

# Postgraduate Certificate 3D Character Modeling





## Postgraduate Certificate 3D Character Modeling

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

Website: [www.techtute.com/us/videogames/postgraduate-certificate/3d-character-modeling](http://www.techtute.com/us/videogames/postgraduate-certificate/3d-character-modeling)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Methodology

---

*p. 20*

06

Certificate

---

*p. 28*

# 01

# Introduction

There are all kinds of characters in video games. From classic human heroes to antagonists or companions of every imaginable fantasy race. It is essential that a good 3D designer of the video game industry has enough skill to be able to recreate any of these creatures, with a luxury of exquisite details and a refined technique. This is the best option to stand out and continue to grow in a competitive industry, so TECH has developed this qualification for all design professionals who bet on the quality of their work and their 3D characters. This will strengthen the position of the student and significantly increase their improvement options.





“

*The best games need the most qualified designers to model their characters. Reach the pinnacle of your career with this TECH Postgraduate Certificate"*

The techniques to recreate characters in three dimensions advance continuously, opening the possibilities for designers of all kinds of video games to create the most impressive and impactful 3D models in the industry.

As the graphic evolution is unstoppable and the deadlines more demanding, the designer must be prepared to assume control of all the production steps of a three-dimensional character: from the choice of its style and base shapes to the last stages of lighting, rendering and posing.

With an in-depth knowledge of the entire process involved in creating a 3D character, the designer will have better options for career advancement and professional improvement, so this TECH degree is an excellent opportunity to not only improve daily workflows but also be able to apply for projects and more relevant jobs.

In addition, TECH provides its students the facility to take this program online, without classes, compulsory attendance or schedules. All the teaching material is available from the first day of the diploma, and can be downloaded on any fixed or mobile device with 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 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



*This Postgraduate Certificate will give you the keys to improve your current position through the modeling of 3D characters"*

“

*Your work methodology will be much more efficient by improving all the processes involved in creating 3D characters”*

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 different professional practice situations that arise during the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

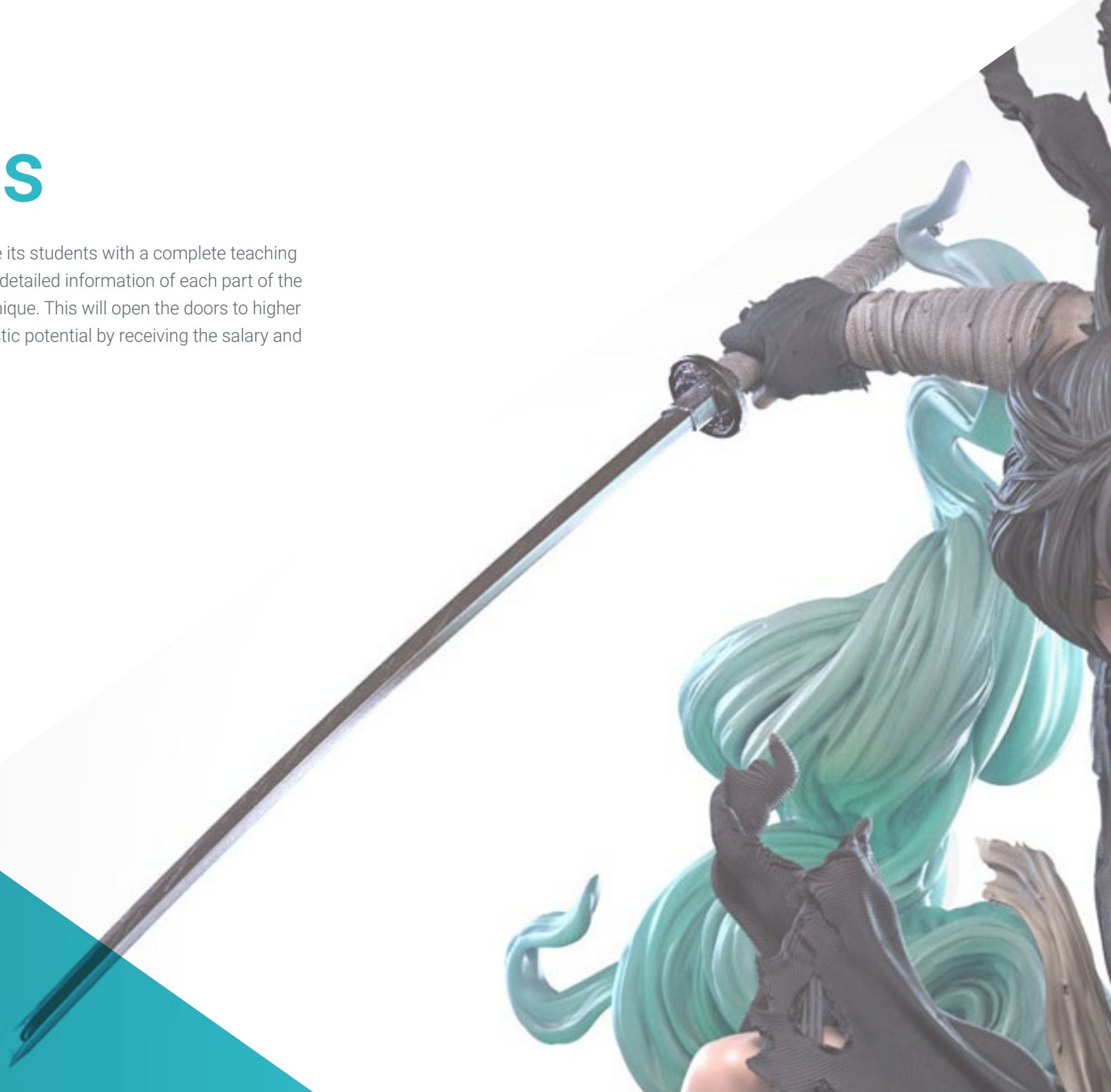
*Refine your current techniques and prove that you are a professional capable of assuming more responsibilities within your organization”*

*Your 3D characters will be remembered by players from all over the world thanks to the care and attention that you will put in every detail after finishing this program”*



# 02 Objectives

The ultimate goal of this program is to provide its students with a complete teaching in the process of creating 3D characters, with detailed information of each part of the process so that the student masters the technique. This will open the doors to higher quality jobs, where they can develop their artistic potential by receiving the salary and prestige they deserve.







“

*If you want to improve your career in the world of modeling for video games without neglecting your responsibilities, this is the best title for you"*



## General Objectives

---

- ◆ Expand knowledge of human and animal anatomy in order to develop hyper-realistic creatures.
- ◆ Master the 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.





## 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

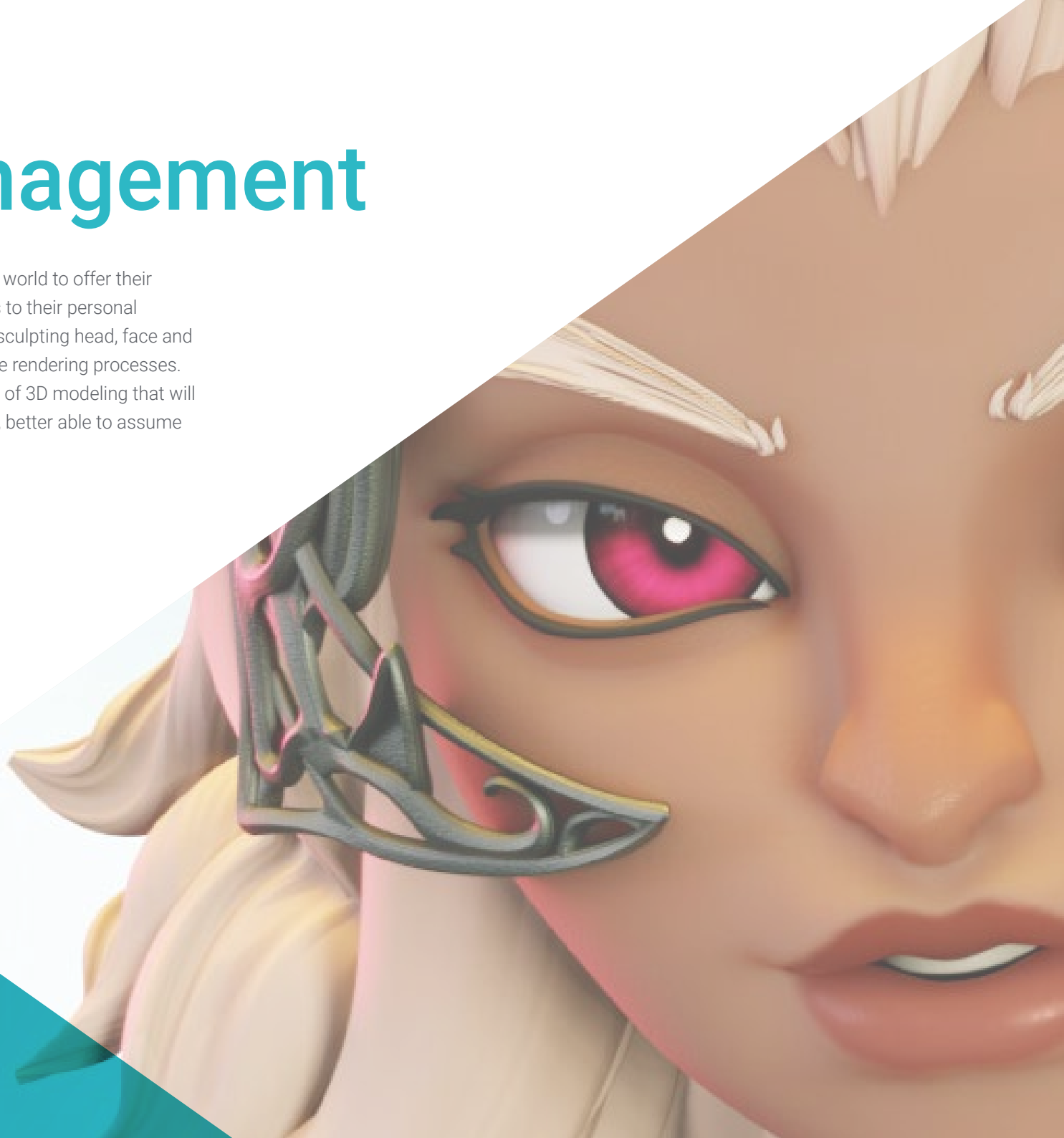
“

*Your professional goals will be much closer after improving your techniques and refinement of models in this Postgraduate Certificate"*

# 03

## Course Management

TECH has chosen the best professionals in the 3D design world to offer their students the best possible teaching in this regard. Thanks to their personal experience, the students will learn from the processes of sculpting head, face and hair to the most advanced textured with the most effective rendering processes. With all this, the students will be instructed in a niche field of 3D modeling that will lead them to be more efficient in their work and, therefore, better able to assume greater positions.





“

*Let video game professionals guide you to a much better future in this growing industry”*

## International Guest Director

Joshua Singh is a leading professional with over 20 years of experience in the video game industry, internationally recognized for his skills in art direction and visual development. With solid training in software such as Unreal, Unity, Maya, ZBrush, Substance Painter and Adobe Photoshop, he has made a significant mark in the field of game design. In addition, his experience spans visual development in both 2D and 3D, and is distinguished by his ability to collaboratively and thoughtfully solve problems in production environments.

In addition, as Art Director at Marvel Entertainment, he has collaborated with and guided elite teams of artists, ensuring that the artwork meets the required quality standards. He has also served as Lead Character Artist at Proletariat Inc. where he has created a safe environment for his team and has been responsible for all character assets in video games.

With an outstanding track record, including leadership roles at companies such as Wildlife Studios and Wavedash Games, Joshua Singh has been an advocate for artistic development and a mentor to many in the industry. Not to mention his time at large and well-known companies, such as Blizzard Entertainment and Riot Games, where he has worked as a Senior Character Artist. And, among his most relevant projects, stands out for his participation in hugely successful video games, including Marvel's Spider-Man 2, League of Legends and Overwatch.

Thus, his ability to unify the vision of Product, Engineering and Art has been fundamental to the success of numerous projects. Beyond his work in the industry, he has shared his experience as an instructor at the prestigious Gnomon School of VFX and has been a presenter at renowned events such as the Tribeca Games Festival and the ZBrush Summit.



## D. Singh, Joshua

---

- Art Director at Marvel Entertainment, California, USA
- Lead Character Artist at Proletariat Inc.
- Art Director at Wildlife Studios
- Art Director at Wavedash Games
- Senior Character Artist at Riot Games
- Senior Character Artist at Blizzard Entertainment
- Artist at Iron Lore Entertainment
- 3D Artist at Sensory Sweep Studios
- Senior Artist at Wahoo Studios/Ninja Bee
- General Studies from Dixie State University
- Degree in Graphic Design from Eagle Gate Technical College



*Thanks to TECH, you will be able to learn with the best professionals in the world"*

## 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.





# 04

## Structure and Content

Being such a complex theme that of the modeling of characters in 3 dimensions, this Postgraduate Certificate gathers the essential knowledge that the student must have to stand out with an efficient workflow. Being fully aware of all the steps that must be taken, the students can even choose to lead teams dedicated to 3D character modeling. Thanks to the educational methodology of TECH, the teaching material is enriched with a multitude of practical examples and real cases in which the student learns contextually to design the best possible 3D characters.



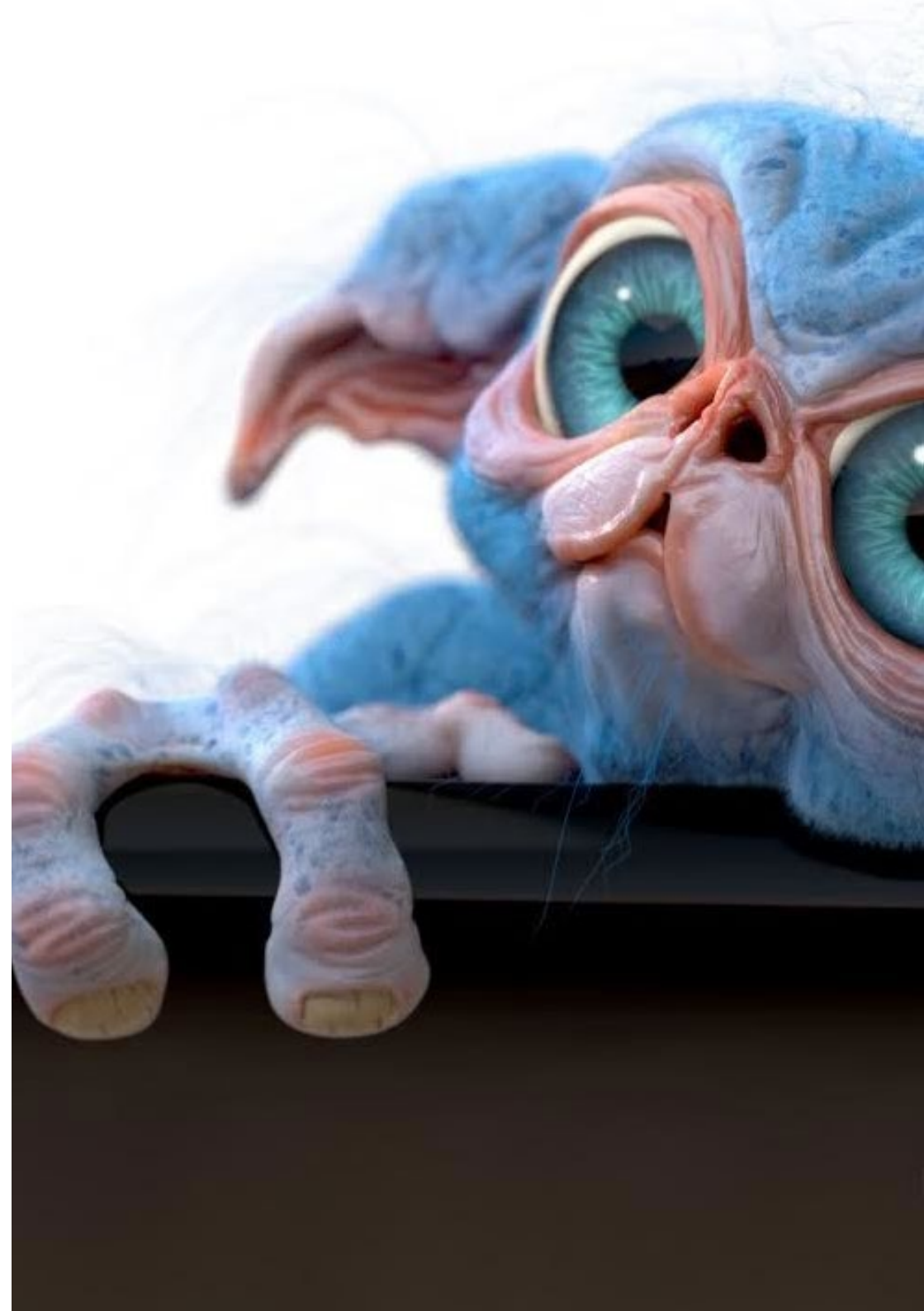


“

*This is the occasion you've been waiting for to specialize in 3D video game modeling and relaunch your career. Don't miss it and enroll today"*

## 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





- 1.7. UV Mapping and Baking
  - 1.7.1. UV's
  - 1.7.2. Substance Painter: Baking
  - 1.7.3. Polishing Baking
- 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
- 1.9. Lighting and Rendering
  - 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

“

*With a syllabus as complete as this and a teaching staff involved in your professional improvement, you will have all the easiness to become a reference in the modeling of 3D video game characters"*

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"*

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

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.

## 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.

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.



### 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.



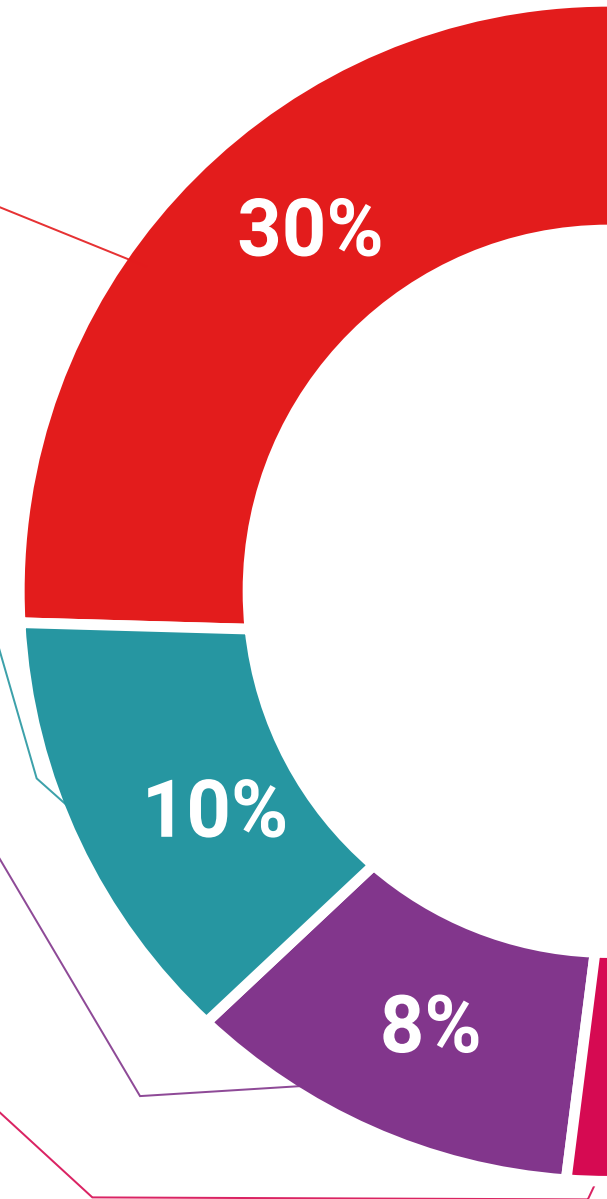
### Practising Skills and Abilities

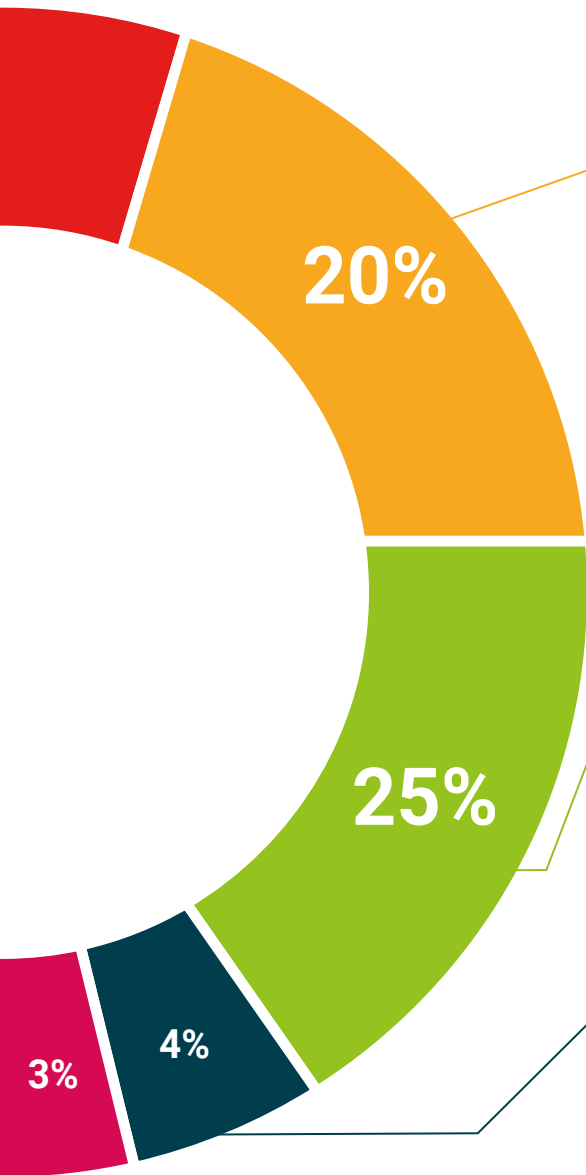
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization we live in.



### 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

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 Character Modeling 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 Character Modeling** 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.

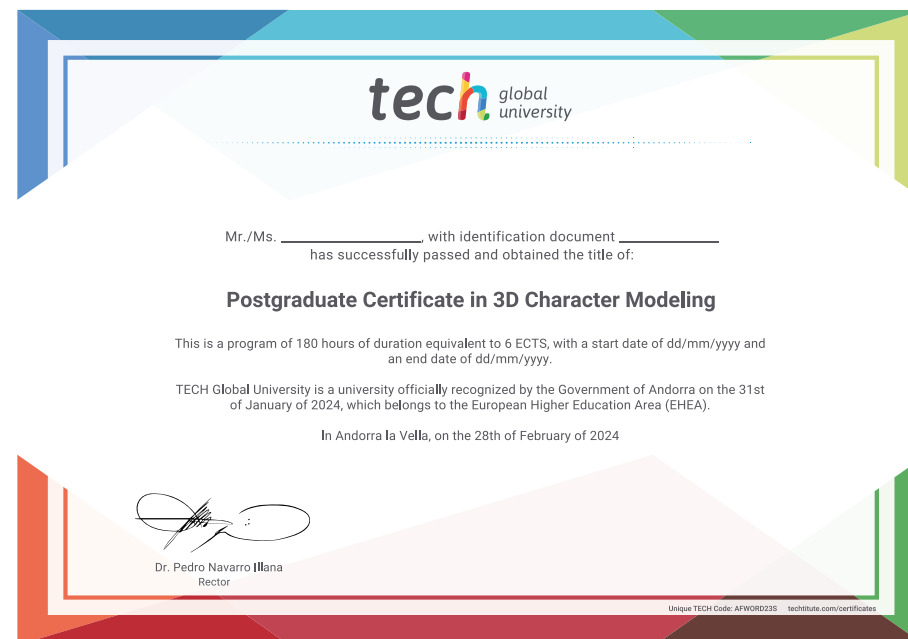
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in 3D Character Modeling**

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 quality  
development language  
virtual classroom



## Postgraduate Certificate 3D Character Modeling

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

# Postgraduate Certificate 3D Character Modeling

