

# Postgraduate Certificate 3D Modeling with ZBrush





## Postgraduate Certificate 3D Modeling with ZBrush

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

Website: [www.techtitute.com/us/design/postgraduate-certificate/3d-modeling-zbrush](http://www.techtitute.com/us/design/postgraduate-certificate/3d-modeling-zbrush)

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# 01

# Introduction

The incipient influence of three-dimensional design in industrial production, animation or video game development, causes a renewed interest in certain programs and therefore also the interest of graphic designers in the specialization of these tools. ZBrush is the most widely used organic 3D modeling program on the market. Therefore, this educational plan is designed to be able to reconcile personal and professional life with the updating of knowledge. ZBrush is a complex editing tool that this plan is in charge of unraveling to make it easily understandable thanks to the pedagogical adaptations made by the management team and teaching staff of the program.







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*Specialize your graphic design career in 3D modeling with ZBrush thanks to this Postgraduate Certificate"*

Knowing in depth one of the most used programs in the market in organic modeling is now easier thanks to this Postgraduate Certificate. It is designed in online mode so that the educational recycling can be combined with the work and daily routine. Thanks to the fact that all the multimedia content is uploaded to the digital platform, you can access it whenever you want and have an Internet connection.

This Postgraduate Certificate works on the theoretical and practical dimension of learning, therefore, special emphasis is placed on making real models and, in addition, you learn to optimize ZBrush as you work with it, avoiding possible problems of refinement and learning to solve technical difficulties that may arise.

The study plan is focused on explaining each of the program's tools, helping students to understand when to use each of them and why. The Postgraduate Certificate also contains notions about the Hard Surface tool, which allows inorganic modeling to be performed within the program.

Finally, students will be taught different methods for organic modeling, so that they can be put into practice in the real working dimension. Also, everything necessary to start from scratch a character or creature and develop the model smoothly until the end of the design will be explained.

This **Postgraduate Certificate in 3D Modeling with ZBrush** contains the most complete and up-to-date educational program on the market. Its most notable features are:

- ◆ The development of case studies presented by experts in 3D Modeling with Graphite Tool
- ◆ 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



*Because all multimedia content is uploaded to the digital platform, you can access it whenever you need it"*

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*Learn how to create a character or creature from the beginning to the end of the design with this Postgraduate Certificate specialized in 3D Modeling with ZBrush"*

The program's teaching staff includes professionals from the sector who contribute 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 course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Our study plan is focused on explaining each of the tools of the ZBrush program.*

*Did you know that ZBrush is the most used program in organic modeling in the market?*





# 02

# Objectives

The main objective of this Postgraduate Certificate is to learn how to correctly use the 3D organic modeling program, ZBrush. Therefore, this study plan devised by objectives describes some indispensable items to finally be able to create a character or creature model from start to finish without problems. The programs offered by TECH are always supported by real professionals in the field in which they are taught, for this reason the management team and faculty design the study systems so that the objectives can be achieved within the six-week period. Furthermore, the knowledge is structured based on the requirements of the labor market in situations as close to reality as possible.





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*The TECH management team and faculty design the study systems so that the objectives can be achieved within the 6-week period”*



## General Objectives

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- ◆ Know in depth all the steps to create a 3D modeling of a professional's own
- ◆ Know and understand in detail how textures work and how they influence on the modeling
- ◆ Master several programs focused on modeling, texturing and real time used today in the professional world
- ◆ Apply the knowledge acquired in the resolution of problems of a modeling
- ◆ Expertly use the knowledge acquired to create your own projects and intelligently add them to your portfolio
- ◆ Develop the resources of each program to achieve the best effect for your modeling







## Specific Objectives

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- ◆ Know in depth the ZBrush program, the most used in organic modeling in the market
- ◆ Optimize the model as you work on it, avoiding potential problems after refinement
- ◆ Understand each of the program's tools, knowing when to use each one and why
- ◆ Learn the Hard Surface tool, which allows inorganic modeling within the program
- ◆ Knowing different methods to perform organic modeling
- ◆ Apply everything necessary to start a character or creature from scratch and perform smoothly until the end of the project

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*Understand each of the tools that ZBrush offers so that you can put it into practice in the work dimension"*

# 03

# Course Management

This program is designed following the guidelines of a group of experts of the highest prestige. They are working professionals who have dedicated a large part of their careers to develop their texturing technique, continuing at the forefront of the industry and developing their professional practice in the best animation studios and projects of international stature. Therefore, through the content they will present and the diverse didactic materials they have developed, the students will receive the most current and requested knowledge of this industry.







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*Understand each of the tools that ZBrush offers so that you can put it into practice in the work dimension"*

## Management



### Ms. Vidal Peig, Teresa

- ◆ Specialist in Arts and Technology (digital art, 2D, 3D, VR and AR)
- ◆ Designer and creator of 2D character sketches for mobile video games
- ◆ Designer at Sara Lee, Motos Bordy, Hebo and Full Gass
- ◆ Teacher and director of Professional Master's Degree in Video Game Programming
- ◆ Teacher at the University of Girona
- ◆ PhD in Architecture from the Polytechnic University of Catalonia
- ◆ Bachelor of Fine Arts from the University of Barcelona



# 04

## Structure and Content

The management of this program has designed the structure and content of this Postgraduate Certificate to make it more accessible and easier to learn organic 3D modeling with the ZBrush program. This program, which is considered one of the most used in the market, will be easily manageable thanks to the notions taught in this program, which includes: the explanation of the interface and basic controls, *Subtools*, brushes and *Alphas*, among other aspects. The content also includes the main modification tools and the most advanced tools of the program. In addition, the *Adaptative Skin*, *Hard surface* and modifiers tools are explained. Finally, the model made in the *Transpose Mastertool* will be shown, posing the character or creature created by the students.





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*Learning to use the most widely used organic 3D modeling program on the market is possible in only six weeks thanks to the distribution of the content of this Postgraduate Certificate"*

## Module 1. 3D Modeling with ZBrush

- 1.1. ZBrush
  - 1.1.1. Interface and Basic Controls
  - 1.1.2. Subtools, Symmetry, Transpose and Deformation
  - 1.1.3. Brushes and Alphas
- 1.2. Main Tools
  - 1.2.1. Masks and Polygroups
  - 1.2.2. Subdivisions, Dynamesh y ZRemesher
  - 1.2.3. Modify Topology, Matcaps and BPR
- 1.3. Modification Tools
  - 1.3.1. Insert Multi Mesh
  - 1.3.2. Layers and Morph Target
  - 1.3.3. Projections and Extract
- 1.4. Advanced Tools
  - 1.4.1. Crease and Bevel
  - 1.4.2. Surface and Shadowbox
  - 1.4.3. Decimation Master
- 1.5. ZSpheres and Adaptive Skin
  - 1.5.1. ZSpheres Controls
  - 1.5.2. ZSketch
  - 1.5.3. Adaptive Skin
- 1.6. Dynamesh and advanced Zremesher
  - 1.6.1. Booleans
  - 1.6.2. Brushes
  - 1.6.3. Zremesher using guides
- 1.7. Curve Brushes
  - 1.7.1. Controls and Modifiers
  - 1.7.2. Curve Surface and Other Brushes
  - 1.7.3. Creating Brushes with Curve





- 1.8. Hard Surface
  - 1.8.1. Segments with Masks
  - 1.8.2. Polygroupit
  - 1.8.3. Panel Loops
  - 1.8.4. ZModeler
  - 1.8.5. Primitives
- 1.9. Modifiers
  - 1.9.1. Extend and Multi Slice
  - 1.9.2. Deformer and Blend Twist
  - 1.9.3. Taper and Flatten
  - 1.9.4. Bend Arc and Bend Curve
- 1.10. Transpose Master
  - 1.10.1. Posing a Character with Transpose Master
  - 1.10.2. Corregir detalles
  - 1.10.3. Prepare Character for *Rendering*



*Learn the keys to organic modeling with ZBrush and how to use its most complex tools"*

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.

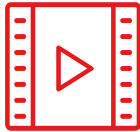
*Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.*

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 3D Modeling with ZBrush 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 a **Postgraduate Certificate in 3D Modeling with ZBrush** endorsed by TECH Global University, the largest digital university in the world.

**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 educational framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of joint tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

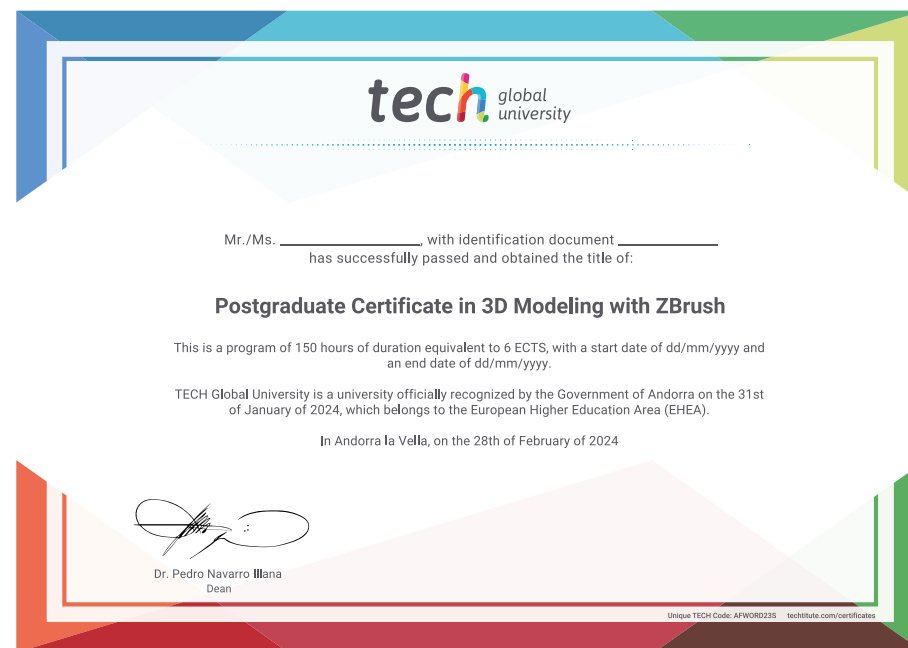
This **TECH Global University** title is a European program of continuous education and professional updating that guarantees the acquisition of competencies in its area of knowledge, conferring a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in 3D Modeling with ZBrush**

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 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 quality  
development languages  
classroom



## Postgraduate Certificate 3D Modeling with ZBrush

- » Modality: online
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- » Accreditation: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

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