**Postgraduate Certificate** 3D Creature Modeling



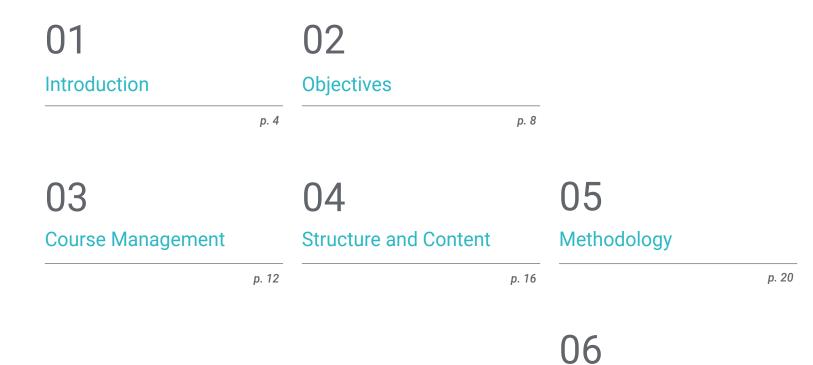


## **Postgraduate Certificate** 3D Creature Modeling

- » 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/postgraduate-certificate/3d-creature-modeling

## Index



Certificate

## 01 Introduction

In the world of video games, it is common to find impressive creatures of all kinds. In the case of Horizon Zero Dawn are gigantic metal dinosaurs that populate the world, while in the more realistic approach of Red Dead Redemption 2 can be found bears, horses or wolves recreated with luxury of details. Be it fantastic or credible, the designer who wants to succeed creating 3D models for video games must know how to recreate any type of creature. Therefore, this TECH title offers a complete program with which the student will be distinguished with honors, improving their prestige and position by reliably recreating any real or fictitious animal.



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Having a mastery of 3D modeling of creatures, you will be able to access the most ambitious projects in the world of video games"

## tech 06 | Introduction

It is strange to find today a video game title that does not include some kind of creature, either, fantastic or real. The world of animals houses many anatomies, so design professionals dedicated to their recreation must have extensive knowledge in this field.

To fill this knowledge gap that many designers may have who want to specialize their career, TECH has developed a complete Postgraduate Certificate in which the student will review the anatomies of reptiles, amphibians, mammals and animals with plumage, as well as all the features that make them unique and distinctive compared to others.

Thanks to an intensive study of the bones, faces and diverse muscles of the animal kingdom, the student will be able to perfectly recreate any kind of animal in Maya, making use of XGen for their fur or feathers.

A Postgraduate Certificate that takes students to the next professional level in their career, because it is perfectly compatible with other types of work or personal responsibilities. Being a completely online program, the study material is available for download from the first day of the qualification, allowing the student to decide when and how to study it. This **Postgraduate Certificate in 3D Creature Modeling** contains the most complete and up-to-date 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

Designing realistic and convincing 3D creatures will greatly improve your chances of job growth"

#### Introduction | 07 tech

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This Postgraduate Certificate will open the doors to the job promotion you are looking for, demonstrating ability and quality in your 3D odelling work"

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 during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

Formalize your odelling in this program today and don't wait any longer to build the future you want by designing and odelling the creatures of the future.

Did you always want to know why Yoshi has stayed in people's collective memory? Discover the secret behind its charm in this Postgraduate Certificate

## 02 **Objectives**

Creating good quality 3D models is not enough to stand out in the video game industry. The professional has to have a complete understanding of the entire sculpting process, including the anatomical principles themselves if their task is to recreate animals or creatures accurately. This Postgraduate Certificate instructs its students in all knowledge about three-dimensional creatures to achieve the best possible results, highlighting with guarantees in its excellence, fluidity of work and accurate recreation of all real or fictitious elements of animals.

TECH will help you reach new professional heights in your 3D design career thanks to useful and demanded knowledge in the video game industry"

## tech 10 | Objectives

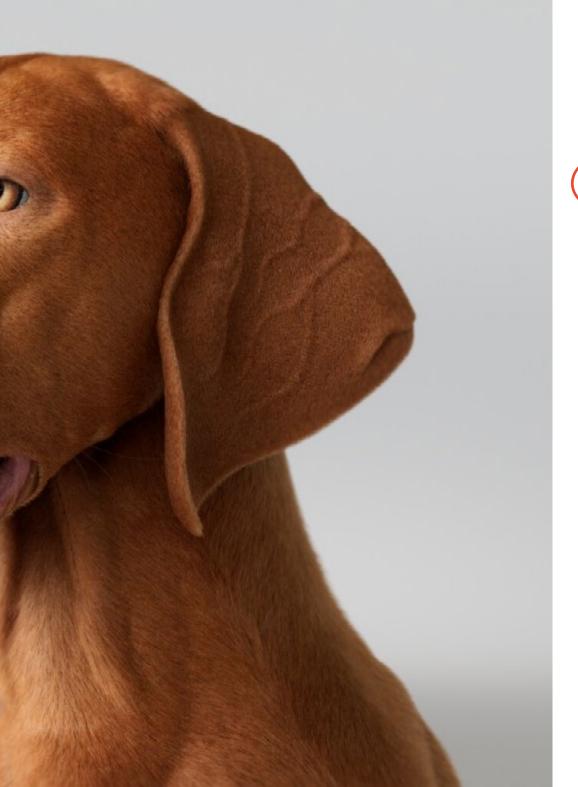


#### **General Objectives**

- 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 odelling
- 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**

- Learn the odelling of different types of animal anatomy
- Review the different types of reptiles and how to create scales with Displacement maps and Alphas
- Investigate how to export models to Mari for realistic texturing
- Learn more about Grooming and how to Groom animals with Xgen
- Render models in Arnold Render in Maya



Don't miss this opportunity to get closer to your professional goal with this successful program in 3D Creature Modeling"

## 03 Course Management

The students will find in this Postgraduate Certificate a teaching staff that will not only instruct them in the fundamental aspects of the design of 3D creatures, but also shares their concerns and interests to get as far as possible in the field of 3D design for video games. Thanks to their great professional experience, teachers can provide the student with very useful advice when continuing to improve their career path.

The teachers of this program will help you in everything you need to have to be a great winner of 3D odelling in video games"

### tech 14 | Course Management

#### **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

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

## tech 16 | 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





## 04 Structure and Content

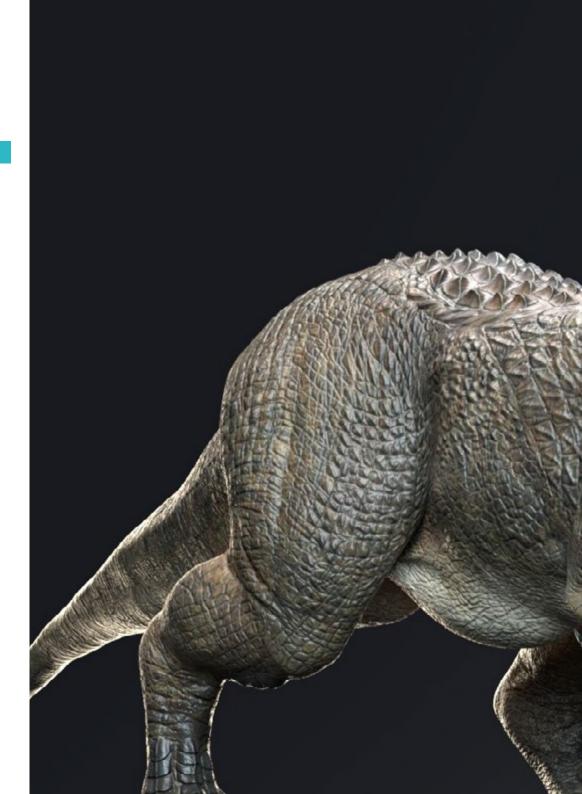
Following the most recent and innovative educational methodology, TECH and its teaching staff prepare the contents of qualifications such as this Postgraduate Certificate in 3D Creatures Modeling for the student to make the most of them. Thus, the student will see how the most realistic animals and beasts of video games are performed in a practical way, with real cases and guided videos that, in addition, greatly lighten the teaching load. It is therefore a fantastic opportunity to improve the work trajectory in 3D design as quickly and directly as possible, as no final work is required to finish the title.

You will become the expert in creatures of your department, assigning you greater responsibilities and being able to access better games and projects"

### tech 20 | Structure and Content

#### Module 1 Creature Modeling

- 1.1. Understanding Animal Anatomy
  - 1.1.1. Study of the Bones
  - 1.1.2. Proportions of an Animal Head
  - 1.1.3. Anatomic Differences
- 1.2. Anatomy of the Skull
  - 1.2.1. Animal Face
  - 1.2.2. Muscles of the Head
  - 1.2.3. Skin Layer, Over Bones and Muscles
- 1.3. Anatomy of the Spine and Thoracic Cage
  - 1.3.1. Animal Torso and Hip Musculature
  - 1.3.2. Central Axis of its Body
  - 1.3.3. Creation of Torsos in Different Animals
- 1.4. Animal Musculature
  - 1.4.1. Muscle
  - 1.4.2. Synergy Between Muscles and Bones
  - 1.4.3. Shapes of an Animal Body
- 1.5. Reptiles and Amphibians
  - 1.5.1. Reptilian Skin
  - 1.5.2. Small Bones and Ligaments
  - 1.5.3. Fine Detail
- 1.6. Mammals
  - 1.6.1. Fur
  - 1.6.2. Larger, Stronger Bones and Ligaments
  - 1.6.3. Fine Detail





## Structure and Content | 21 tech

- Animals with Feathers 1.7.
  - 1.7.1. Plumage
  - 1.7.2. Elastic and Light Bones and Ligaments
  - 1.7.3. Fine Detail
- Analysis of the Jaw and Creation of Teeth 1.8.
  - 1.8.1. Animal Specific Teeth
  - 1.8.2. Detailing of Teeth
  - 1.8.3. Teeth in the Jaw Cavity
- 1.9. Creation of Fur, Fur for Animals
  - 1.9.1. Xgen in Maya: Grooming
  - 1.9.2. Xgen: Feathers
  - 1.9.3. Render
- 1.10. Fantastic Animals
  - 1.10.1. Fantastic Animal
  - 1.10.2. Complete Modeling of the Animal
  - 1.10.3. Texturing, Lighting and Rendering

Join the digital family of TECH, with a title 100% online and designed for you in which you will learn all the secrets to model creatures with rigor and precision"

## 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 24 | 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.

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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.

## Methodology | 25 tech



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 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.

### tech 26 | Methodology

#### **Relearning Methodology**

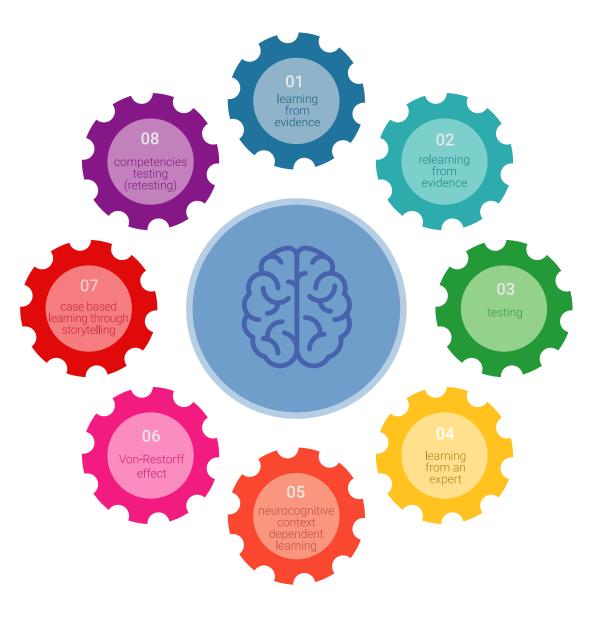
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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.



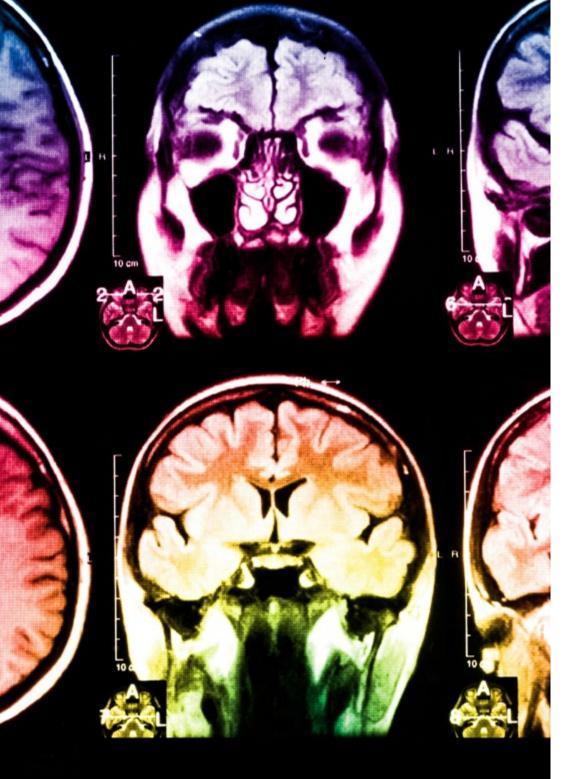
#### Methodology | 27 tech

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. 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.



#### tech 28 | 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.

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.

## Methodology | 29 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.



#### 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".



4%

3%

20%



#### **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 Creature Modeling 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"

### tech 32 | Certificate

This program will allow you to obtain your **Postgraduate Diploma 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 Diploma 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.

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