

Master's Degree Video Game Sound Design



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- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitude.com/us/videogames/master-degree/master-video-game-sound-design

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01

Introduction

Video games make up one of the largest audiovisual industries in the world. It is in continuous expansion, and this has led to the emergence of numerous specialized professions dedicated to each specific aspect in the development of a video game. Therefore, the part in charge of sound is one of the most important, since it will determine whether the experience is satisfactory for the player. For that reason, numerous companies, both industry giants and independents, are looking for experts in music design, production and composition to lead their games to success. This program, therefore, prepares students to face the challenges of the present and the future in terms of video game sound, taking into account the specificities of this field and its latest developments.





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Design and produce the sound and music of the next successful video games thanks to this Master's Degree, which prepares you to face the challenges of the present and the future in this expanding industry”

The video game industry has experienced tremendous growth in recent years. The number of people who play them has multiplied and new types of experiences have appeared, bringing these audiovisual works to the Internet environment in a definitive way thanks to the popularization of online games. But with the increase in users has also come increased specialization in several ways. Companies specializing in independent video games have emerged and new subgenres with narrative experimentation are being created. With this wider range of game types, there has also been a need for professionals dedicated to very specific areas.

One of them is sound. The sound design of a video game covers a wide range of disciplines: music production and composition, sound design and foley, dialogue and voice-overs recording, among others. Therefore, in order to face this complex and exciting task, it is necessary to have the best knowledge and tools, and this Master's Degree offers them, so that The student who completes it has all the necessary skills to work in all kinds of projects in this ever-expanding industry.

Thus, throughout this degree they will be able to deepen in aspects such as harmony, acoustic and virtual orchestration or music or audio production, always focused on the field of video games. all of this, following an innovative 100% online learning methodology that adapts to the professional and personal circumstances of the students, who will also have a highly qualified teaching staff and multimedia teaching resources that are totally practice-oriented.

This **Master's Degree in Video Game Sound Design** 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 self-assessment can be used 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



The video game industry is booming and needs sound specialists to take on new projects"

“

TECH's innovative online learning methodology will allow you to combine your professional career with your studies, since it adapts to your personal circumstances”

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.

Have broad knowledge of the secrets of harmony and musical composition and apply them to your new video games.

Learn how to integrate all the sound tasks in your professional projects with this specialized program.



02 Objectives

The main objective of this Master's Degree in Video Game Sound Design is to provide the professional with the most up-to-date knowledge and tools in this field. The video game industry undergoes continuous transformations, so it is necessary to adapt to them in order to continue enjoying the best opportunities. For this reason, this program is perfect for those who wish to remain at the forefront of video game sound reinforcement and also for those who wish to enter this booming industry.



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All your professional objectives will be at your fingertips. Enroll now to access to the best video game projects”



General Objectives

- ♦ Understand in depth the construction and basic movements of chords
- ♦ Differentiate and use the various types of modern modes
- ♦ Learn comprehensively how to manage harmonic constructions outside of key
- ♦ Distinguish the various instruments and the proper use of a traditional orchestra and a virtual orchestra
- ♦ Have detailed knowledge of and handle the different 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



In this Master's Degree, you will delve into essential aspects of video game sound reinforcement such as the implementation Interactive Audio"





Specific Objectives

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. Advanced Harmony

- ♦ Classify and define modern modes according to their modal degrees and movements
- ♦ Relate the various types of modal chords
- ♦ Comprehensively learn the construction and use of the various ethnic modes
- ♦ Comprehensively learn the construction and use of the various synthetic modes
- ♦ Analyze the difference between tonality, atonality and the various harmonic colors
- ♦ Assimilate the concepts of extra tonal harmony
- ♦ Understand in depth and differentiate the various methods of avant-garde music

Module 4. Acoustic and Virtual Orchestration

- ♦ Understand the construction and different formations of the orchestra
- ♦ Differentiate the instruments by their construction and way of emitting sound
- ♦ Broadly understand the use of the string section for various moments of sound
- ♦ Classify the various types of percussion instruments according to their construction
- ♦ Learn in detail how other less common instruments work in the traditional orchestra
- ♦ Differentiate widely between the behavior of a real orchestra and that of a virtual orchestra
- ♦ Control the different sections of a virtual orchestra

Module 5. Composition Techniques

- ♦ Understand in depth the various basic elements for thematic creation
- ♦ Understand the behavior of the origin of counterpoint
- ♦ Assimilate the functioning of musical accompaniment
- ♦ Differentiate and create various types of thematic melodies
- ♦ Broadly understand the characteristics and typology of the stinger
- ♦ Create one shot musical compositions
- ♦ Compose using interactive techniques such as layering or horizontal sequencing
- ♦ Understand the functioning of the different variants of dynamic music

Module 6. Music and Audio Production

- ♦ Differentiate and classify the various types of microphones according to their construction and polar pattern
- ♦ Use different stereo recording techniques
- ♦ Understand the different techniques of multi-microphone and surround pickup
- ♦ Understand and use the various types of filters is found in an equalizer to balance the frequencies of an instrument
- ♦ Understand and use the various processors to correct the dynamics of an instrument
- ♦ Understand and use reverberation to place an instrument in a sound space
- ♦ Understand and use the different effects processors to give spatiality to a track
- ♦ Master the sound construction based on audio-visual standards

Module 7. 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 8. 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 Mophing 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 9. Voice-Over

- ♦ Understand the needs and functions of the voice
- ♦ Learn how to use voice in conjunction with animation
- ♦ Organize and analyze Voice-overrequirements
- ♦ Select and prepare what is needed to carry out a voice-over recording
- ♦ Use the various editing methods depending on the type of scene
- ♦ Manage the final finishing touches of voice-overediting
- ♦ Learn and make extensive use of the technical requirements for recording a voice over
- ♦ Learn recording techniques from a voice actor's point of view
- ♦ Control the mixing process specific to vocals

Module 10. 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 Middlewareitself
- ♦ Place the different sounds in the surround space
- ♦ Export and integrate all interactive audio into the corresponding game engine

03 Skills

This Master's Degree in Video Game Sound Design will provide the student with a series of skills totally focused on the professional field. Therefore, at the end of the program, the student will be able to understand the needs of each project to carry it out, focusing on the creation of melodies, editing, mixing and Mastering of soundtracks, the integration of different types of instruments in the soundtrack of a video game or, more specifically, the construction of chords with different intervallic or superimposed chords.



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The skills you will acquire in this program will allow you to gain access to the best video game companies in the world”



General Skills

- ♦ Create, build and manage a space and a work team
- ♦ Plan, organize and develop a sound ecosystem
- ♦ Program, organize and select the appropriate techniques to carry out a recording session
- ♦ Generate and implement interactive audio for a video game
- ♦ Plan, develop and organize a soundtrack at various creative levels
- ♦ Plan, develop and organize sound aesthetics at various creative levels
- ♦ Achieve a powerful and realistic sound of a virtual orchestra
- ♦ Manipulate different creative techniques to obtain compositional resources
- ♦ Manage, plan and conduct a recording session
- ♦ Record and smoothly conduct a vocal recording session





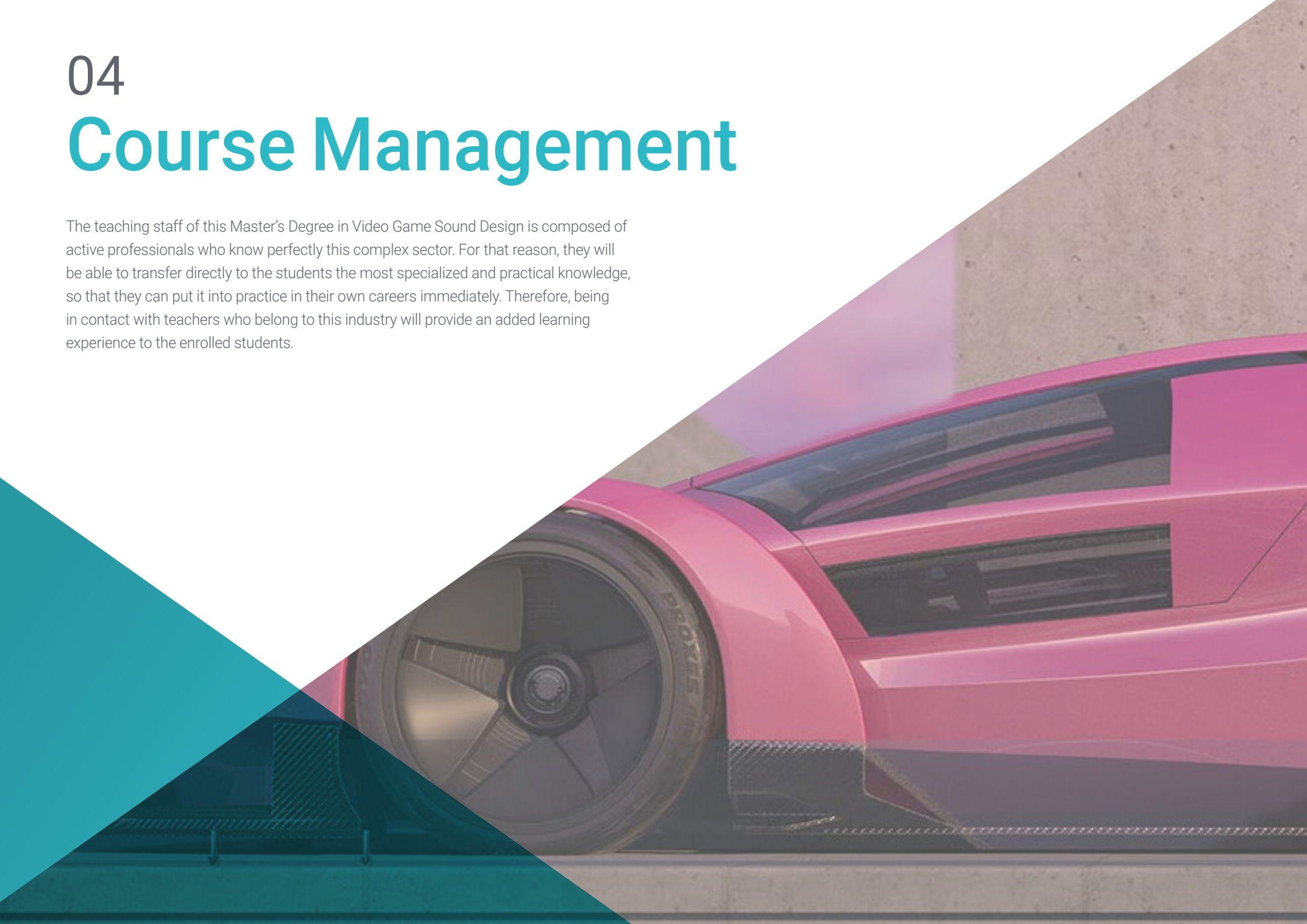
Specific Skills

- ◆ Create melodies and musical themes using basic composition techniques
- ◆ Perform editing, mixing and Mastering of a soundtrack
- ◆ Cast, record and edit Voice-overs
- ◆ Use modality as a tonal resource
- ◆ Manage the use of the woodwind section to fill in and reinforce the string section
- ◆ Use the brass section to fill in and reinforce the string and woodwind sections
- ◆ Handle the Loop technique as a compositional resource
- ◆ Create a narrative discourse through sound
- ◆ Build chords with different intervallic or superimposed chords
- ◆ Use the capturing techniques of each instrument according to the family to which it belongs

04

Course Management

The teaching staff of this Master's Degree in Video Game Sound Design is composed of active professionals who know perfectly this complex sector. For that reason, they will be able to transfer directly to the students the most specialized and practical knowledge, so that they can put it into practice in their own careers immediately. Therefore, being in contact with teachers who belong to this industry will provide an added learning experience to the enrolled students.



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The best teaching staff specialized in video game sound design gives you all the keys to become a highly sought-after expert by companies in the industry”

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. Caplivski, Daniel

- Director of the Travel Medicine Program at Mount Sinai Hospital, New York, USA
- Physician at Mount Sinai Hospital, New York
- Gorgas Postgraduate Certificate in Clinical Tropical Medicine, Peru
- Specialist in Internal Medicine and Infectious Diseases at Mount Sinai Hospital, Mount Sinai, New York
- Doctor of Medicine, Yale University
- B.A. in History and Literature from Harvard University

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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

Mr. Martín, Álvaro

- ♦ Sound Technician (Room) at SDI MEDIA IBERIA
- ♦ Sound Technician at EDM
- ♦ Advanced Degree in Sound

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

Ms. Valencia Loaiza, Carolina

- ◆ Composer Specializing in Video Games
- ◆ Piano and theory of musical initiation teacher
- ◆ Bachelor's Degree in History from Valle University
- ◆ Master's Degree in Audiovisual Media Composition

05

Structure and Content

This program is structured in 10 specialized modules, each divided into 10 topics, through which the student will be able to delve into issues such as harmonic rhythm, harmonic progressions, modern modes, orchestration, both acoustic and virtual, thematic construction during the composition process, the recording session and its preparations or sound editing methods, among many others.





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You will enjoy the most complete curriculum in the field of sound for video games: enroll and check it out”

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. Advanced Harmony

- 3.1. Modern Modes
 - 3.1.1. Mode Classification
 - 3.1.2. Modal Scale
 - 3.1.3. Modal Operation
- 3.2. Modal Harmonic Relationships
 - 3.2.1. Major and Minor Chords
 - 3.2.2. Modal Cadences
 - 3.2.3. Modal Harmonization
- 3.3. Tonal Use of Modality
 - 3.3.1. Tonal Function of the Modal Chord
 - 3.3.2. Tonal Cadences with Modal Chords
 - 3.3.3. Tonal Use of the Modal Chord

- 3.4. Ethnic Modes
 - 3.4.1. Modal Scales
 - 3.4.2. Tonal Use
 - 3.4.3. Modal Chord
- 3.5. Synthetic Modes
 - 3.5.1. Construction
 - 3.5.2. Modal Scales
 - 3.5.3. Tonal Use
- 3.6. Tonal Use of Ethnic and Synthetic Modes
 - 3.6.1. The Idea
 - 3.6.2. Tonal Functions
 - 3.6.3. The Chord as a Harmonic Color
- 3.7. Harmonic Colors: Tonality and Atonality
 - 3.7.1. Tonality vs Atonality
 - 3.7.2. Chords without a Function
 - 3.7.3. Harmonic Omission
- 3.8. Harmonic Colors: Constructions
 - 3.8.1. Chord Construction in Different Intervals
 - 3.8.2. Overlapping Chords
 - 3.8.3. Colored Modal Chord
- 3.9. Extra-Tonal harmony
 - 3.9.1. Bitonality
 - 3.9.2. Polytonality vs. Atonality
 - 3.9.3. Dodecaphonism and Serialism
- 3.10. Avant-Garde Music
 - 3.10.1. Random Music
 - 3.10.2. Indeterminism
 - 3.10.3. Minimalism

Module 4. Acoustic and Virtual Orchestration

- 4.1. The Orchestra
 - 4.1.1. Instruments
 - 4.1.2. Formats
 - 4.1.3. Hybrid Orchestra
- 4.2. Instruments
 - 4.2.1. Structure and Classification
 - 4.2.2. Techniques
 - 4.2.3. Bell Effects
- 4.3. String Orchestration
 - 4.3.1. Sound Planes
 - 4.3.2. Contrapuntal vs. Homophonic Writing Homophone
 - 4.3.3. Accompanying a Soloist
- 4.4. Woodwind and String Accompaniment Orchestration
 - 4.4.1. Contrapuntal vs. Homophonic Writing Homophone
 - 4.4.2. Use of Wood to Achieve Color Contrasts
 - 4.4.3. Special Effects
- 4.5. Brass and Woodwind Orchestration with Woodwinds and Strings
 - 4.5.1. Uses and Duplications
 - 4.5.2. Melody, Homophonic and Contrapuntal Writing
 - 4.5.3. Sound Climax and Timbral Effects
- 4.6. Percussion Section
 - 4.6.1. Instrument Classification
 - 4.6.2. Number and Distribution of Instrumentalists
 - 4.6.3. Notation of Percussion Instruments
- 4.7. Other Instruments
 - 4.7.1. Keyboard Instruments
 - 4.7.2. String Instruments without a Bow
 - 4.7.3. Orchestration for These Instruments
- 4.8. Differences between Samplers and Real Orchestras
 - 4.8.1. Dynamics, Balance and Panorama
 - 4.8.2. Layers
 - 4.8.3. Keyswitches

- 4.9. Orchestration Techniques for Samplers: Patches Ensemble
 - 4.9.1. Full and Powerful Sound
- 4.9.2. Using Patches Ensemble
 - 4.9.3. Strings: Sustain, Tremolo and Staccato
- 4.10. Orchestration Techniques for Samplers: Pairing
 - 4.10.1. Timpani
 - 4.10.2. Orchestra and Percussion Pairing
 - 4.10.3. Choir and Orchestra Pairing

Module 5. Composition Techniques

- 5.1. Thematic Construction
 - 5.1.1. The Shape
 - 5.1.2. The Motive
 - 5.1.3. The Musical Phrase
- 5.2. Counterpoint
 - 5.2.1. The Musical Phrase
 - 5.2.2. Melodic Rhythm and Harmonic Rhythm
 - 5.2.3. Counterpoint in Several Voices
- 5.3. Accompaniment
 - 5.3.1. Types of Accompaniment
 - 5.3.2. Reason for Accompaniment
 - 5.3.3. Bass Line
- 5.4. Melody
 - 5.4.1. Vocal Melody
 - 5.4.2. Instrumental Melody
 - 5.4.3. Counter Theme Melody
- 5.5. Creative Techniques
 - 5.5.1. The Pedal and the Ostinato
 - 5.5.2. Multi-Tonics and Repetitions
 - 5.5.3. Reharmonization
- 5.6. Composition Techniques for Video Games: The Linear Loop
 - 5.6.1. Features
 - 5.6.2. Methods
 - 5.6.3. Technical Problems

- 5.7. Composition Techniques for Video Games: The Stinger
 - 5.7.1. Features
 - 5.7.2. Types
 - 5.7.3. Stingers in Action
- 5.8. Composition Techniques for Video Games: One-Shot Tracks
 - 5.8.1. Features
 - 5.8.2. Cinematics and Scenes
 - 5.8.3. Hyphenated Events
- 5.9. Composition Techniques for Video Games: Interactive Music
 - 5.9.1. Introduction to Interactive Music
 - 5.9.2. Horizontal Sequencing
 - 5.9.3. Vertical Layering
- 5.10. Dynamic Music
 - 5.10.1. Generative Music
 - 5.10.2. Adaptive Music
 - 5.10.3. Problems of Dynamic Music

Module 6. Music and Audio Production

- 6.1. The Recording Session
 - 6.1.1. Pre-Production
 - 6.1.2. Preparation/Choosing a Studio
 - 6.1.3. Session Registration
- 6.2. Microphones
 - 6.2.1. Microphones
 - 6.2.2. Types of Microphones
 - 6.2.3. Features
- 6.3. Stereo Microphone Techniques
 - 6.3.1. Matching Pair
 - 6.3.2. Spaced Pair
 - 6.3.3. Near-Matching Pair
- 6.4. Multimicrophonic and Surround Techniques
 - 6.4.1. Multimicrophonic Techniques
 - 6.4.2. Surround Recording
 - 6.4.3. Surround Recording Techniques
- 6.5. Instrument Recording
 - 6.5.1. Stringed Instruments
 - 6.5.2. Percussion Instruments
 - 6.5.3. Wind and Amplified Instruments
- 6.6. Mixing Techniques: Equalization
 - 6.6.1. Equalization
 - 6.6.2. Types of Filters
 - 6.6.3. Applying to the Track
- 6.7. Mixing Techniques: Dynamics
 - 6.7.1. Compressors and Other Processors
 - 6.7.2. Sidechain
 - 6.7.3. Multiband Compression
- 6.8. Mixing Techniques: Reverberation
 - 6.8.1. Characteristics of an Ambience
 - 6.8.2. Functions and Algorithms
 - 6.8.3. Parameters
- 6.9. Mixing Techniques: Other Effects
 - 6.9.1. Eco/Delay
 - 6.9.2. Modulation Effects
 - 6.9.3. Pitch Effects
- 6.10. Mastering
 - 6.10.1. Features
 - 6.10.2. Process
 - 6.10.3. Application in the Audio Engine

Module 7. Sound Design

- 7.1. Editing Methods
 - 7.1.1. Audio Editor
 - 7.1.2. Multitrack Editor
 - 7.1.3. Sequencer
- 7.2. Foley
 - 7.2.1. Field Recording
 - 7.2.2. Studio Recording
 - 7.2.3. Edition
- 7.3. Sound Libraries
 - 7.3.1. Formats
 - 7.3.2. Types
 - 7.3.3. Creating Libraries
- 7.4. Planning
 - 7.4.1. Sound Spaces
 - 7.4.2. Game Mechanics
 - 7.4.3. Requirements
- 7.5. Sound Organization
 - 7.5.1. References
 - 7.5.2. Sources
 - 7.5.3. Edition
- 7.6. Sound Script
 - 7.6.1. References
 - 7.6.2. Connection with Narrative Elements
 - 7.6.3. Proposals
- 7.7. Sound Image
 - 7.7.1. Visual Sounds
 - 7.7.2. Mute Sounds
 - 7.7.3. Invisible Sounds
- 7.8. Dialog Cleaning
 - 7.8.1. Organization
 - 7.8.2. Vocal Processing
 - 7.8.3. Standardization





- 7.9. Sound Effects
 - 7.9.1. Organization
 - 7.9.2. Typology
 - 7.9.3. Categories
- 7.10. Event Adjustments
 - 7.10.1. Features
 - 7.10.2. Types of Events
 - 7.10.3. Synchronization

Module 8. Sound Creativity

- 8.1. Sound Analysis
 - 8.1.1. Features
 - 8.1.2. Types of Sounds
 - 8.1.3. Narrative Development
- 8.2. Sound Object
 - 8.2.1. Silences
 - 8.2.2. Environment
 - 8.2.3. Metaphor
- 8.3. Soundscapes
 - 8.3.1. Features of the Environment
 - 8.3.2. Layers of the Environment
 - 8.3.3. Hybridizations
- 8.4. Physical Phenomena
 - 8.4.1. Waves and Frequencies
 - 8.4.2. Particles
 - 8.4.3. Subject
- 8.5. Creating Characters
 - 8.5.1. Analysis
 - 8.5.2. Natural Sounds
 - 8.5.3. Game Sounds
- 8.6. Morphing
 - 8.6.1. Amplitude
 - 8.6.2. Substitution
 - 8.6.3. Interpolation

- 8.7. Layers
 - 8.7.1. Materials
 - 8.7.2. Psychological Techniques/Tactics
 - 8.7.3. Reflexive
- 8.8. Space Design: Panoramic
 - 8.8.1. Overview
 - 8.8.2. Reverberation
 - 8.8.3. Absorption
- 8.9. Space Design: Noise
 - 8.9.1. Noise
 - 8.9.2. Sound Planes
 - 8.9.3. Randomness
- 8.10. Generation by Synthesis
 - 8.10.1. Analog Synthesis
 - 8.10.2. Digital Synthesis
 - 8.10.3. Modular Synthesis

Module 9. Voice-Over

- 9.1. Voice Objectives
 - 9.1.1. Quality
 - 9.1.2. Functions
 - 9.1.3. Features
- 9.2. Voice Creation: Voice and Animation
 - 9.2.1. Voice before Animation
 - 9.2.2. Voice at the Same Time as Animation
 - 9.2.3. Voice after Animation
- 9.3. Voice Creation: Types and Script
 - 9.3.1. Types of Voices
 - 9.3.2. Script Creation
 - 9.3.3. List of Assets
- 9.4. Choosing the Voice-Over
 - 9.4.1. Casting
 - 9.4.2. In-house Study vs. Specialized study
 - 9.4.3. Costs and Benefits of Using Voice-Over
- 9.5. Recording Sessions
 - 9.5.1. Fluidity in the Session
 - 9.5.2. Recording
 - 9.5.3. Management
- 9.6. Edition
 - 9.6.1. Dialogues in Cinematics
 - 9.6.2. Character Interaction
 - 9.6.3. Silences
- 9.7. Finishes
 - 9.7.1. Rendering
 - 9.7.2. Synchronization
 - 9.7.3. Export
- 9.8. Vocal Recording: Placement
 - 9.8.1. Type of Microphone
 - 9.8.2. Positioning the Voice-Over
 - 9.8.3. How to Approach Voice Recording
- 9.9. Vocal Recording: Sound-Sync
 - 9.9.1. Sound-Sync
 - 9.9.2. Restricted Files
 - 9.9.3. Unrestricted Files
- 9.10. Voice Processing
 - 9.10.1. Equalization
 - 9.10.2. Dynamics
 - 9.10.3. Effects

Module 10. Implementing Interactive Audio: FMOD

- 10.1. FMOD
 - 10.1.1. Installation
 - 10.1.2. Main Advantages
 - 10.1.3. Publisher's Organization
- 10.2. Instruments: Single and Multi-Instruments
 - 10.2.1. Single and Multi-Instruments
 - 10.2.2. Event Instruments
 - 10.2.3. Programmer Instruments
- 10.3. Instruments: Command Instruments
 - 10.3.1. Command Instruments
 - 10.3.2. Silence and Scatter Instruments
 - 10.3.3. Snapshot Instruments
- 10.4. Tracks
 - 10.4.1. Audio Tracks
 - 10.4.2. Automation Tracks
 - 10.4.3. Return and Master Tracks
- 10.5. Logic Tracks
 - 10.5.1. Destination Markers
 - 10.5.2. Transitions and Transition Regions
 - 10.5.3. Loop Regions
- 10.6. Parameters
 - 10.6.1. Adjustments
 - 10.6.2. Sheets
 - 10.6.3. Properties
- 10.7. Modulators
 - 10.7.1. Type of Surround
 - 10.7.2. Type LFO
 - 10.7.3. Sidechain Type
- 10.8. Mixer
 - 10.8.1. View Configuration
 - 10.8.2. Buses, Events, Shipments and Returns
 - 10.8.3. VCA
- 10.9. 3D Events
 - 10.9.1. Spacer
 - 10.9.2. 3D Preview
 - 10.9.3. Built-In Parameters
- 10.10. Export
 - 10.10.1. Libraries
 - 10.10.2. Preferences
 - 10.10.3. Platforms



This Master's Degree combines the most in-depth and up-to-date content, the most excellent teaching staff and a 100% online learning method designed for working professionals"

06 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.



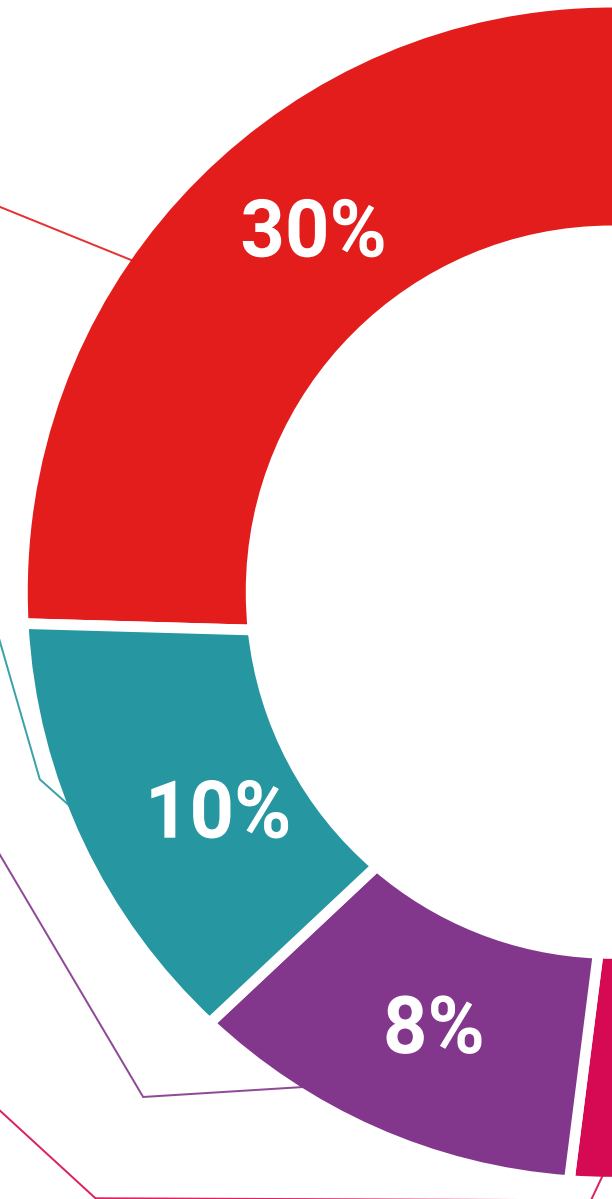
Practising Skills and Abilities

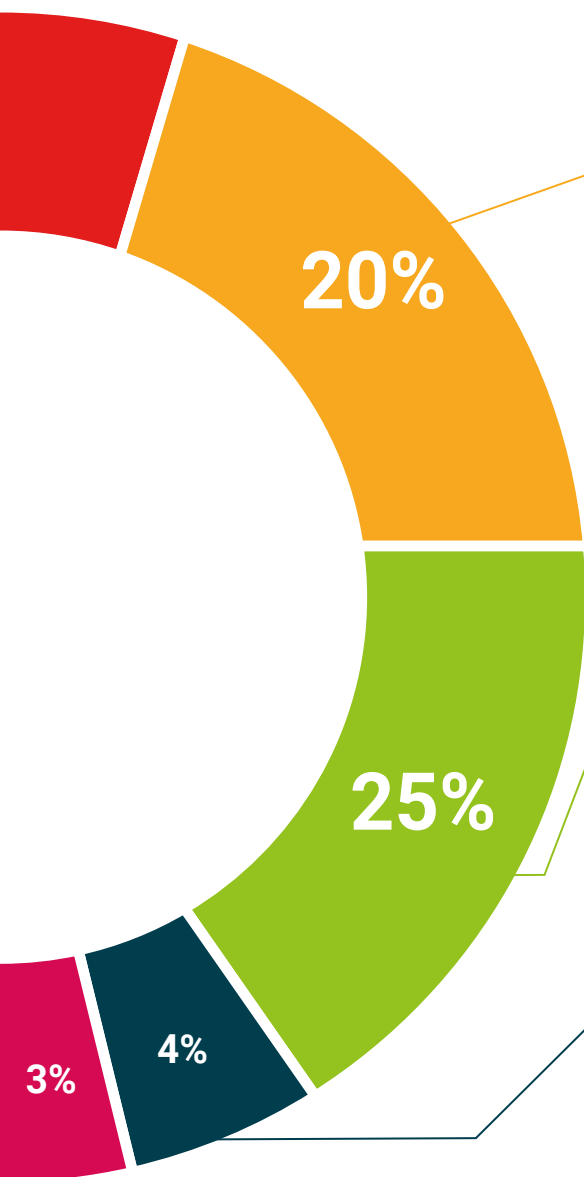
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization we live in.



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.



07 Certificate

The Master's Degree in Video Game Sound Design guarantees students, in addition to the most rigorous and up-to-date education, access to a Master's Degree issued by TECH Global University.



“

*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 **Master's Degree diploma in Video Game Sound Design** 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.

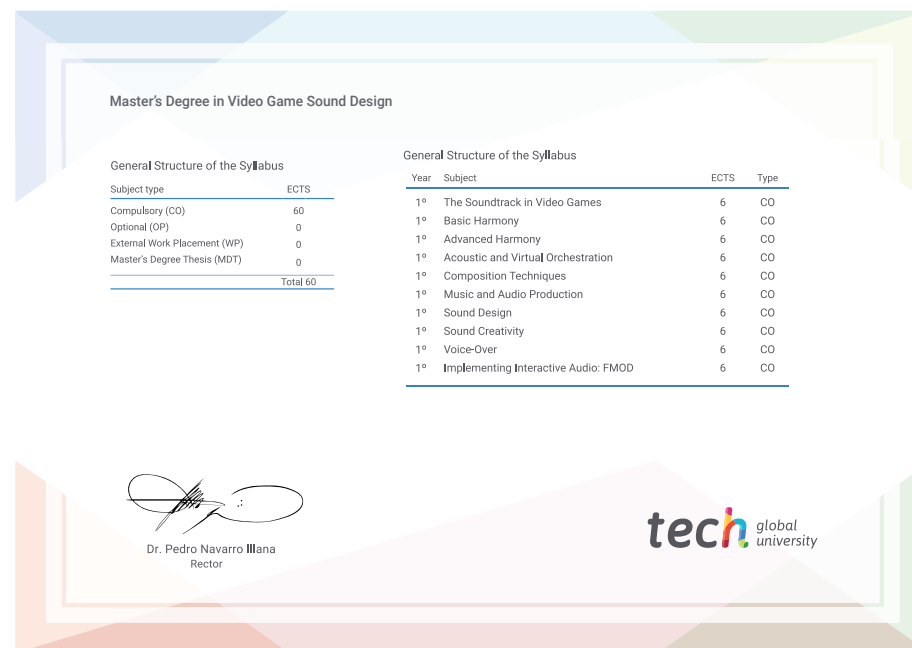
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Master's Degree in Video Game Sound Design**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**





Master's Degree

Video Game Sound Design

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Master's Degree

Video Game Sound Design