Postgraduate Certificate
3D Modeling for
Video Games

tech global university

Postgraduate Certificate
3D Modeling
for Video Games

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

Website: **www.techtitute.com/us/videogames/postgraduate-certificate/3d-modeling-video-games**

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01
Introduction

3D Modeling is one of the most complex and essential tasks in the process of creating a video game. This activity largely determines its visual aspect, since it is involved in the creation of the models and different textures that are the aesthetic surface that *gamers* will encounter at all times while playing. For that reason, a proper preparation and specific knowledge is needed to be able to offer the best service working on the design of a video game. This program offers students the best skills to become experts in 3D Modeling and to be able to work in one of the largest companies in the sector.

3D Modeling is a basic element in every video game. Specialize in this area and gain access to the best professional opportunities in the sector"

Each video game is produced following a series of technical and artistic procedures that make its final appearance and functioning what it is. Therefore, although at a visual level players perceive a certain, very superficial, aesthetic reality, everything they see is of enormous complexity and has been designed and modeled by experts in the field.

The specific case of 3D Modeling is especially complicated, since it requires highly focused professionals to shape all kinds of models and textures that can be used in the video game. But to reach this level of specialization, it is necessary to know how to use a series of technical and computer tools that are fundamental in the design of video games.

This Postgraduate Certificate in 3D Modeling for Video Games offers students all the skills require to become great experts in this discipline. Therefore, throughout the syllabus, students will learn about object-oriented programming, mathematical and physical concepts useful in the subject, graphic systems and the Unity tool, a basic requirement for the carrying out this task.

The program is conducted entirely online and has an expert faculty in this field, so that students can acquire the best skills directly from proven professionals in the area.

This **Postgraduate Certificate in 3D Modeling for Video Games** contains the most complete and up-to-date educational program on the market. The most important features include:

- Practical cases presented by experts in Video Game Design
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the 3D Modeling applied to video games
- Practical exercises where self-assessment can be used to improve learning
- 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

Specialization is key. Study this program and become a great professional in the video game industry"

"

3D Modeling is fundamental in the design process of a video game: become an expert in this field with this Postgraduate Certificate"

Create high-quality models and textures for video games thanks to this program.

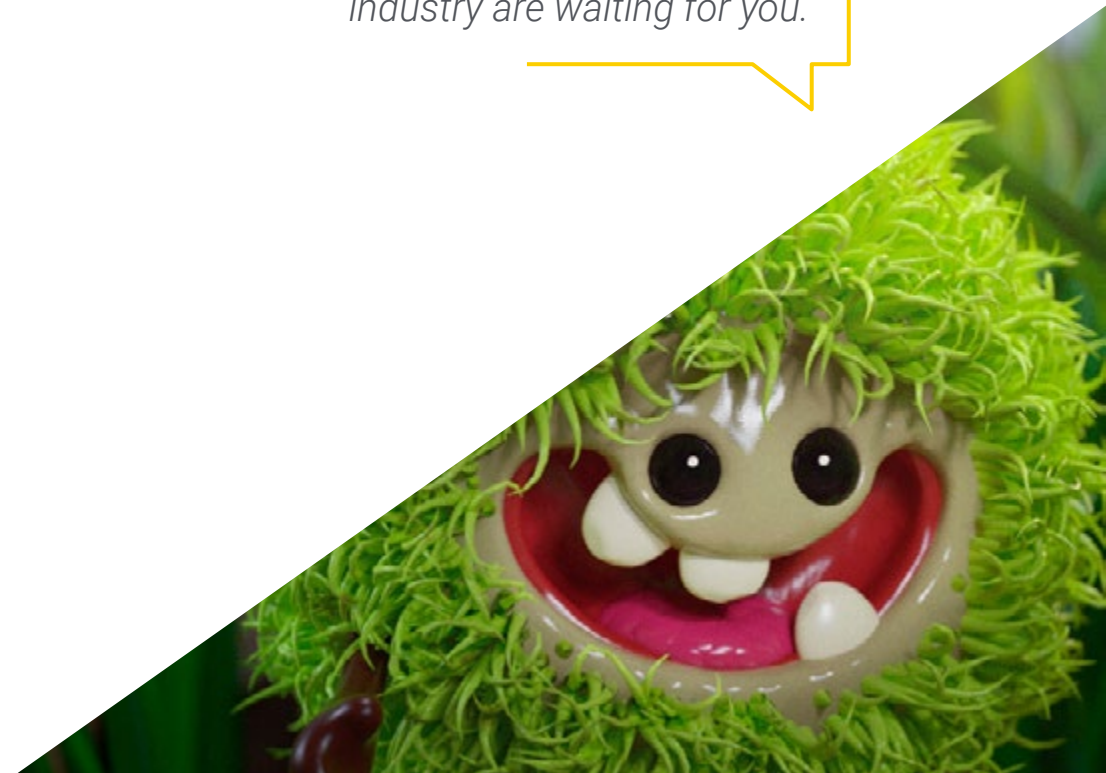*The best companies in the industry are waiting for you.*

The teaching staff of this program includes professionals from the industry, who contribute the experience of their work to this program, in addition to recognized specialists from reference societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive learning programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

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Objectives

The objective of this Postgraduate Certificate in 3D Modeling for Video Games is to provide students with the best knowledge in this technique, so that they can apply their new skills in all types of video games and in companies of different sizes and with different motivations. Therefore, this program provides its students with a comprehensive learning process that will make them highly qualified professionals for any type of project or initiative in this industry.

Your goal is to get into the video game industry and this program brings you closer to it"

General Objectives

- Understand what 3D modeling is
- Assimilate how the integration of 3D modeling in a video game takes place
- Observe the importance of this task in the design of a video game
- Learn general video game design skills

Specific Objectives

♦ Ascertain the internal structure of a video game engine

♦ Establish the elements of a modern video game architecture

♦ Understand the functions of each one of the video game components

♦ Examine examples of video games made with 2D and 3D graphics

TECH wants you to achieve all your goals. This program will ensure you go further"

Structure and Content

Becoming a specialist in 3D Modeling requires in-depth and specific knowledge that cannot be easily acquired. This Postgraduate Certificate in 3D Modeling for Video Games teaches everything necessary to perform this task in various types of companies thanks to its content in programming, mathematical and physical fundamentals and Unity, the essential software to carry out this activity. Therefore, in order to meet its objective, this program has been structured in a module, divided into 10 topics, which will provide students with all the keys to this discipline.

These are the contents you need to become the greatest expert in 3D Modeling"

Module 1. 3D Modeling

04
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.

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.

The student will learn to solve complex situations in real business environments through collaborative activities and real cases.

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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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.

30%

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.

10%

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.

8%

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.

20%

25%

4%

3%

Case Studies

Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best specialists in the world.

Interactive Summaries

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

05
Certificate

The Postgraduate Certificate in 3D Modeling for Video Games guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate 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 **Postgraduate Certificate in 3D Modeling for Video Games** 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 3D Modeling for Video Games**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**

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Mr./Ms. _____, with identification document _____ has successfully passed and obtained the title of:

Postgraduate Certificate in 3D Modeling for Video Games

This is a program of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

Unique TECH Code: AFWORD23S   techtitute.com/certificates

*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.

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