## **Postgraduate Certificate** Blender in Art for Virtual Reality



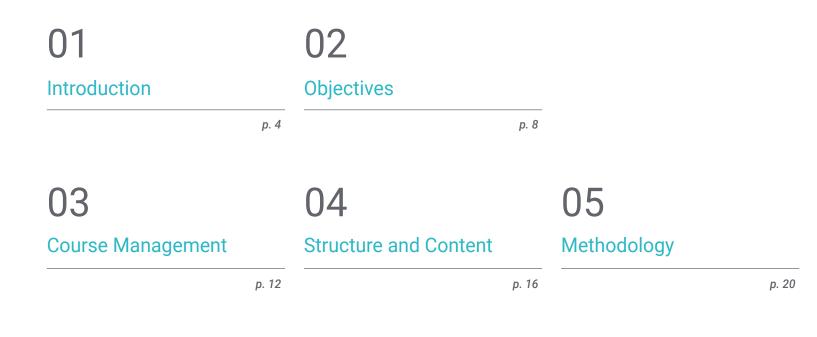


## **Postgraduate Certificate** Blender in Art for Virtual Reality

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

Website: www.techtitute.com/in/videogames/postgraduate-certificate/blender-art-virtual-reality

## Index



06 Certificate

## 01 Introduction

Blender's extreme versatility makes it one of the most powerful tools in the Virtual Reality industry. In this program, the professionals oriented to the VR artistic creation will address the aspects related to modeling, Workflow and Add-ons that improve the speed and quality of the work. The 100% online learning system, with multiple multimedia resources, case studies and qualified faculty will allow the designers to excel in their 3D creations. A comprehensive knowledge that will make the difference over the rest of the competitors thanks to a unique work methodology and total flexibility to take on the teaching load at your own pace.



Show a high professional artistic level with your
3D creations from the knowledge gained in this
Postgraduate Certificate"

## tech 06 | Introduction

The Postgraduate Certificate in Blender in Art for Virtual Reality is oriented to professionals who wish to improve their artistic skills and abilities through this program, used by the big studios of the Video Game industry based on immersive environments.

The teaching team that makes up this program will analyze each of the tools offered by this software so that students can perfect Hard Surface and procedural modeling, while acquiring the skills to make fast and high-quality creations.

Throughout the program, professionals will be introduced to the animation field to give more vividness to the modeling, which in turn allows the creation of presentations with a higher level of specialization. In addition, they will be immersed in the world of simulations to create more realistic artistic designs.

Students will discover a whole world of possibilities through the learning with this 100% online program, which gives them the freedom to choose when and where to take it. All you need is a device with internet connection to access a platform with video summaries, complementary readings and real cases, which will allow you to perfect your technique in a field with a successful present and future.

This **Postgraduate Certificate in Blender in Art for Virtual Reality** contains the most complete and up-to-date program on the market. The most important features include:

- The development of case studies presented by experts in Virtual Reality Art
- The graphic, schematic, and practical contents with which they are created, provide 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



### Introduction | 07 tech

Make any gamer surrender to the vividness of your creations using Blender. Enroll in this Postgraduate Certificate and exploit your potential"

The program's teaching staff includes professionals from sector who contribute their work experience to this 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 for 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.

Perfect your creative skills with this Postgraduate Certificate and expand your career opportunities in the VR Video Game industry.

Do you create 3D models, but you haven't mastered Blender yet? This Postgraduate Certificate is designed for you.

# 02 **Objectives**

The design of this Postgraduate Certificate in Blender in Art for Virtual Reality will make the professional be able to develop procedural materials, animate modeling, perform quality renderings and manage the new Grease Pencil and Geometry Nodes. The teaching team specialized in graphic design will show through case studies the great potential of this program to create three-dimensional objects and characters in Video Games with immersive environments.



TECH's goal is to turn you into the professional that companies in the Video Game field are looking for"

## tech 10 | Objectives

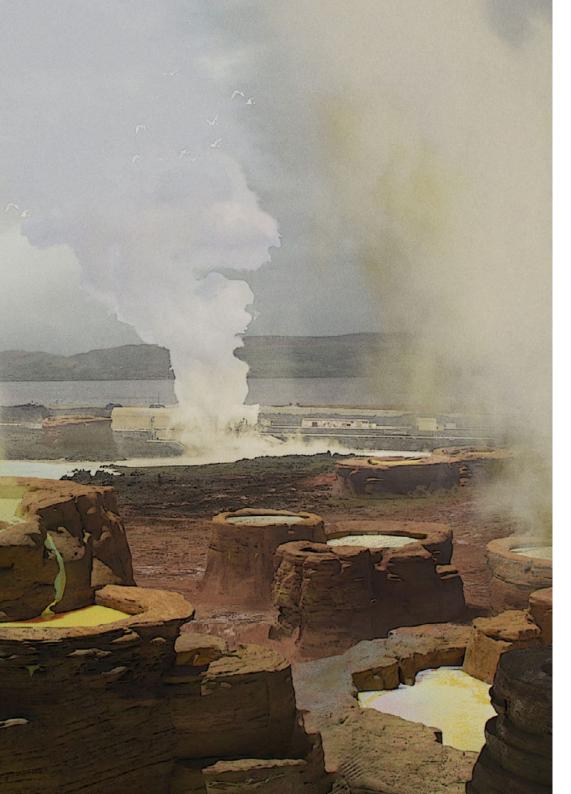


### **General Objectives**

- Understand the advantages and constraints provided by Virtual Reality
- Develop high-quality hard surface modeling
- Create high-quality organic modeling
- Understand the principles of retopology
- Understand the principles of UVS
- Master Baking in Substance Painter
- Expertly manage layers
- Be able to create a dossier and submit works at a professional level, at the highest quality
- Make a conscious decision as to which programs best fit your Pipeline



## Objectives | 11 tech





#### Specific Objectives

- Develop procedural materials
- Be able to animate a modeling
- Use fluid, hair, particle, and clothing simulations with ease
- Create high-quality renders in both Eevee and Cycles
- Learn how to operate the new grease pencil and how to get the best out of it
- Learn how to use the new geometry nodes and be able to do fully procedural modeling

The Relearning system of this Postgraduate Certificate will help you to consolidate your knowledge and to apply them in the labor market"

## 03 Course Management

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TECH Technological University selects the most relevant professionals, in this case from the Video Game design and creation field, to offer students an elite education within everyone's reach. The experience of the faculty of this program is one of the strengths that students will find and that will serve to extract the best teachings on the latest trends in 3D modeling in Virtual Reality Video Games.

A teaching team with extensive experience will accompany you throughout this program. Perfect your skills with Blender"

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## tech 14 | Course Management

#### Management



#### Mr. Menéndez Menéndez, Antonio Iván

- Senior environment and element artist and 3D consultant at The Glimpse Group VR
- 3D model designer and texture artist at INMO-REALITY
- Props and environment artist for PS4 games at Rascal Revolt
- Graduated in Fine Arts at the UPV
- Specialist in Graphic Techniques from the University of the Basque Country
- Master's Degree in Sculpture and Digital Modeling by the Voxel School of Madrid
- Master's Degree in Art and Design for Video Games by U-Tad University of Madrid

#### Professors

#### Mr. Morro, Pablo

- 3D Artist specialized in modeling, VFX, and textures
- 3D Artist at Mind Trips
- Graduated in Video Game Creation and Design at Jaume I University



## 04 Structure and Content

The syllabus of this Postgraduate Certificate has been designed by the faculty selected by TECH Technological University in the aim of delving into each of the tools offered by Blender. In this way, the software interface, the elements to create modeling, the main materials used, or the rendering are explained in detail. The Relearning teaching system and the support of multimedia content will be the key to achieve an optimal learning process and to be at the educational forefront.

A program designed for professionals who wish to update their knowledge in artistic design and combine their working life"

## tech 18 | Structure and Content

#### Module 1. Blender

- 1.1. Interface
  - 1.1.1. Software Blender
  - 1.1.2. Controls and Shortcuts
  - 1.1.3. Scenes and Customization
- 1.2. Modeling
  - 1.2.1. Data Science
  - 1.2.2. Mesh
  - 1.2.3. Curves and Surfaces
- 1.3. Modifiers
  - 1.3.1. Modifiers
  - 1.3.2. How Are They Used?
  - 1.3.3. Types of Modifiers
- 1.4. Hard Surface Modeling
  - 1.4.1. Prop Modeling
  - 1.4.2. Prop Modeling's Evolution
  - 1.4.3. Prop Modeling's Final Assessment
- 1.5. Materials
  - 1.5.1. Assignment and Components
  - 1.5.2. Creating Materials
  - 1.5.3. Creating Procedural Materials
- 1.6. Animation and Rigging
  - 1.6.1. Keyframes:
  - 1.6.2. Armatures
  - 1.6.3. Constraints
- 1.7. Simulation
  - 1.7.1. Fluids
  - 1.7.2. Hair and Particles
  - 1.7.3. Clothing





### Structure and Content | 19 tech

- 1.8. Rendering
  - 1.8.1. Cycles and Eevee
  - 1.8.2. Light
  - 1.8.3. Cameras
- 1.9. Grease Pencil
  - 1.9.1. Structure and Primitives
  - 1.9.2. Properties and Modifiers
  - 1.9.3. Examples:
- 1.10. Geometry Nodes

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- 1.10.1. Attributes
- 1.10.2. Types of Nodes
- 1.10.3. Practical Example

A Postgraduate Certificate that will give you the precise tools to make perfect animations and riggings for the VR video game industry"

# 05 **Methodology**

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

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

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

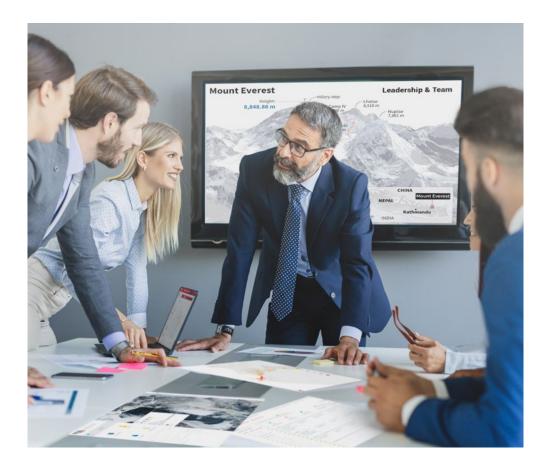
## tech 22 | Methodology

#### Case Study to contextualize all content

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

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



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

## Methodology | 23 tech



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.

## tech 24 | Methodology

#### **Relearning Methodology**

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

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

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

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

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



### Methodology | 25 tech

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



## tech 26 | Methodology

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



#### **Study Material**

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

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10%

8%

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



#### Classes

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

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



#### **Practising Skills and Abilities**

They will carry out activities to develop specific 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



#### **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.



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25%

## 06 **Certificate**

The Postgraduate Certificate in Blender in Art for Virtual Reality guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

## tech 30 | Certificate

This **Postgraduate Certificate in Blender in Art for Virtual Reality** 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 Certificate** issued by **TECH Technological University** via tracked delivery\*.

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

Title: Postgraduate Certificate in Blender in Art for Virtual Reality Official N° of Hours: 150 h.



technological university Postgraduate Certificate Blender in Art for Virtual Reality » Modality: online » Duration: 6 weeks » Certificate: TECH Technological University » Dedication: 16h/week » Schedule: at your own pace

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