

# Postgraduate Diploma

## Composition Techniques

### Production for Video Games



## Postgraduate Diploma Composition Techniques Production for Video Games

- » Modality: **online**
- » Duration: **6 months**
- » Certificate: **TECH Technological University**
- » Dedication: **16h/week**
- » Schedule: **at your own pace**
- » Exams: **online**

Website: [www.techtute.com/in/videogames/postgraduate-diploma/postgraduate-diploma-composition-techniques-production-video-games](http://www.techtute.com/in/videogames/postgraduate-diploma/postgraduate-diploma-composition-techniques-production-video-games)

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# 01

# Introduction

Music composition does not only require talent and ideas: to produce good pieces of music you need to master the best techniques. This program offers them to their students, while delving into sound production, so that they get a complete learning in this area, always focused on video games. Thus, throughout this program they will be able to delve into issues such as thematic construction or counterpoint, among many others. This will make them valuable professionals and highly valued by the best companies in the industry.







“

*Specialize in Music Production and Composition for Video Games thanks to this Postgraduate Diploma, which will provide you with all the tools you need to develop professionally in this exciting area”*

The huge growth experienced by the video game industry in recent years has led to the rise of new professional profiles. Thus, the music composer for video games is becoming increasingly important and large companies in the sector are looking for talented experts who are able to compose and produce soundtracks for their video games with competence.

This Postgraduate Diploma in Composition Techniques Production for Video Games allows professionals to learn the most advanced composition and production techniques, delving into issues such as the Linear Loop, Vertical Layering, the recording session, mixing techniques or stereo microphonic techniques, among others.

All this, follow an innovative difficulties methodology 100% online very flexible that adapts to the circumstances of each student, allowing balance their Assignments with their studies. In addition, they will be able to enjoy a wide range of multimedia resources such as video explanations and procedures, theoretical and practical exercises, interactive summaries and master classes.

This **Postgraduate Diploma in Composition Techniques Production 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



*Learn the best techniques of composition and music production for video games such as the linear Loop with this Postgraduate Diploma”*

“

*This program will allow you to delve into the process of composing soundtracks for video games, focusing on the aspects of production and recording”*

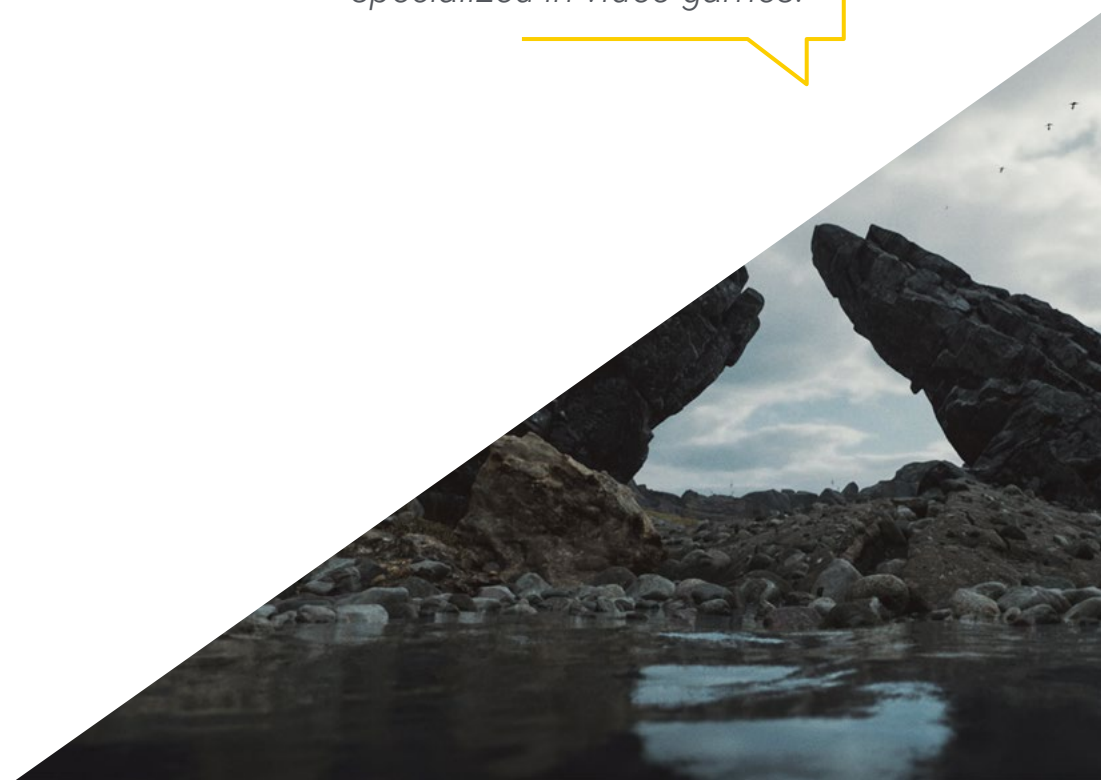
The program's teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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.

*Decide when, how and where to study thanks to TECH's learning methodology, which adapts to your professional and personal circumstances.*

*This program will allow you to become a great music producer specialized in video games.*



# 02 Objectives

The main goal of this Postgraduate Diploma in Composition and Production Techniques for Video Games is to offer students the best skills and knowledge in these areas, so that they can incorporate them into their daily work immediately. Thus, they will improve their career prospects in a sector in continuous transformation such as the video game industry, which requires specialists who master these aspects to create the soundtracks of the next blockbuster titles.





“

*You will achieve all your professional goals: don't wait any longer and enroll”*



## General Objectives

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- ◆ 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
- ◆ 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

“

*This program is what you were looking for to help you become a relevant creator in the video game industry”*





## Specific Objectives

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### Module 1. 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 2. 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 3. 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

# 03

## Course Management

This Postgraduate Diploma in Composition and Production Techniques for Video games has a faculty specialized in these subjects, and will transfer to the student all the keys to be able to compose and produce not only soundtracks for video games, but all kinds of musical pieces and other complementary works such as Voice-over, so present and important in contemporary video games. Thus, the professional who completes this program will have at his disposal the most useful knowledge transmitted by teachers with experience in this complex sector.







“

*If you want to get in touch with specialists in this sector for guidance, this is your qualification. Enroll and gain access to a faculty that knows the video game industry inside out”*

## 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. Martín, Álvaro

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

### Ms. Valencia Loaiza, Carolina

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

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



# 04

## Structure and Content

Through 3 specialized modules, students will be able to delve into a series of very important aspects in the process of composition and production for video games. Thus, they will delve into issues such as the thematic construction and the musical motif associated with characters and scenarios, vocal melody, the use of musical counterpoint, the preparation of the recording studio, the recording of the session and the creation of voices for animation, among many others.







“

*These contents will make you a great specialist in orchestration for videogames”*

## Module 1. Composition Techniques

- 1.1. Thematic Construction
  - 1.1.1. The Shape
  - 1.1.2. The Motive
  - 1.1.3. The Musical Phrase
- 1.2. Counterpoint
  - 1.2.1. The Musical Phrase
  - 1.2.2. Melodic Rhythm and Harmonic Rhythm
  - 1.2.3. Counterpoint in Several Voices
- 1.3. Accompaniment
  - 1.3.1. Types of Accompaniment
  - 1.3.2. Reason for Accompaniment
  - 1.3.3. Bass Line
- 1.4. Melody
  - 1.4.1. Vocal Melody
  - 1.4.2. Instrumental Melody
  - 1.4.3. Counter Theme Melody
- 1.5. Creative Techniques
  - 1.5.1. The Pedal and the Ostinato
  - 1.5.2. Multitones and repetitions
  - 1.5.3. Reharmonization
- 1.6. Composition Techniques for Video Games: The Linear Loop
  - 1.6.1. Features
  - 1.6.2. Methods
  - 1.6.3. Technical Problems
- 1.7. Composition Techniques for Video Games: The Stinger
  - 1.7.1. Features
  - 1.7.2. Types
  - 1.7.3. Stingers in Action
- 1.8. Composition Techniques for Video Games: One-Shot Tracks
  - 1.8.1. Features
  - 1.8.2. Cinematics and Scenes
  - 1.8.3. Hyphenated Events

- 1.9. Composition Techniques for Video Games: Interactive Music
  - 1.9.1. Introduction to Interactive Music
  - 1.9.2. Horizontal Sequencing
  - 1.9.3. Vertical Layering
- 1.10. Dynamic Music
  - 1.10.1. Generative Music
  - 1.10.2. Adaptive Music
  - 1.10.3. Problems of Dynamic Music

## Module 2. Music and Audio Production

- 2.1. The Recording Session
  - 2.1.1. Pre-Production
  - 2.1.2. Preparation/Choosing a Studio
  - 2.1.3. Session Registration
- 2.2. Microphones
  - 2.2.1. Microphones
  - 2.2.2. Types of Microphones
  - 2.2.3. Features
- 2.3. Stereo Microphone Techniques
  - 2.3.1. Matching Pair
  - 2.3.2. Spaced Pair
  - 2.3.3. Near-Matching Pair
- 2.4. Multi-Microphone and Surround Techniques
  - 2.4.1. Multi-Microphone Techniques
  - 2.4.2. Surround Recording
  - 2.4.3. Surround Recording Techniques
- 2.5. Instrument Recording
  - 2.5.1. Stringed Instruments
  - 2.5.2. Percussion Instruments
  - 2.5.3. Wind and Amplified Instruments
- 2.6. Mixing Techniques: Equalization
  - 2.6.1. Equalization
  - 2.6.2. Types of Filters
  - 2.6.3. Applying to the Track

- 2.7. Mixing Techniques: Dynamics
  - 2.7.1. Compressors and Other Processors
  - 2.7.2. Sidechain
  - 2.7.3. Multi-Band Compression
- 2.8. Mixing Techniques: Reverberation
  - 2.8.1. Characteristics of an Ambience
  - 2.8.2. Functions and Algorithms
  - 2.8.3. Parameters.
- 2.9. Mixing Techniques: Other Effects
  - 2.9.1. Eco/Delay
  - 2.9.2. Modulation Effects
  - 2.9.3. Pitch Effects
- 2.10. Mastering
  - 2.10.1. Features
  - 2.10.2. Process
  - 2.10.3. Application in the Audio Engine

### Module 3. Voice-Over

- 3.1. Voice Objectives
  - 3.1.1. Quality
  - 3.1.2. Functions
  - 3.1.3. Features
- 3.2. Voice Creation: Voice and Animation
  - 3.2.1. Voice before Animation
  - 3.2.2. Voice before Animation
  - 3.2.3. Voice after Animation
- 3.3. Voice Creation: Types and Script
  - 3.3.1. Types of Voices
  - 3.3.2. Script Creation
  - 3.3.3. List of Assets
- 3.4. Choosing the Voice-Over
  - 3.4.1. Casting
  - 3.4.2. In-house Study vs. Specialized study
  - 3.4.3. Costs and Benefits of Using Voice-Over

- 3.5. Recording Sessions
  - 3.5.1. Fluidity in the Session
  - 3.5.2. Recording
  - 3.5.3. Management
- 3.6. Edition
  - 3.6.1. Dialogues in Cinematics
  - 3.6.2. Character Interaction
  - 3.6.3. Silences
- 3.7. Finishes
  - 3.7.1. Rendering
  - 3.7.2. Synchronization
  - 3.7.3. Export
- 3.8. Vocal Recording: Placement
  - 3.8.1. Type of Microphone
  - 3.8.2. Positioning the Voice-Over
  - 3.8.3. How to Approach Voice Recording
- 3.9. Vocal Recording: Sound-Sync
  - 3.9.1. Sound-Sync
  - 3.9.2. Restricted Files
  - 3.9.3. Unrestricted Files
- 3.10. Voice Processing
  - 3.10.1. Equalization
  - 3.10.2. Dynamics
  - 3.10.3. Effects

“*Enroll and give a twist to your professional career: with this Postgraduate Diploma you will learn the best techniques of music production for video games and your artistic prestige will increase*”

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 Production Recording Techniques Composition for Video Games guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.





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

This **Postgraduate Diploma in Composition Techniques Production 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 certificate 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 Composition Techniques Production for Video Games**

Official N° of Hours: **450 h.**



\*Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present content  
development language  
virtual classroom



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