

Postgraduate Certificate

Baking in Art for Virtual Reality





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Baking in Art for Virtual Reality

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

Website: www.techtute.com/us/design/postgraduate-certificate/baking-art-virtual-reality

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01

Introduction

Baking is widely used in the architecture sector, but also in the video game sector. The great boom that Virtual Reality has had in the last decades has made the gaming industry incorporate this technology to its most outstanding titles. Digital artists who wish to enter a growing sector must master the technique of modeling three-dimensional figures. This course fully delves into the baking process so that the texturing of the objects is excellent. All this, accompanied by interactive content and complementary reading in a 100% online format.





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Thanks to this Postgraduate Certificate, obtain incredible 3D designs that will help you be part of the best VR video game creative studios”

The Postgraduate Certificate in Baking in Art for Virtual Reality is aimed at graphic designers who mainly want an excellent result in their artistic creations for the VR video game sector.

This program provides a specialization in baking, considered one of the most important creation phases in the modeling of three-dimensional figures. Thanks to this course, digital artists will be able to transform the information from a High Poly modeling to a Low Poly mesh in a professional way and work as artistic designers in a competitive field like that of Virtual Reality video games, which requires high-level skills and abilities.

The expert faculty teaching this Postgraduate Certificate will help digital artists who seek to advance their careers to improve their skills. All this paired with a program with an innovative approach, which has a library of interactive content that adds even more value to this course.

A unique opportunity available to all thanks to the TECH philosophy that provides high-quality learning with a 100% online methodology, where students can choose the time and the device from which to access the content of this Postgraduate Certificate.

This **Postgraduate Certificate in Baking 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 Art for Virtual Reality
- ◆ 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



Get the attention of the leading VR game studios with your designs. Improve your 3D modeling technique with this Postgraduate Certificate"

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Without mastering the modeling technique, your art will not reach the level required for a VR video game. Take the step and enroll”

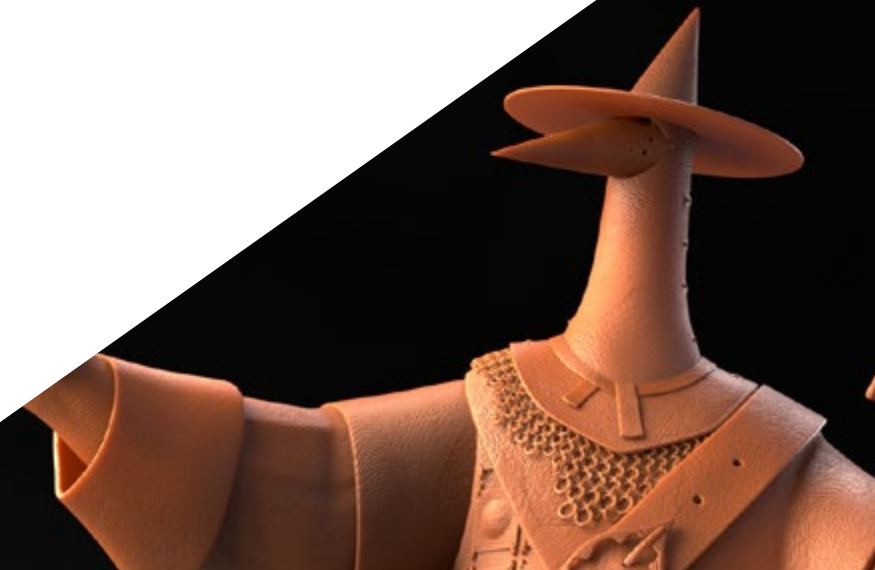
The program's teaching staff includes professionals from the sector who brought their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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 are presented to them throughout the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

Win over gamers with your three-dimensional figures and progress in your professional artistic career.

Be able to bake any modeling with this Postgraduate Certificate.



02 Objectives

Over the six weeks of this program, designers and artistic creators will be able to bake professionally. Under the supervision and guidance of a specialized teaching team, students will learn to use the main programs and their tools to achieve excellent 3D modeling. In this way, digital artists will be able to bake any modeling and process it in real time with Marmoset. The simulation of real cases in this course will be very useful for professionals who wish to be as prepared as possible for a competitive job market.





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Learn about the most advanced programs that will allow you to make a professional bake”



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





Specific Objectives

- ◆ Understand the principles of baking
- ◆ Learn how to solve the problems that may arise when baking a model
- ◆ To be able to bake any modeling
- ◆ Master real-time baking in Marmoset



The Relearning system of this Postgraduate Certificate makes the difference between learning and consolidating the concepts that you will apply in your professional field"

03

Course Management

The teaching team of this Postgraduate Certificate has been selected by TECH under strict criteria to guarantee students a high-quality education. That is why this course has professionals in the graphic design and video game creation sector with experience in the field of Virtual Reality. Their knowledge will be a great contribution to the artistic creators who want an up-to-date content according to the requirements of the leading studios of the VR video game industry.





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A specialized team with experience in the VR video game sector will guide you during the six weeks of this Postgraduate Certificate”

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 Inmoreality
- 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. Márquez Maceiras, Mario

- ♦ Audiovisual Operator PTM Pictures That Moves
- ♦ Gaming tech support agent at 5CA
- ♦ 3D and VR environment creator and designer at Inmoreality
- ♦ Art designer at Seamantis Games
- ♦ Founder of Evolve Games
- ♦ Graduated in Graphic Design at the School of Art of Granada
- ♦ Graduated in Video Games and Interactive Content Design at the School of Art of Granada
- ♦ Master's Degree in Game Design by U-Tad University of Madrid



04

Structure and Content

The syllabus of this course covers the general basics of baking up to the use of the tools that allow baking any modeling that the artistic professional may create. A teaching that combines theoretical content with the simulation of real cases to achieve a better specialization. In this syllabus, the teaching team will provide students with the essential tips so that the final result can be submitted by our professionals to the main studios of the Virtual Reality video game industry.





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Direct your 3D modeling to the field of Virtual Reality-based video games with the guarantee of obtaining high-level results”

Module 1. Baking

- 1.1. Model Baking
 - 1.1.1. Preparing the Model for Baking
 - 1.1.2. Baking Principles
 - 1.1.3. Processing Options
- 1.2. Model Baking: Painter
 - 1.2.1. Baking in Painter
 - 1.2.2. Low Poly Baking
 - 1.2.3. High Poly Baking
- 1.3. Model Baking: Boxes
 - 1.3.1. Using Boxes
 - 1.3.2. Adjusting Distances
 - 1.3.3. Computing Tangent Space per Fragment
- 1.4. Map Baking
 - 1.4.1. Normal
 - 1.4.2. ID
 - 1.4.3. Ambient Occlusion
- 1.5. Map Baking: Curvatures
 - 1.5.1. Curvature
 - 1.5.2. Thickness
 - 1.5.3. Improving Map Quality
- 1.6. Baking in Marmoset
 - 1.6.1. Marmoset
 - 1.6.2. Functions
 - 1.6.3. Real-Time Baking
- 1.7. Setting Up the Document for Baking in Marmoset
 - 1.7.1. High Poly and Low Poly in 3dsMax
 - 1.7.2. Organizing the Scene in Marmoset
 - 1.7.3. Verifying That Everything Is Correct



- 1.8. Bake Project Panel
 - 1.8.1. Bake Group, High and Low
 - 1.8.2. The Geometry Menu
 - 1.8.3. Load
- 1.9. Advanced Options
 - 1.9.1. Output
 - 1.9.2. Adjusting the Cage
 - 1.9.3. Setting Up Maps
- 1.10. Baking
 - 1.10.1. Maps
 - 1.10.2. Result Preview
 - 1.10.3. Baking Floating Geometry

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Master all the creation processes in 3D modeling and progress in the VR video game industry with this Postgraduate Certificate”

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.





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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.

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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.



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 is the most widely used learning system in the best faculties in the world. 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 we face in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their 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.

With this methodology we have 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, markets, and financial 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.



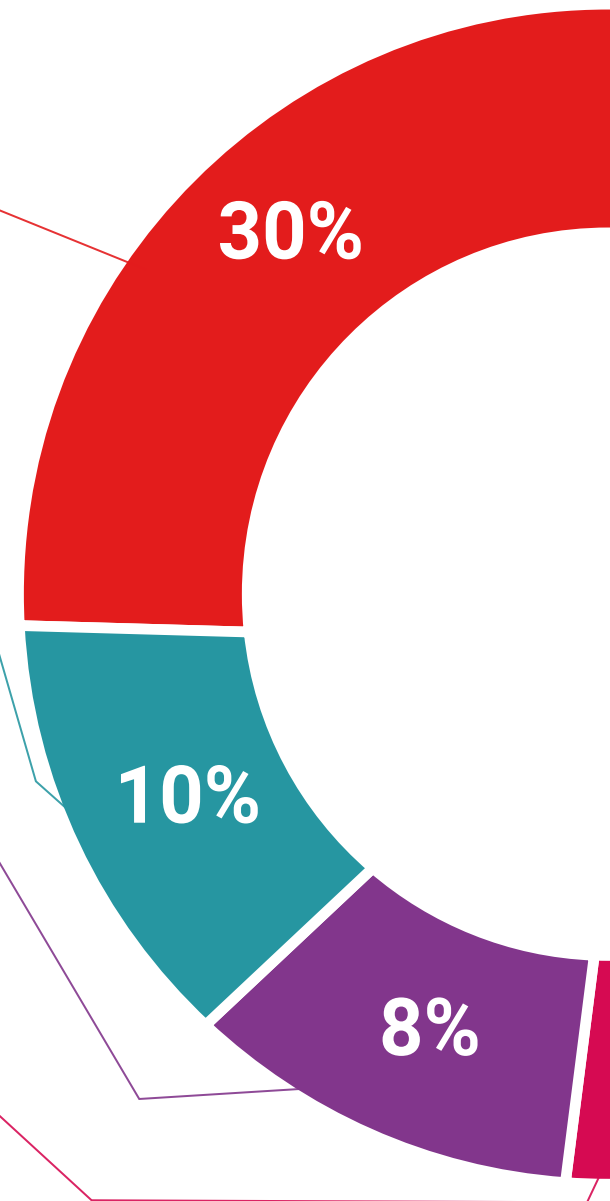
Practising Skills and Abilities

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



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 Certificate in Baking in Art for Virtual Reality guarantees you, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate issued by TECH Global University.





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*Successfully complete this program
and receive your university degree
without travel or laborious paperwork”*

This program will allow you to obtain your **Postgraduate Certificate in Baking in Art for Virtual Reality** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

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

Title: **Postgraduate Certificate in Baking in Art for Virtual Reality**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



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

future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

tech global
university

personalized service innovation

knowledge present

online training

development language

classroom

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