

# Postgraduate Diploma Sound Design and Creativity for Video Games



## Postgraduate Diploma Sound Design and Creativity for Video Games

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

Website: [www.techtute.com/us/videogames-design/postgraduate-diploma/postgraduate-diploma-sound-design-creativity-video-games](http://www.techtute.com/us/videogames-design/postgraduate-diploma/postgraduate-diploma-sound-design-creativity-video-games)

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# 01

# Introduction

One of the most important elements of a video game is the soundtrack. Starting with its music, through the voices, to the sound effects, this component marks the identity of an audiovisual work and is capable of making it a reference point for millions of players. Therefore, sound design is one of the facets to which large companies devote more effort, counting on great specialists for their video games. This program offers professionals a deeper understanding of the subject, giving them the opportunity to access the latest developments in Foley and in the implementation of interactive audio, among other important issues.





“

*Become a specialist in sound design and creativity for video games with this Postgraduate Diploma, which gives you all the tools to progress professionally in this powerful industry”*

The growing specialization in the video game industry has led to the need for new professional profiles to meet the current needs of these companies. In this way, one of the most important elements for companies today is the sound aspect of their works. Sound, in all its facets, defines the video game and, for that reason, can make or break it.

In this way, sound designers are highly valued in the industry and need to be aware of all the new developments that are emerging in this field, which evolves technically and technologically very fast. This Postgraduate Diploma in Sound Design and Creativity for Video Games offers students an update in fields such as Morphing, synthesis generation, audio track management or the implementation of interactive audio

The professionals who enroll in the program will have at their disposal a high-level faculty, highly specialized in this subject, and multimedia didactic resources of high pedagogical accuracy. All this, following a 100% online education methodology that allows the students to choose the time and place to study, since it adapts to their personal life.

This **Postgraduate Diploma in Sound Design and Creativity for Video Games** contains the most complete and up-to-date program on the market. The most important features include:

- ◆ Case studies presented by experts in sound design and production specialized in videogames
- ◆ 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 assignments
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



*TECH's learning system adapts to your professional circumstances, allowing you to study without annoying interruptions"*

“

*Gain access to important professional opportunities in the video game industry thanks to the new knowledge and skills in sound design that you will acquire in this program”*

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

Its multimedia content, developed with the latest educational technology, will allow professionals to learn in a contextual and situated learning environment, i.e., a simulated environment that will provide immersive education programmed to prepare in real situations.

The design of this program focuses on Problem-Based Learning, by means of which professionals must try to solve the different professional practice situations that arise during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

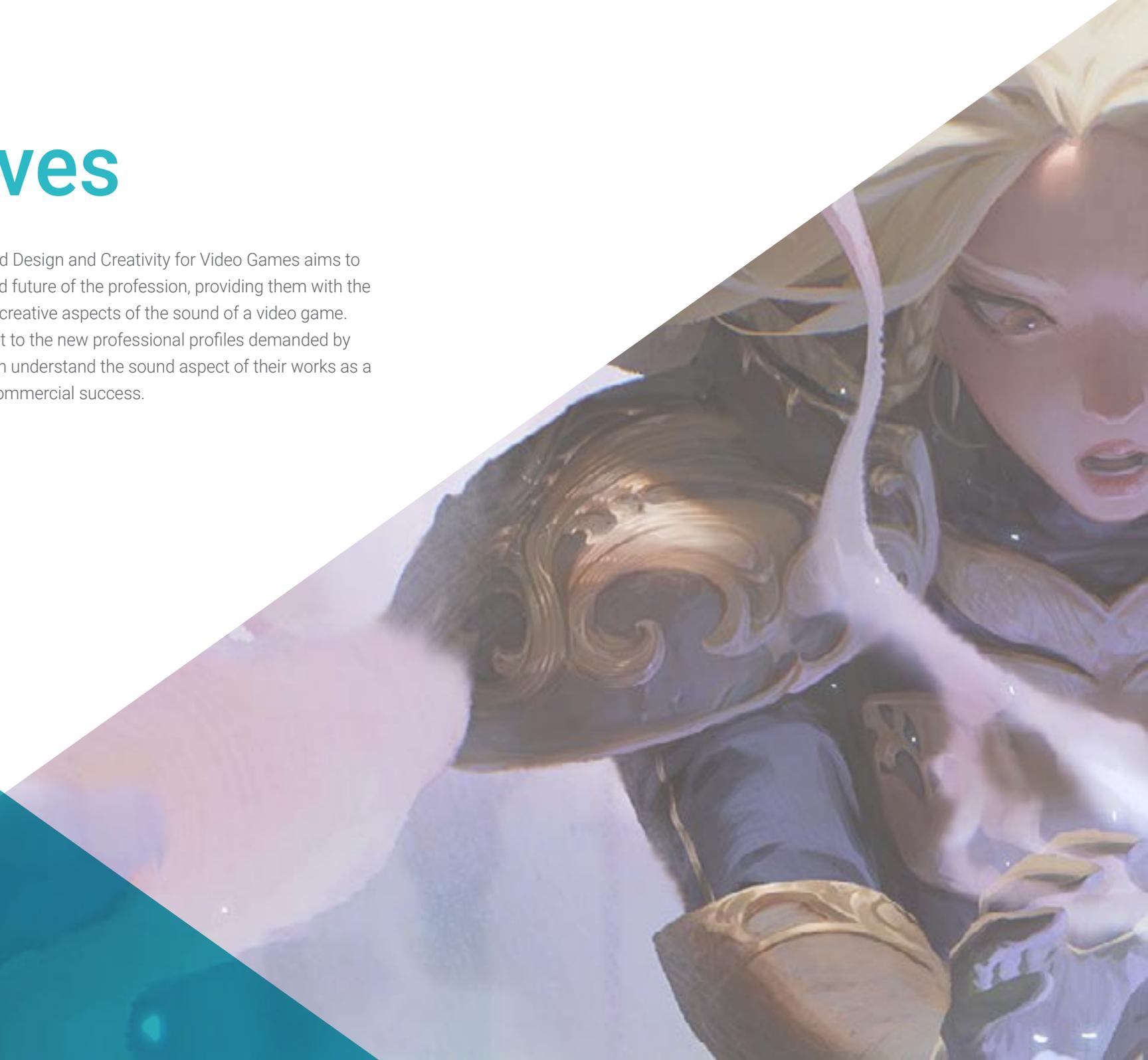
*Enhance your creativity as a composer and sound designer thanks to this Postgraduate Diploma.*

*You will be able to specialize in the implementation of interactive audio, one of the most important features of design.*



# 02 Objectives

This Postgraduate Diploma in Sound Design and Creativity for Video Games aims to prepare students for the present and future of the profession, providing them with the latest techniques in the design and creative aspects of the sound of a video game. In this way, they will be able to adapt to the new professional profiles demanded by large companies in the sector, which understand the sound aspect of their works as a fundamental and key element for commercial success.



“

*This Postgraduate Diploma will allow you to learn all the keys to sound design for video games, boosting your career in this booming industry”*



## General Objectives

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- ◆ Understand in depth the construction and basic movements of chords
- ◆ Deeply know and handle the various specific techniques of video game composition
- ◆ Differentiate the various means to generate the sound of a video game
- ◆ Relate sound to the different parts of the video game
- ◆ Choose the appropriate editing method to create the sound of a character or an environment

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*Learn the best sound creativity techniques to improve your work as a composer and sound designer for videogames”*





## Specific Objectives

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### Module 1. Sound Design

- ◆ Choose the editing method that best suits your needs
- ◆ Understand the Foley technique and the different ways of capturing
- ◆ Manage the possibilities offered by the use of a sound library
- ◆ Plan the sound characteristics of the project
- ◆ Organize the different sounds that the project will have
- ◆ Define the sounds heard on screen
- ◆ Organize, process and clean the sound dialogues
- ◆ Catalogue and organize the project's sound effects
- ◆ Relate the various sounds to their corresponding events

### Module 2. Sound Creativity

- ◆ Analyze the different types and characteristics of sound
- ◆ Understand in depth the various components that are sound objects
- ◆ Create and produce the sonority of different types of soundscapes
- ◆ Create and produce the sonority of different types of physical phenomena
- ◆ Create and produce the sonority of different characters
- ◆ Use and assimilate the *Morphing* technique for sound creation
- ◆ Manage the use of sound layers
- ◆ Assimilate the different parameters of a sound space
- ◆ Create a sound space
- ◆ Understand and create sounds through sound synthesis

### Module 3. Implementing Interactive Audio: FMOD

- ◆ Fluently operate the interface and its main windows
- ◆ Differentiate and master the various types of instruments
- ◆ Understand and use the various types of tracks
- ◆ Assimilate the structure and use of Logic Tracks
- ◆ Use parameters to create dynamics
- ◆ Manage sound modulation through generators
- ◆ Master the mix from the Middleware itself
- ◆ Place the different sounds in the surround space
- ◆ Export and integrate all interactive audio into the corresponding game engine

# 03

# Course Management

This Postgraduate Diploma in Sound Design and Creativity for Video Games has the best teaching staff in the educational market, true specialists in all areas of video game sound design. This ensures that students of this program can receive all the keys to become great experts in the field and potentially take part in large video game projects around the world.





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*One of the strengths of this program is its faculty: you will be in contact with great specialists in sound for video games, being able to learn with them throughout the learning process”*

## International Guest Director

Dr. Alexander Horowitz is a leading audio director and video game composer with a solid career in the digital entertainment industry. As such, he has held the position of Audio Director for Criterion at Electronic Arts, in Guildford, UK. In fact, his specialization in sound design for video games has led him to work on high-profile projects, including his contribution to the soundtrack of Hogwarts Legacy, a game that received a Grammy Award nomination.

Likewise, throughout his career, he has accumulated valuable experience in several well-known companies in the video game industry. For example, he has been Audio Director at Improbable and Audio Lead at Studio Gobo in Brighton and Hove. In addition, his career has included key roles in creating audio experiences for AAA titles such as Red Dead Redemption 2 and GTA V: Online for Rockstar North, as well as Madden NFL 17 for Electronic Arts. These experiences have allowed him to develop a deep understanding of audio production and direction in the context of large projects.

Internationally, he has gained recognition for his innovative work in sound design for video games. In this sense, he has been nominated for a BAFTA award for his work on the short film Room 9 and has participated in the creation of several critically acclaimed games. His ability to combine creativity and technology has earned him a prominent place in the international field of audio design for video games.

In addition to his great professional success, Dr. Alexander Horowitz has contributed to his field through research, as his work includes publications and studies on sound for interactive media, providing valuable knowledge and advances in his specialty.



## Dr. Horowitz, Alexander

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- Criterion Audio Director at Electronic Arts, Guildford, UK
- Audio Director at Improbable
- Audio Lead at Studio Gobo
- Lead Audio Developer at FundamentalVR
- Audio Lead at The Imaginati Studios Ltd.
- Game Tester at Rockstar Games
- Audio Production Assistant at Electronic Arts (EA)
- Ph.D. in Game Development from Glasgow School of Art
- Master's Degree in Serious Games and Virtual Reality at Glasgow School of Art
- Master's Degree in Sound Design for the Moving Image from the Glasgow School of Art
- Bachelor of Music in Composition from the Royal Conservatory of Scotland



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

## Management



### Mr. Raya Buenache, Alberto

- Musician Specialist in Performance and Composition for Audiovisual Media
- Musical director from of the Colmejazz Big Band
- Director of the Colmenar Viejo Youth Symphony Orchestra
- Professor of Music Composition for Audiovisual Media and Music Production
- Advanced Music Degree in the Specialty of Performance from the Royal Conservatory of Music of Madrid
- Master's Degree in Composition for Audiovisual Media (MCAV) from the Katarina Gurska University of Applied Sciences

## Professors

### Mr. García Cabrero, Alejandro

- ♦ Degree in Cinematography and Visual Arts
- ♦ Sound assistant at Lucky Road
- ♦ Sound editing assistant at Lucky Road
- ♦ Degree in Cinematography and Visual Arts from the University School of ARTs TAI

### Ms. González Rus, Lorena

- ♦ Direct Sound and Postproduction Specialist
- ♦ Sound Designer and Sound Engineer at Saber Interactive
- ♦ Sound Designer and Engineer at Spika Tech
- ♦ Specialization in Sound, Direct Sound and Postproduction at TAI School of Arts
- ♦ Degree in Cinematography and Visual Arts from the University School of ARTs TAI

**Ms. Jiménez García, Marina**

- ◆ Direct Sound and Postproduction Specialist
- ◆ Direct sound and postproduction manager at Un Susurro
- ◆ Direct sound manager at Alas de Papel
- ◆ Direct sound assistant at El Descampado
- ◆ Postproduction at Similia
- ◆ Degree in Cinematography and Audiovisual Arts from TAI University Center of the Arts

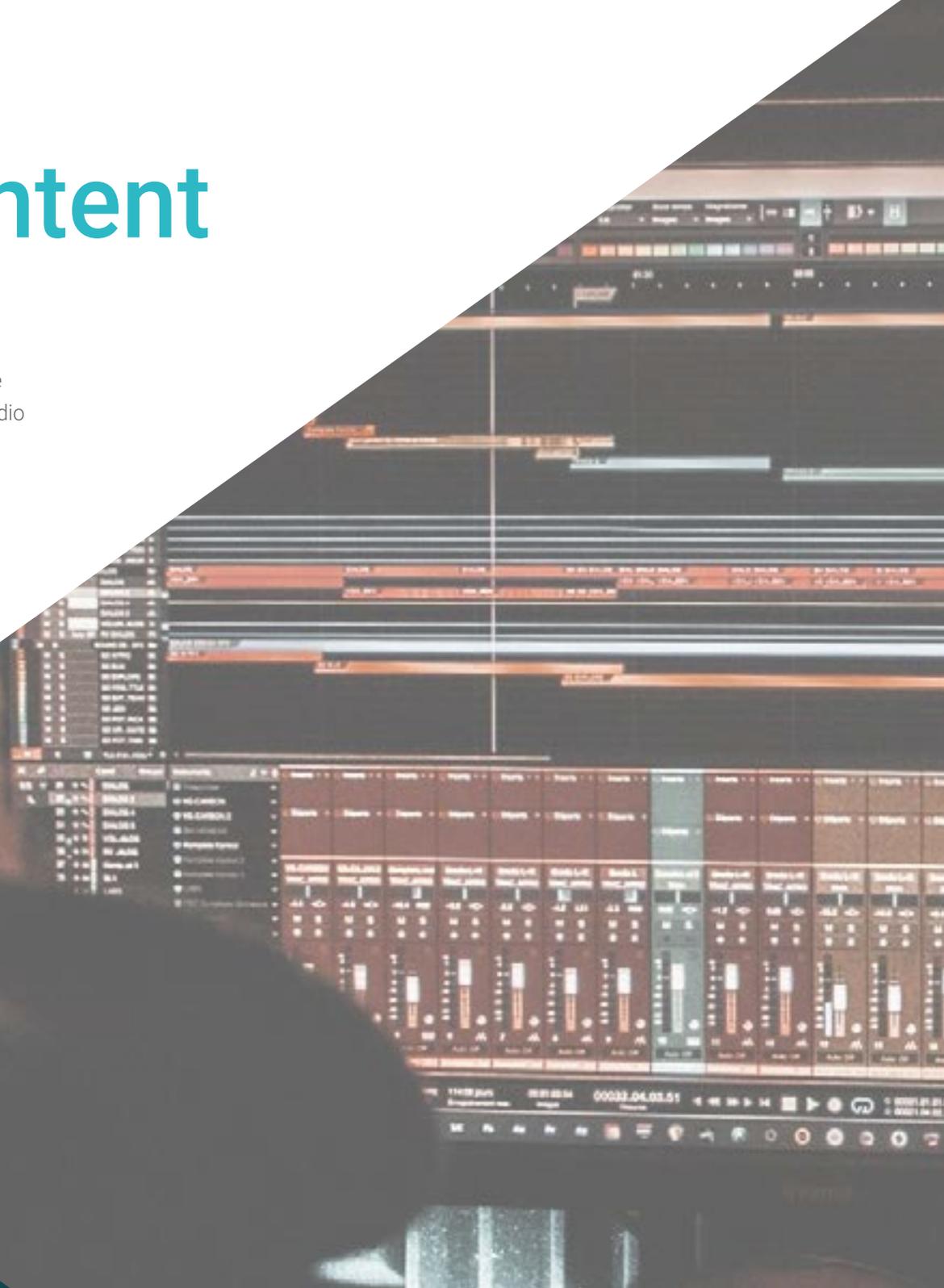
“*The leading professionals in the field have come together to offer you the most comprehensive training, so that you can develop with total guarantees of success”*



# 04

## Structure and Content

The structure of this Postgraduate Diploma in Sound Design and Creativity for Video Games has been designed based on 3 specialized teaching modules. Each of them focuses on a different aspect of sound design and creativity, and students will be able to delve into issues such as editing methods and audio editing software, field and studio recording, Foley, sound libraries, capturing and cleaning voices or sound design in line with the narrative development of the video game, among others.





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*The best syllabus dedicated to sound design applied to video games is here: don't wait any longer and enroll!”*

## Module 1. Sound Design

- 1.1. Editing Methods
  - 1.1.1. Audio Editor
  - 1.1.2. Multitrack Editor
  - 1.1.3. Sequencer
- 1.2. Foley
  - 1.2.1. Field Recording
  - 1.2.2. Studio Recording
  - 1.2.3. Edition
- 1.3. Sound Libraries
  - 1.3.1. Formats
  - 1.3.2. Types
  - 1.3.3. Creating Libraries
- 1.4. Planning
  - 1.4.1. Sound Spaces
  - 1.4.2. Game Mechanics
  - 1.4.3. Requirements
- 1.5. Sound Organization
  - 1.5.1. References
  - 1.5.2. Sources
  - 1.5.3. Edition
- 1.6. Sound Script
  - 1.6.1. References
  - 1.6.2. Connection with Narrative Elements
  - 1.6.3. Proposals
- 1.7. Sound Image
  - 1.7.1. Visual Sounds
  - 1.7.2. Mute Sounds
  - 1.7.3. Invisible Sounds
- 1.8. Dialog Cleaning
  - 1.8.1. Organization
  - 1.8.2. Vocal Processing
  - 1.8.3. Standardization

- 1.9. Sound Effects
  - 1.9.1. Organization
  - 1.9.2. Typology
  - 1.9.3. Categories
- 1.10. Event Adjustments
  - 1.10.1. Features
  - 1.10.2. Types of Events
  - 1.10.3. Synchronization

## Module 2. Sound Creativity

- 2.1. Sound Analysis
  - 2.1.1. Features
  - 2.1.2. Types of Sounds
  - 2.1.3. Narrative Development
- 2.2. Sound Object
  - 2.2.1. Silences
  - 2.2.2. Environment
  - 2.2.3. Metaphor
- 2.3. Soundscapes
  - 2.3.1. Features of the Environment
  - 2.3.2. Layers of the Environment
  - 2.3.3. Hybridizations
- 2.4. Physical Phenomena
  - 2.4.1. Waves and Frequencies
  - 2.4.2. Particles
  - 2.4.3. Subject
- 2.5. Creating Characters
  - 2.5.1. Analysis
  - 2.5.2. Natural Sounds
  - 2.5.3. Game Sounds
- 2.6. Morphing
  - 2.6.1. Amplitude
  - 2.6.2. Substitution
  - 2.6.3. Interpolation

- 2.7. Layers
    - 2.7.1. Materials
    - 2.7.2. Psychological Techniques/Tactics
    - 2.7.3. Reflexive
  - 2.8. Space Design: Panoramic
    - 2.8.1. Overview
    - 2.8.2. Reverberation
    - 2.8.3. Absorption
  - 2.9. Space Design: Noise
    - 2.9.1. Noise
    - 2.9.2. Sound Planes
    - 2.9.3. Randomness
  - 2.10. Generation by Synthesis
    - 2.10.1. Analog Synthesis
    - 2.10.2. Digital Synthesis
    - 2.10.3. Modular Synthesis
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- Module 3. Implementing Interactive Audio: FMOD**
- 3.1. FMOD
    - 3.1.1. Installation
    - 3.1.2. Main Advantages
    - 3.1.3. Publisher's Organization
  - 3.2. Instruments: Single and Multi-Instruments
    - 3.2.1. Single and Multi-Instruments
    - 3.2.2. Event Instruments
    - 3.2.3. Programmer Instruments
  - 3.3. Instruments: Command Instruments
    - 3.3.1. Command Instruments
    - 3.3.2. Silence and Scatter Instruments
    - 3.3.3. Snapshot Instruments
  - 3.4. Tracks
    - 3.4.1. Audio Tracks
    - 3.4.2. Automation Tracks
    - 3.4.3. Return and Master Tracks
  - 3.5. Logic Tracks
    - 3.5.1. Destination Markers
    - 3.5.2. Transitions and Transition Regions
    - 3.5.3. Loop Regions
  - 3.6. Parameters
    - 3.6.1. Adjustments
    - 3.6.2. Sheets
    - 3.6.3. Properties
  - 3.7. Modulators
    - 3.7.1. Type of Surround
    - 3.7.2. Type LFO
    - 3.7.3. Sidechain Type
  - 3.8. Mixer
    - 3.8.1. View Configuration
    - 3.8.2. Buses, Events, Shipments and Returns
    - 3.8.3. VCA
  - 3.9. 3D Events
    - 3.9.1. Spacer
    - 3.9.2. 3D Preview
    - 3.9.3. Built-In Parameters
  - 3.10. Export
    - 3.10.1. Libraries
    - 3.10.2. Preferences
    - 3.10.3. Platforms



*The best content, taught by the best  
TEACHING STAFF Become a specialist now  
with this Postgraduate Diploma in Sound  
Design and Creativity for Video Games”*

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"*

## Case Study to contextualize all content

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

“

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



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



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

### A learning method that is different and innovative

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

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

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

What should a professional do in a given situation? This is the question that you are presented with in the case method, an action-oriented learning method. Over the course of 4 years, you will be presented with multiple practical case studies. You will have to combine all your knowledge, and research, argue, and defend your ideas and decisions.

## 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.



In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

This methodology has trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, and financial markets and instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

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

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

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



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



### Study Material

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

These contents are then 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 skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization we live in.



### Additional Reading

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





#### Case Studies

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.



06

# Certificate

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



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*Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”*

This program will allow you to obtain your **Postgraduate Diploma in Sound Design and Creativity for 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 Design and Creativity for 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.



## Postgraduate Diploma Sound Design and Creativity for Video Games

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

# Postgraduate Diploma Sound Design and Creativity for Video Games

