

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/design/postgraduate-certificate/texturing-digital-sculpture

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01

Introduction

Currently, 3D modeling is one of the computer graphics techniques that has had the most impact in recent years thanks to implementation of three-dimensional scanning, video game engines or milling. The implementation of Digital Sculpture in industries such as video games, architecture, health, cinema or digital entertainment in general, among others, has made the use of its techniques and tools essential. However, in order for the work to be successful at a visual and functional level, it must include quality final finishes, and for this it is important to use texturing as the main technique. In this program, the student will master and integrate the most widely used sculptural techniques in current modeling. Enhance your profile to become an expert in your current field or create new opportunities.



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You will be able to master three major programs in the industry such as ZBrush, Substance painter and 3D Max, to obtain photorealistic finishes"

The implementation of Digital Sculpture in different industries has increased, largely thanks to 3D printing, 3D scanning, video game engines and milling. In this program, you will achieve mastery of the texturing stage and of standard import/export systems between the various programs, which will allow you take advantage of each software's outstanding qualities and perform efficiently with work teams that use integrated systems. Free software texture management programs will be used to extract all the necessary maps from a project, in order to understand the philosophy of texturing

Additionally, this program will provide professionals with exhaustive knowledge of how to paint geometries directly with programs such as ZBrush, 3D Max and one of the greatest programs of recent times and used in major film blockbusters, VFX and AAA games, with which they will achieve a truly photorealistic finish

In just 6 weeks, students of the Diploma in Texturing for Digital Sculpture will understand the use of references as a modeling system and shape the structure of their works in a technical way so that, through organic modeling in ZBrush, they may develop a high quality of detail that can be integrated into a pioneering program in infoarchitecture as is Lumion

This course, taught by TECH Global University through an innovative, 100% online study methodology, provides professionals with continuous and efficient education through any device with an Internet connection, and the entire program is guided by an expert teaching faculty. With the option to download the contents so that they can be viewed offline in order to meet the course objectives for a Postgraduate Certificate in only 6 weeks

This **Postgraduate Certificate in Texturing for Digital Sculpture** contains the most complete and up-to-date educational program on the market. Its most notable features are:

- ◆ Practical cases presented by experts in 3D modeling and digital sculpture
- ◆ 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 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 with 3D design, this program is for you"

“*Learn how to master all the techniques on Texturing for Digital Sculpture and make a difference in your work environment*”

The program's 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 immersion 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 throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts

Further your studies in scenography modeling using 3Ds Max and integrate them with ZBrush.

Studying entirely online gives you the opportunity to organize your professional and personal goals to achieve success.



02

Objectives

This program opens the doors of professionalization to anyone working or with experience in 3D design, infoarchitecture, *Art Design*, as a *Technical Artist*, 3D generalist, modeler, texturizer, illuminator or concept artist. Its main objective is to provide all the knowledge and skills required in the area of Texturing for Digital Sculpture, as well as the in use of software and specific tools that will lead to unique results in different projects



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Like the design world and want to advance your career? This Postgraduate Certificate is for you. Sign up and study 100% online"



General Objectives

- ◆ Understand the importance of having an adequate topology at all levels of development and production
- ◆ Perform advanced texturing of realistic PBR and non-photorealistic systems to enhance digital sculpting projects
- ◆ Advanced management and use of various organic modeling systems, Edit Poly and Splines
- ◆ Produce specialized, Hard Surface and infoarchitecture finishes.
- ◆ Understand the current demands of the movie and video game industries in order to offer best results





Specific Objectives

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

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Basic industries are currently implementing Digital Sculpture in their processes. Take advantage of a growing sector and choose to become a professional"

03

Course Management

To ensure that the learning process is properly developed, TECH Global University has selected a high-level teaching staff composed of professional experts in 3D modeling. They will transmit their knowledge through innovative methods so that students learn the subjects in an effective way and is able to integrate them in their professional performance.





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Make your journey towards professionalization with experts in an online and secure environment"

Management



Mr. Sequeros Rodríguez, Salvador

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



04

Structure and Content

This Postgraduate Certificate includes all the subject matter on Texturing for Digital Sculpture, provided in practical and theoretical content and entirely available in a dynamic and secure environment online. This will allow students to acquire the most advanced and updated skills in 3D modeling and professional finishing. They will be able to master the techniques effectively thanks to practical exercises and interactive content that make the user experience more agile. You will be able to engage with communities of specialists, use forums, meeting rooms and private chats with your faculty, plus you can download the entire syllabus to consult it without an Internet connection.





“TECH is the first Digital university to combine the Harvard Case Method with an 100% online learning system based on repetition methodology: 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. Non-Photorealistic Cartoon
- 1.3. PBR Textures
 - 1.3.1. Procedural Textures
 - 1.3.2. Color Maps, Albedo and Diffuse
 - 1.3.3. Opacity and Specular
- 1.4. Mesh Enhancements
 - 1.4.1. Normal Mapping
 - 1.4.2. Displacement Mapping
 - 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. Baked Hard Surface Textures
 - 1.6.2. Baked Organic Textures
 - 1.6.3. Baking Joints
- 1.7. Exportations and Importations
 - 1.7.1. Texture Formats
 - 1.7.2. FBX, OBJ and STL
 - 1.7.3. Subdivision Vs. Dynamesh
- 1.8. Mesh Paintings
 - 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 Texture Maps with High Poly Detail
 - 1.9.3. Material Processing
- 1.10. Substance Painter - Advanced
 - 1.10.1. Realistic Effects
 - 1.10.2. Improving Baking
 - 1.10.3. SSS Materials, Human Skin



Learn about the latest trends applied in the market and the workflow of the 3D animation, video game and three-dimensional printing industries"



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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.



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

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 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 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 Texturing for Digital Sculpture guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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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 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.



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