

# Postgraduate Certificate

## Texturing for Digital Sculpture



## Postgraduate Certificate Texturing for Digital Sculpture

- » 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-design/postgraduate-certificate/texturing-digital-sculpture](http://www.techtitute.com/us/videogames-design/postgraduate-certificate/texturing-digital-sculpture)

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# 01

# Introduction

One of the attractions that most attracts the followers of video games is the realism they express, the ability to highlight artistic, musical and visual creativity. Video games are becoming more and more professional in terms of graphics details, story and composition in general. The implementation of digital sculpting in this industry has made it essential to manage its techniques and tools, to achieve a truly professional sculpting; as well as the materials, to have a great final finish. But to master them, the professional must be trained with the most updated knowledge, that is why in this program the student will master the most used sculptural techniques in the current modeling and will integrate them together in a 100% online way and with the guidance of experts to graduate in 6 weeks.





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*You will enhance your skills in three major industry programs such as ZBrush, Substance painter and 3ds Max, to obtain photorealistic finishes”*

In recent years the concept of modeling has changed radically, so that nowadays texturing cannot be separated from modeling and vice versa, as these two stages of development coexist symbiotically. To achieve a truly professional sculpting, you need the coordinates of the textures, as well as the materials, to have a great final finish. Thanks to this, it is possible to obtain the same modeling with different levels of polygonization and to have this information collected as textures.

In this course the professional will master the texturing stage, as well as the standard export systems between the different programs, which will help them to take advantage of the great qualities of each *software*, to perform efficiently in integrated systems of work teams. You will use free *software* texture management programs to extract all the necessary maps from a project to understand the philosophy of texturing.

You will also learn how to paint geometries directly with programs such as *ZBrush*, *3ds Max* and one of the great programs of recent times and used in major film blockbusters, VFX and AAA games such as *Substance painter*, with which you will get a great really photorealistic finish. You will develop organic modeling with *ZBrush* with a high quality of detail that can also be integrated into a pioneering program in infoarchitecture such as *Lumion*.

In only 6 weeks and through an innovative and totally *online* study methodology, the professional will be able to graduate, thanks to a continuous and efficient training, through the use of devices of their preference with internet connection and the accompaniment of an expert teaching team; which will allow them to fulfill the professionalization objectives in an agile and efficient way.

This **Postgraduate Certificate in Texturing for Digital Sculpture** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ◆ The development of case studies presented by experts in 3D Modeling and Digital Sculpture
- ◆ The graphic, schematic, and eminently 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



*If you are a professional or have experience in the field of 3D design and want to enhance your skills, this University Course is for you"*



*Learn how to paint geometries directly with programs such as ZBrush, 3ds Max and Substance painter to achieve a great photorealistic finish"*

The programs teaching staff includes professionals from the sector who contribute their work experience to this training program, as well as renowned specialists from leading 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 training programmed to train 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 during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Master various types of free software and their texture management programs, to get all the necessary maps for your project.*

*Study at your own pace, thanks to the fully online and relearning based methodology implemented by TECH.*



# 02 Objectives

The main objective of this Postgraduate Certificate in Texturing for Digital Sculpture is to provide all the knowledge in the area, such as the use of *software* and specific tools, which will lead the professional to obtain unique results in their projects. Thus, it opens the doors of professionalization to anyone who works or has had experience in 3D design, infoarchitecture, as *Art Design*, *Technical Artist*, 3D generalists, modelers, texturizers, illuminators or *concept art* and who want to make their way in the video game industry.





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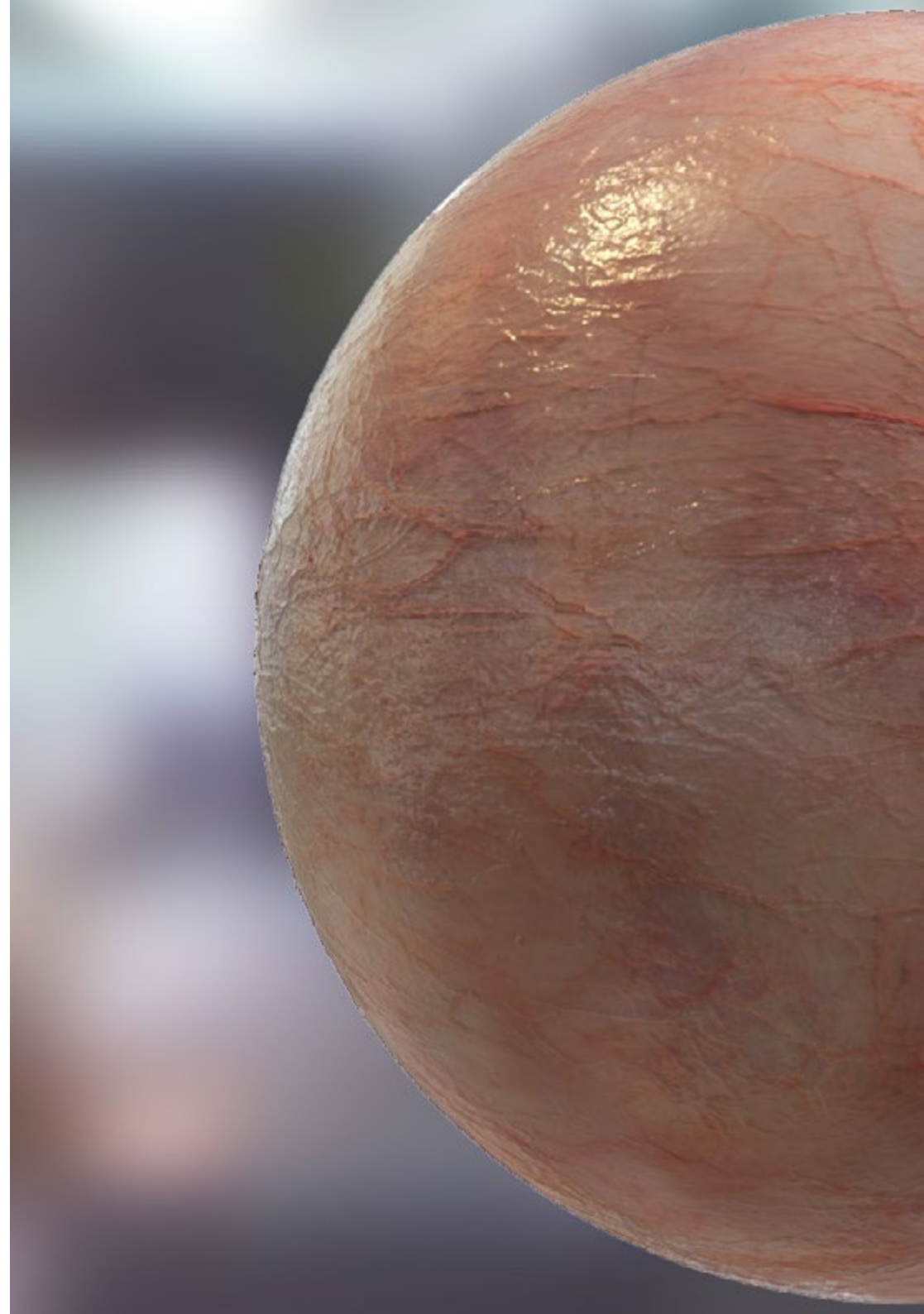
*Do you love the world of video games and are looking to specialize in your career? This Postgraduate Certificate is for you. Enroll and study completely online"*



## General Objectives

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- ◆ Understand the need for a good topology at all levels of development and production
- ◆ Perform advanced texturing of realistic PBR and non-photorealistic systems to enhance Digital Sculpture projects
- ◆ Advanced handling and use of various organic modeling systems, *edit poly* and *splines*
- ◆ Specialized *hard surface* finishing and infoarchitecture
- ◆ Understand current systems in the film and video game industry to deliver great results





## Specific Objectives

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- ◆ Using PBR texture and material maps
- ◆ Use texturing modifiers
- ◆ Apply map generating software
- ◆ Create texture baked
- ◆ Manage texturing to generate improvements in our modeling
- ◆ Complex use of the import and export systems between programs
- ◆ Advanced operation of *Substance Painter*

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*The video game sector is unstoppable, take advantage of the growth of the industry and choose to professionalize in specific areas"*



03

# Course Management

TECH has selected a high-level teaching staff composed of professional experts in 3D modeling, who will transmit their knowledge through the most innovative methodology based on relearning and a diversity of multimedia resources, so that the student can effectively learn the topics of study and finally integrate them into their professional performance. Thus, it ensures that the learning process develops properly.

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*Get trained by experts in a secure  
online environment"*

## Management



### Mr. Sequeros Rodríguez, Salvador

- ♦ Freelance 2D/3D modeler and generalist
- ♦ Concept art and 3D modeling for Slicecore Chicago
- ♦ Videomapping and modeling Rodrigo Tamariz Valladolid
- ♦ Professor of Higher Level Training Cycle 3D Animation Superior School of Image and Sound ESISV Valladolid
- ♦ Professor of Higher Level Training Cycle GFGS 3D Animation European Institute of Design IED Madrid
- ♦ 3D modeling for the falleros Vicente Martinez and Loren Fandos Castellón
- ♦ Master in Computer Graphics, Games and Virtual Reality URJC University. Madrid
- ♦ Bachelor of Fine Arts at the University of Salamanca (specializing in Design and Sculpture)





# 04

## Structure and Content

The syllabus of this program on Texturing for Digital Sculpting is divided into practical and theoretical content, available in a dynamic and secure environment totally *online*, which allows the student to acquire the most advanced and updated knowledge in 3D modeling and professional finishes to develop in the video game industry. You will share in communities of specialists, through forums, meeting rooms and private chat rooms; and you will be able to download the agenda for consultation without an Internet connection.





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*TECH is the first digital university that combines the Harvard Case Method with a 100% online learning system based on repetition: Relearning”*



## Module 1. Texturing for Digital Sculpture

- 1.1. Texturing
  - 1.1.1. Texture Modifiers
  - 1.1.2. *Compact Systems*
  - 1.1.3. Slate Node Hierarchy
- 1.2. Materials
  - 1.2.1. ID
  - 1.2.2. Photorealistic PBR
  - 1.2.3. No Photorealistic *Cartoon*
- 1.3. PBR Textures
  - 1.3.1. Procedural Textures
  - 1.3.2. Color, Albedo and *DiffuseMaps*
  - 1.3.3. Opacity and Specular
- 1.4. Mesh Improvements
  - 1.4.1. Map of Normal
  - 1.4.2. Displacement Map
  - 1.4.3. *Vector Maps*
- 1.5. Texture Managers
  - 1.5.1. Photoshop
  - 1.5.2. *Materialize and Online Systems*
  - 1.5.3. Texture Scanning
- 1.6. UVW and *Baking*
  - 1.6.1. *Hard SurfaceTextureBaking*
  - 1.6.2. *Baking Organic Textures*
  - 1.6.3. *Baking Unions*



- 1.7. Exports and Imports
  - 1.7.1. Texture Formats
  - 1.7.2. FBX, OBJ and STL
  - 1.7.3. Subdivision Vs. *Dinamesh*
- 1.8. Mesh Painting
  - 1.8.1. *Viewport Canvas*
  - 1.8.2. *Polypaint*
  - 1.8.3. *Spotlight*
- 1.9. *Substance Painter*
  - 1.9.1. *Zbrush with Substance Painter*
  - 1.9.2. *Low Poly with High Poly Texture Maps*
  - 1.9.3. Material Treatments
- 1.10. *Advanced Substance Painter*
  - 1.10.1. Realistic Effects
  - 1.10.2. Improve the *Baked*
  - 1.10.3. SSS Materials, Human Skin



*Learn about the latest trends applied in the market and the Workflow of the video game industry. Enroll now and graduate in 6 weeks"*



# 05

# Methodology

This training program provides you with 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 Re-learning, 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"*

## At TECH we use the Case Method

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



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



*We are the first online university to combine Harvard Business School case studies with a 100% online learning system based on repetition.*



### A learning method that is different and innovative

This intensive program in Video Games at TECH Global University prepares you to face all the challenges in this area, both nationally and internationally. We are committed to promoting your personal and professional growth, the best way to strive for success, that is why at TECH Global University you will use Harvard *case studies*, with which we have a strategic agreement that allows us, to offer you material from the best university in the world.

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*Our program prepares you to face new challenges in uncertain environments and achieve success in your career”*

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

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. Throughout 4 years, you will be presented with multiple real cases. You will have to combine all your knowledge, and research, argue, and defend your ideas and decisions.



## Re-Learning Methodology

Our University is the first in the world to combine Harvard University case studies with a 100%-online learning system based on repetition, which combines different teaching elements in each lesson.

We enhance Harvard case studies with the best 100% online teaching method: Re-learning.

*In 2019, we obtained the best learning results of all Spanish-language 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 Re-learning.

Our university is the only Spanish-speaking university qualified 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 Spanish 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.

*Re-learning 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 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

They will complete a selection of the best case studies in the field used at Harvard. Cases that are presented, analyzed, and supervised by the best senior management specialists in Latin America.



#### 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 multimedia content presentation training Exclusive system was awarded by Microsoft as a "European Success Story".



#### Testing & Re-testing

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 your goals.



# 06 Certificate

The Postgraduate Certificate in Texturing for Digital Sculpture, in addition to the most rigorous and updated training, access to a Postgraduate Certificate issued by TECH Global University.



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*Successfully complete this training program and receive your diploma without travel or laborious paperwork”*



This program will allow you to obtain your **Postgraduate Certificate in Texturing for Digital Sculpture** 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 Texturing for Digital Sculpture**

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  
personalized service innovation  
knowledge present  
development language  
classroom



## Postgraduate Certificate Texturing for Digital Sculpture

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

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