**Postgraduate Certificate** 3D Character Modeling

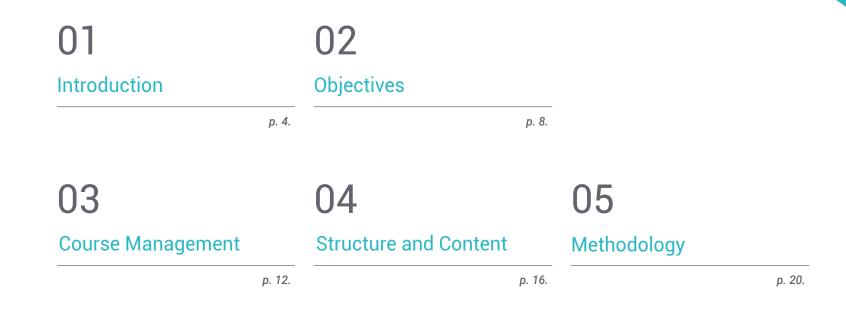




## **Postgraduate Certificate** 3D Character Modeling

Course Modality: Online Duration: 6 weeks Certificate: TECH Technological University Official N° of hours: 150 h. Website: www.techtitute.com/in/design/postgraduate-certificate/3d-character-modeling

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Certificate

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# 01 Introduction

Today's technology has advanced to a pace where big productions and CGI dominate the audiovisual industry at all levels. From series for platforms such as Netflix or Disney+ to major video game titles or Hollywood movies, 3D modeling and sculpting departments have more work than ever developing characters of all kinds in three dimensions. As technology improves, so do all the software and processes related to 3D modeling, so this TECH program responds to the needs of professionals to continue improving in the industry, leading innovation and the latest creative trends.



Your 3D characters will have the detail needed to surprise both general and specialized audiences, guaranteeing you a good future in the creative industry"

### tech 06 | Introduction

Digital characters recreated in 3D dominate almost all current audiovisual entertainment titles. Obviously, in video games they have a wide presence, but in movies and series it is increasingly common to incorporate CGI that was previously only accessible to major Hollywood productions.

This leads to a growing market demand for 3D modeling experts who understand all the latest techniques and methodologies. Therefore, there is ample opportunity for growth within the sector itself, where the most prepared professionals will be able to lead their own work teams or undertake highly successful projects on their own.

Taking into consideration all these circumstances, TECH has prepared the best possible program in 3D Character Modeling, with the most innovative techniques in the industry so that the student can stand out prominently in their daily work and can apply to projects and positions of greater relevance within the sector.

A qualification that responds to all the needs of its students, as it is also taught completely online so that students can combine it with their personal or professional responsibilities. All didactic content is available from day one and can be downloaded to any device with an internet connection. This **Postgraduate Certificate in 3D Character Modeling** 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
- 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
- Access to content from any fixed or portable device with an Internet connection

This is the best time for you to stand out in the industry by creating the most detailed and realistic 3D characters in your industry"

#### Introduction | 07 tech

Enroll today in this TECH Postgraduate Certificate and start improving your work methodology in modeling to get that promotion you desire" You will be able to take on the responsibility of creating the characters of the best productions in video games or cinema thanks to your careful and detailed techniques.

> Make your projects shine in front of all kinds of audiences with characters that captivate the eyes of viewers around the world.

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 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 throughout the program. This will be done with the help of an innovative system of interactive videos made by renowned experts.

# 02 **Objectives**

The objective of this qualification is to offer its students a complete program in 3D Character Modeling, with advanced techniques that will allow them not only to improve their professional performance but also to be able to opt for better jobs in the industry. As such, TECH strives to ensure that its students get the most out of their qualifications, with adequate knowledge adapted to their own professional and personal demands.

Objectives | 09 tech

By signing up to this program, you will be taking the right step towards the professional improvement you deserve in the world of 3D modeling"

## tech 10|Objectives



## **General Objectives**

- Expand knowledge of human and animal anatomy in order to develop hyper-realistic creatures
- Master retopology, UVs and texturing to perfect the models created
- Create an optimal and dynamic workflow to work more efficiently with 3D modeling
- Have the skills and knowledge most in demand in the 3D industry to be able to apply for the best jobs



## Objectives | 11 tech



#### Specific Objectives

- Focus anatomical knowledge in simpler, cartoon-like forms
- Create a cartoon model from the base to the detail by applying what has been previously learned
- Review the techniques learned in the program in a different modeling style

This will be a great opportunity for you to improve professionally through a unique knowledge of 3D character modeling"

# 03 Course Management

This qualification is directed by a team of professionals versed in 3D character modeling, which gives the student access to first level material based on real cases that the student faces every day, providing cutting-edge solutions to make it an essential part of the business organization chart. As a result, the students have the guidance of a teaching staff that knows what they need to excel in their profession.

Stand out in the world of 3D Character Modeling by making your characters as detailed and realistic as possible"

## tech 14 | Course Management

#### Management



#### Ms. Gómez Sanz, Carla

- 3D Generalist at Blue Pixel 3D
- Concept Artist, 3D Modeler, Shading in Timeless Games Inc.
- Collaboration with multinational consulting firm for the design of vignettes and animation for commercial proposals
- Advanced Technician in 3D Animation, video games and interactive environments at CEV School of Communication, Image and Sound
- Master's Degree and Bachelor's Degree in 3D Art, Animation and Visual Effects for video games and cinema at CEV School of Communication, Image and Sound

## Course Management | 15 tech

## 04 Structure and Content

The educational methodology employed by TECH enables its students to get the most out of their qualifications. In this Postgraduate Certificate in 3D Character Modeling, the students have access to high-quality teaching material, complemented with audiovisual content and practical examples that, in addition to lighten the teaching load, the student sees *in situ* the application of model refinement, clean retopology and texturing in Substance Painter.

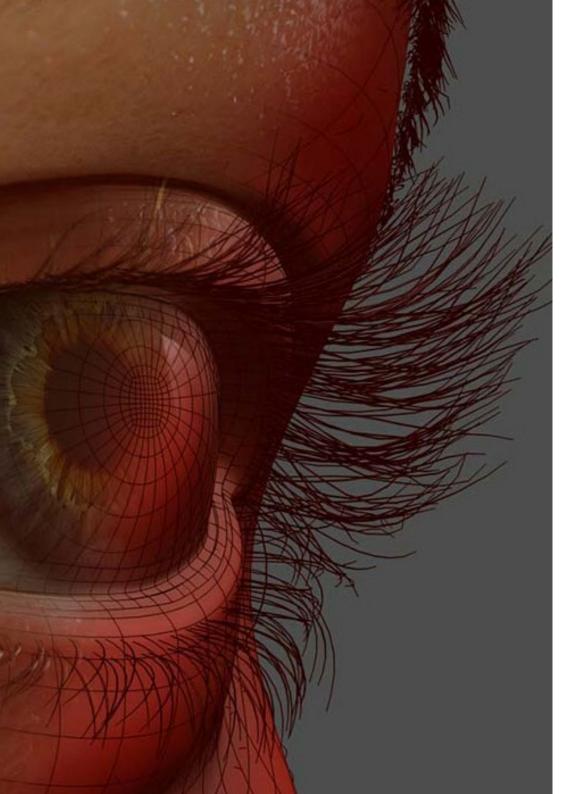
You'll be prepared for the big challenges that the best jobs in the 3D modeling industry have in store for you"

### tech 18 | Structure and Content

#### Module 1. Stylized Characters

- 1.1. Choice of a Stylized Character and Blocking of Base Forms
  - 1.1.1. References and Concept Arts
  - 1.1.2. Base Forms
  - 1.1.3. Deformities and Fantastic Shapes
- 1.2. Conversion of our Low Poly into High Poly Model: Head, Hair and Face Sculpting
  - 1.2.1. Head Blocking
  - 1.2.2. New Hair Creation Techniques
  - 1.2.3. Improvements
- 1.3. Model Refinement: Hands and Feet
  - 1.3.1. Advanced Sculpting
  - 1.3.2. Refinement of General Shapes
  - 1.3.3. Shape Cleaning and Smoothing
- 1.4. Creation of Jaw and Teeth
  - 1.4.1. Creation of Human Teeth
  - 1.4.2. Increase its Polygons
  - 1.4.3. Fine Detailing of Teeth in ZBrush
- 1.5. Modeling Clothing and Accessories
  - 1.5.1. Types of Cartoon Clothing
  - 1.5.2. Zmodeler
  - 1.5.3. Applied Maya Modeling
- 1.6. Retopology and Clean Topology Creation from Scratch
  - 1.6.1. Retopology
  - 1.6.2. Loops According to the Model
  - 1.6.3. Optimization of the Mesh





### Structure and Content | 19 tech

- 1.7. UV Mapping and Baking
  - 1.7.1. UVS
  - Substance Painter: Baking 1.7.2.
  - Polishing Baking 1.7.3.
- 1.8. Texturing and Painting In Substance Painter
  - 1.8.1. Substance Painter: Texturing
  - 1.8.2. Hand Painted Cartoon Techniques
  - 1.8.3. Fill Layers with Generators and Masks
- Lighting and Rendering 1.9.
  - 1.9.1. Lighting of Our Character
  - 1.9.2. Color Theory and Presentation
  - 1.9.3. Substance Painter: Render
- 1.10. Posing and Final Presentation
  - 1.10.1. Diorama
  - 1.10.2. Posing Techniques
  - 1.10.3. Presentation of Models



Get your qualification in 3D Character Modeling directly, without the need to do a final project"

# 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.



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"

### tech 22 | Methodology

#### 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.

666 At TECH, you will methodology that

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.

### Methodology | 23 tech



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.

666 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.

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

## tech 24 | Methodology

#### **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.



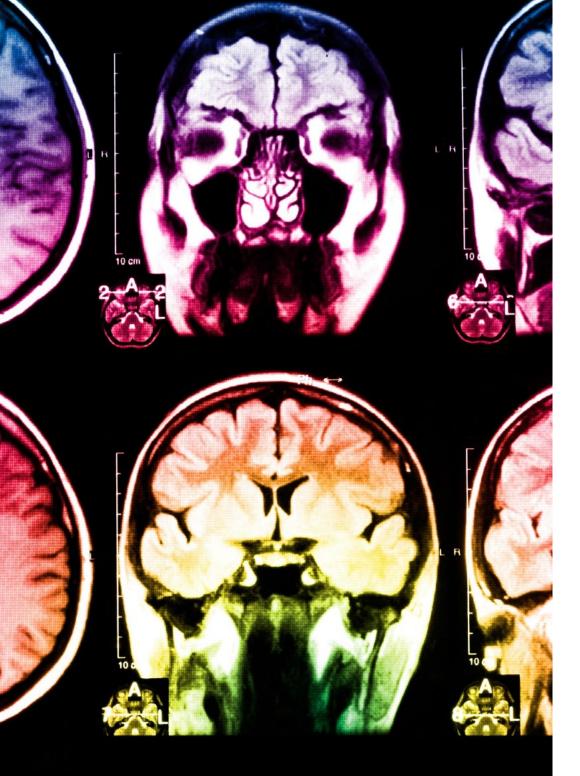
#### Methodology | 25 tech

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.



### tech 26 | Methodology

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.

30%

10%

8%

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.

#### Methodology | 27 tech



#### **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.

20%

25%

4%

3%



#### **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 Character Modeling guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

### tech 30 | Certificate

This **Postgraduate Certificate in 3D Character Modeling** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery\*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations and professional career evaluation committees.

Title: Postgraduate Certificate in 3D Character Modeling Official N° of hours: 150 h.



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

technological university Postgraduate Certificate 3D Character Modeling Course Modality: Online Duration: 6 weeks Certificate: TECH Technological University Official Nº of hours: 150 h.

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