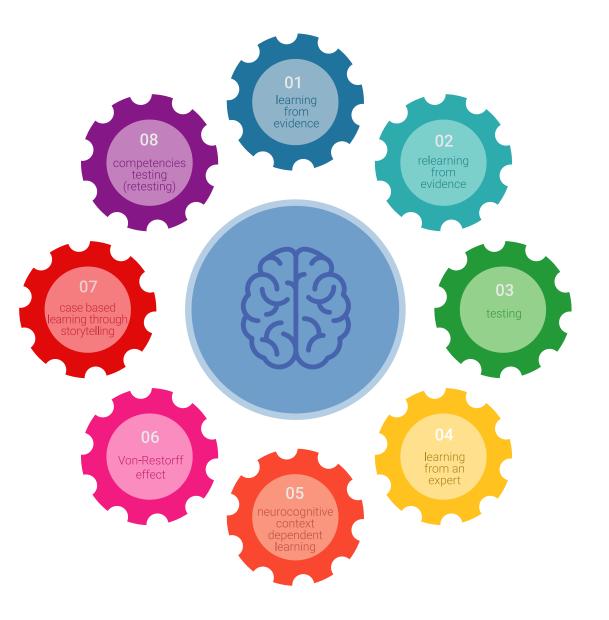
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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

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

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

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



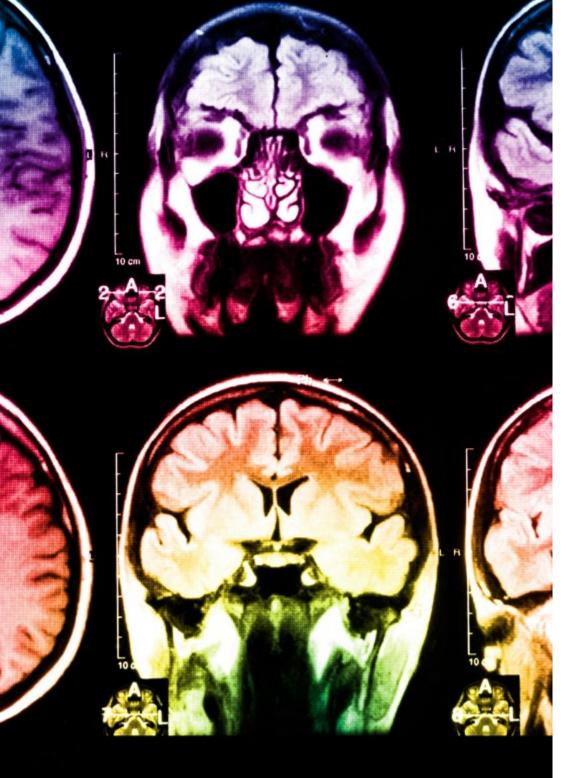
## Methodology | 25 tech

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

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

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

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



# tech 26 | Methodology

This program offers the best educational material, prepared with professionals in mind:



### **Study Material**

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

30%

10%

8%

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



### Classes

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

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



### **Practising Skills and Abilities**

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



### **Additional Reading**

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

## Methodology | 27 tech



#### **Case Studies**

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



### **Interactive Summaries**

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

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



#### **Testing & Retesting**

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



25%



# 06 **Certificate**

The Postgraduate Diploma in Sound and Music Design in Video Games guarantees students, in addition to the most rigorous and up-to-dated education, access to a Postgraduate Diploma issued by TECH Global University.



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Successfully complete this program and receive your university degree without travel or laborious paperwork"

# tech 30 | Certificate

This program will allow you to obtain your **Postgraduate Diploma in Sound and Music Design 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** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Postgraduate Diploma in Sound and Music Design in Video Games

Modality: online

Duration: 6 months

Accreditation: 18 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.

tecn global university Postgraduate Diploma Sound and Music Design in Video Games » Modality: online » Duration: 6 months » Certificate: TECH Global University » Credits: 18 ECTS » Schedule: at your own pace » Exams: online

**Postgraduate Diploma** Sound and Music Design in Video Games

> tech, global university