



# Postgraduate Diploma

Soundtrack and Harmonization for Video Games

» Modality: online

» Duration: 6 months

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/videogames/postgraduate-diploma/postgraduate-diploma-soundtrack-harmonization-video-games

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# tech 06 | Introduction

From the longest and most complex video games of today to the simplest and oldest, all successful titles in history have had a common characteristic: their soundtracks are memorable. Classics like Tetris or Medievil and contemporary video games like The Witcher 3: all have featured music that has greatly enhanced the gaming experience.

For that reason, development companies need the most talented and skilled composers so that they can bring a strong sonic identity to their works. In this way, this Postgraduate Diploma in Soundtrack and Harmonization for Video Games delves into this work, and offers students all the keys to effectively harmonize their compositions, so that upon completion they are in a position to work for the best companies in the industry.

In addition, they will have an innovative teaching methodology that is 100% online and that will allow students to combine their professional career with their education. They will also have at their disposal a highly qualified teaching staff that will accompany them throughout the learning process, while offering them numerous multimedia didactic resources such as interactive summaries or practical exercises.

This **Postgraduate Diploma in Soundtrack and Harmonization 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



Delve into musical harmony to create powerful and memorable soundtracks for the next blockbuster video games"



This Postgraduate Diploma prepares you to become a great expert in harmony and teaches you to apply it with different emotional and aesthetic motivations in the soundtrack of a video game"

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.

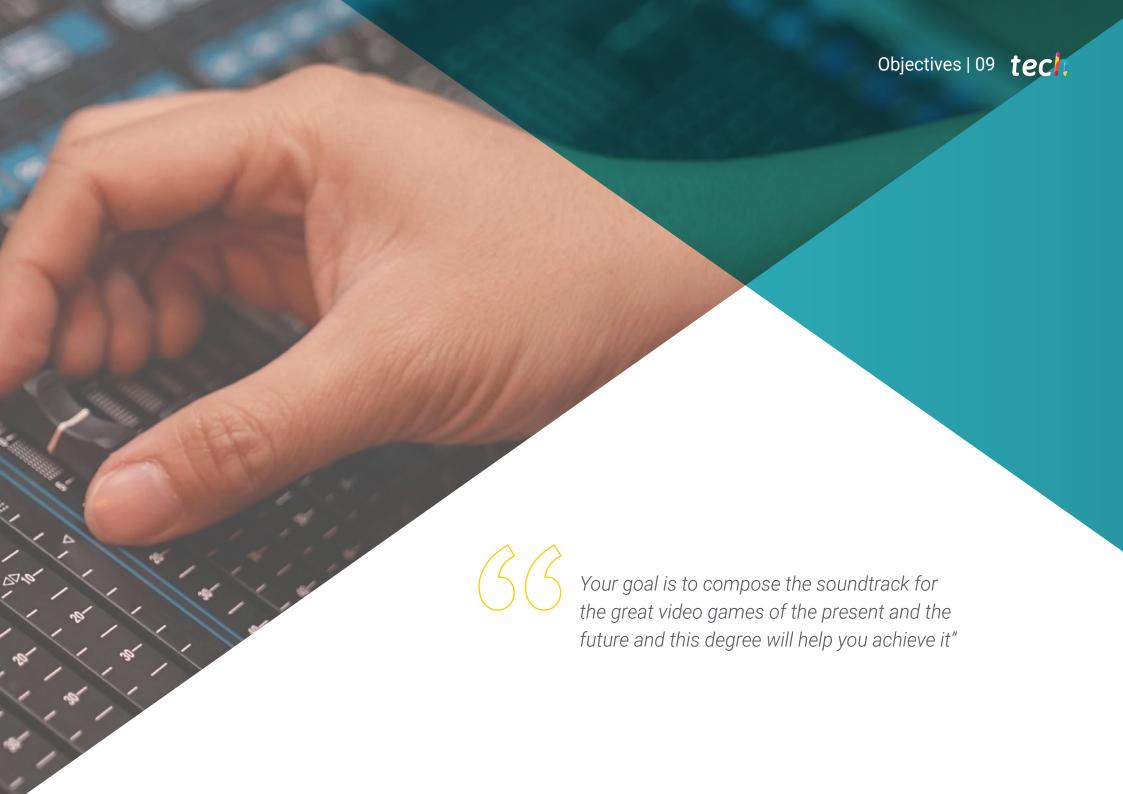
Think about your favorite video games: they all have great soundtracks.

Specialize and compose music to match these works.

In this program you will be taught by a specialist in the field who will provide you with the latest content in the field of music composition for video games.







# tech 10 | Objectives



# **General Objectives**

- Understand in depth the construction and basic movements of chords
- Differentiate and use the different types of modern modes
- Learn comprehensively how to manage harmonic constructions outside of key
- Distinguish the different instruments and the proper use of a traditional orchestra and a virtual orchestra
- Deeply know and handle the different specific techniques of video game composition





# Module 1. The Soundtrack in Video Games

- Understand in depth the acoustic performance and build a suitable space to work in
- Choose the material and components needed to deliver a professional result
- Understand the skills of the various positions in a team
- Differentiate the various types of video games and their relationship to music
- Assimilate the various roles and functions of music as a creator of worlds
- Understand the basic behavior of sound
- Differentiate the various types of listening when mixing and exporting a project
- Know the current trends in the world of music composition and sound design for video games

# Module 2. Basic harmony

- Have a broad knowledge of the concepts of harmony
- Understand the construction and typology of chords
- Analyze the characteristic movements and rules of chord linking
- Assimilate tonal functions, tension-rest movements and harmonic rhythm
- · Invert a chord in all its forms
- Learn the different non-chord tones is found in harmony
- Learn the different non-chord tones is found in melody
- Learn how the dominant works as a harmonic section
- Understand the harmonic evolution from tonality to chromaticism

# Module 3. 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



Progress professionally thanks to this Postgraduate Diploma, which will provide you with what you need to become a reputable composer in the video game industry" O3
Course Management

This Postgraduate Diploma in Soundtrack and Harmonization for Video Games has a very talented and experienced teaching staff in this area. Therefore, they know how the industry works and are specialists in musical composition and harmony,

so students will have at their disposal the most useful and innovative tools and

knowledge to succeed in the complex sector of video games.



# tech 14 | Course Management

# Management



# Mr. Raya Buenache, Alberto

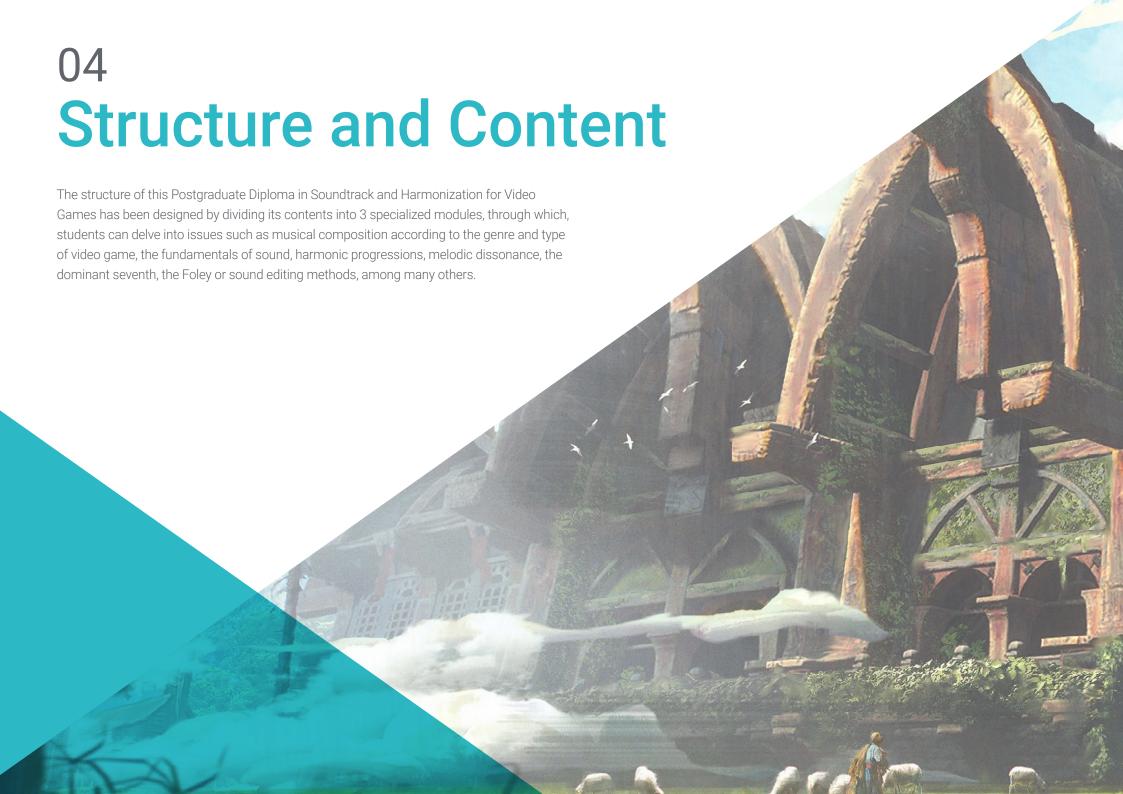
- Musician Specialist in Performance and Composition for Audiovisual Media
- Musical director from of the Colmejazz Big Band
- Director of the Colmenar Viejo Youth Symphony Orchestra
- Professor of Music Composition for Audiovisual Media and Music Production
- Advanced Music Degree in the Specialty of 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**

# 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







# tech 18 | Structure and Content

# Module 1. The Soundtrack in Video Games

- 1.1. The Workspace
  - 1.1.1. Acoustic Aspects
  - 1.1.2. Preparing a Room
  - 1.1.3. Room Construction "Room into Room"
- 1.2. Work Tools I: Hardware
  - 1.2.1. The Computer
  - 1.2.2. Audio Interface
  - 1.2.3. Listening Systems and Other Equipment
- 1.3. Work Tools II: Software
  - 1.3.1. DAW
  - 1.3.2. Kontakt
  - 1.3.3. Plugins
- 1.4. The Work Equipment
  - 1.4.1. Equipment Structure
  - 1.4.2. Equipment Functions
  - 1.4.3. Our Place within the Team
- 1.5. Types of Video Games and Musical Genres
  - 1.5.1. Who Is the Music Intended for?
  - 1.5.2. Music Personality and Aesthetics
  - 1.5.3. Ratio Music vs. Genres in Video Games
- 1.6. Music Roles and Functions
  - 1.6.1. Music as a Mood
  - 1.6.2. Music as a Creator of Worlds
  - 1.6.3. Other Roles
- 1.7. Workflow in Music Composition
  - 1.7.1. Planning, Aesthetics and Creation of the MDD
  - 1.7.2. First Ideas and Composition of Demo Music
  - 1.7.3. The Final Product, from the Demo to the Master Version
- 1.8. Workflow in Editing and Sound Design
  - 1.8.1. Planning and Creation of the ADD
  - 1.8.2. Design and Editing
  - 1.8.3. Adjustment, Synchronization and Testing on the Audio Engine

- 1.9. Sound Fundamentals
  - 1.9.1. Features
  - 1.9.2. Frequency Spectrum
  - 1.9.3. Surround Sound
- 1.10. Surround and 3D Sound
  - 1.10.1. Horizontal vs. Sound Vertical
  - 1.10.2. 3D Audio Simulations
  - 1.10.3. Surround Systems and Dolby Atmos

# Module 2. Basic Harmony

- 2.1. Harmony
  - 2.1.1. The Pentagram, Clefs, Notes and Figures
  - 2.1.2. Range
  - 2.1.3. Intervals
- 2.2. Chord Construction: Types and Arrangement
  - 2.2.1. Classification
  - 2.2.2. Chord Arrangement
  - 2.2.3. Duplications
- 2.3. Building Chords: Movements
  - 2.3.1. Harmonic Movements
  - 2.3.2. Octaves, Unison and Successive and Resulting Fifths
  - 2.3.3. Combining Chords
- 2.4. Harmonic Progressions
  - 2.4.1. Tonal Functions
  - 2.4.2. Harmonic Rhythm
  - 2.4.3. Cadence
- 2.5. Inversions
  - 2.5.1. The First Inversion
  - 2.5.2. The Second Inversion
  - 2.5.3. Inverted Cadence
- 2.6. Non-Chord Tones: Harmonic Dissonance
  - 2.6.1. Harmonic and Melodic Dissonance
  - 2.6.2. Non-Chord Tones in Harmonic Dissonance
  - 2.6.3. Delay and Appoggiatura

- 2.7. Non-Chord Tones: Melodic Dissonance
  - 2.7.1. Non-Chord Tones in Melodic Dissonance
  - 2.7.2. Pitch Note, Ornaments, Elision, Anticipation and Pedal
  - 2.7.3. Combined Action of Non-Chord Tones
- 2.8. Non-Chord Tones in Chords
  - 2.8.1. Dominant Seventh
  - 2.8.2. Seventh Leading-Tone and Second Degree Seventh
  - 2.8.3. Remaining Seventh Chords
- 2.9. Dominant Harmony
  - 2.9.1. Dominant Harmony
  - 2.9.2. Dominant of the Dominant
  - 2.9.3. Secondary Dominant
- 2.10. Evolution Towards Chromaticism
  - 2.10.1. Diatonism and Modulation
  - 2.10.2. Expressive Chromaticism
  - 2.10.3. Loss of Tonal Function

# Module 3. Sound Design

- 3.1. Editing Methods
  - 3.1.1. Audio Editor
  - 3.1.2. Editor Multitrack
  - 3.1.3. Sequencer
- 3.2. Foley
  - 3.2.1. Field Recording
  - 3.2.2. Studio Recording
  - 3.2.3. Edition
- 3.3. Sound Libraries
  - 3.3.1. Formats
  - 3.3.2. Types
  - 3.3.3. Creating Libraries
- 3.4. Planning
  - 3.4.1. Sound Spaces
  - 3.4.2. Game Mechanics
  - 3.4.3. Requirements

- 3.5. Sound Organization
  - 3.5.1. References
  - 3.5.2. Sources
  - 3.5.3. Edition
- 3.6. Sound Script
  - 3.6.1. References
  - 3.6.2. Connection with Narrative Elements
  - 3.6.3. Proposals
- 3.7. Sound Image
  - 3.7.1. Visual Sounds
  - 3.7.2. Mute Sounds
  - 3.7.3. Invisible Sounds
- 3.8. Dialog Cleaning
  - 3.8.1. Organization
  - 3.8.2. Vocal Processing
  - 3.8.3. Standardization
- 3.9. Sound Effects
  - 3.9.1. Organization
  - 3.9.2. Typology
  - 3.9.3. Categories
- 3.10. Event Adjustments
  - 3.10.1. Features
  - 3.10.2. Types of Events
  - 3.10.3. Synchronization



You will delve into the essential elements of composing memorable soundtracks. This is the opportunity you were looking for"





# 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.

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.



# 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.

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.



# Methodology | 27 tech



25%

4%

3%

# **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.





# tech 30 | Certificate

This **Postgraduate Diploma in Soundtrack and Harmonization for Video Games** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma**, issued by **TECH Technological University** via tracked delivery\*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: Postgraduate Diploma in Soundtrack and Harmonization for Video Games
Official N° of Hours: 450 h.



# technological university

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