

# Postgraduate Certificate UVs and 3D Texturing with Allegorithmic



## Postgraduate Certificate UVs and 3D Texturing with Allegorithmic

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

Website: [www.techtute.com/us/information-technology/postgraduate-certificate/uvs-3d-texturing-allegorithmic](http://www.techtute.com/us/information-technology/postgraduate-certificate/uvs-3d-texturing-allegorithmic)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 18*

05

Methodology

---

*p. 22*

06

Certificate

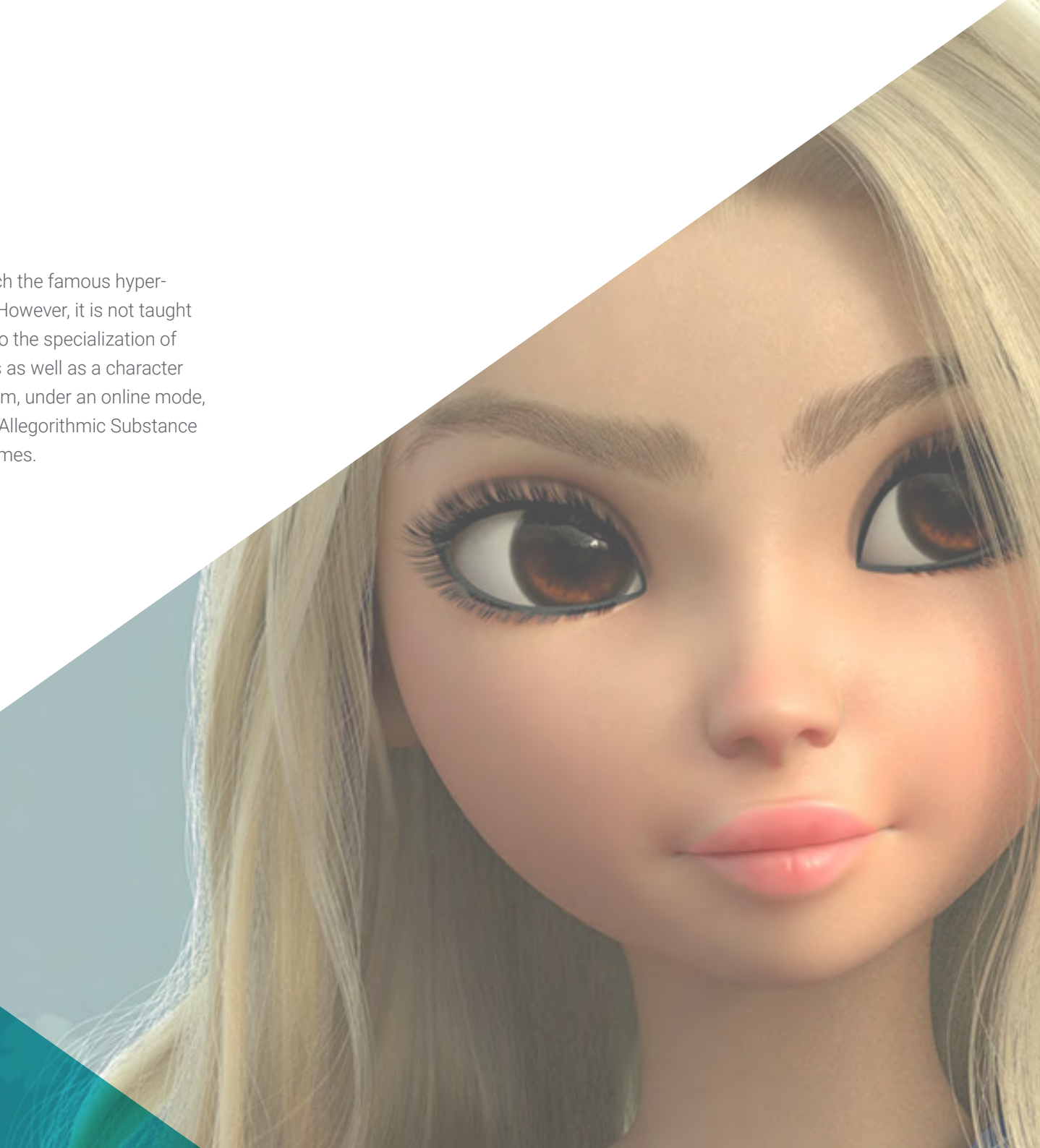
---

*p. 30*

# 01

# Introduction

Mari is a standard software in the film industry, thanks to which the famous hyper-realistic models that appear in the film industry are obtained. However, it is not taught in traditional faculties. For this reason, this program delves into the specialization of professionals capable of creating a character for video games as well as a character for the biggest Hollywood productions. In addition, this program, under an online mode, delves into the aspects of UV mapping and 3D Texturing with Allegorithmic Substance Painter, another of the most used tools in the field of video games.



A close-up, side-profile view of long, straight blonde hair. The hair is the primary focus on the left side of the page, with a soft, natural-looking texture. The background behind the hair is a light, muted teal color.

““

*Don't wait any longer to give your computer career in 3D design a real boost. Enroll today in this Postgraduate Certificate”*

Mari and Allegorithmic Substance Painter are respectively the two most widespread tools in the world of cinema and video games. One of the characteristics they share is their great versatility and the final quality they provide to the 3D models created. As they are complex programs, traditional computer science faculties do not sufficiently emphasize their use.

For this reason, this program provides an in-depth study of the use of both tools in order to specialize students and improve their performance and position at work. A team of experts with experience in the use of these two pieces of software has been assembled with the task of elaborating a Postgraduate Certificate in UI as detailed and exhaustive as possible so that the student ends up mastering these tools in all their aspects.

In addition, the Postgraduate Certificate in Uvs and 3D Texturing with Allegorithmic is taught completely online, and the student can access all the teaching material from the first day of the program. As there are no classes or schedules, the student is the one who decides how and when to study, which gives them great freedom and comfort to be able to face the program.

This **Postgraduate Certificate in UVs and 3D Texturing with Allegorithmic** contains the most complete and up-to-date program on the market. The most important features include:

- ◆ The development of practical cases presented by experts in Uvs and 3D Texturing with Allegorithmic
- ◆ 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



*Become a reference 3D Texturing professional thanks to this state-of-the-art program"*

“

*You will learn different ways of 3D Texturing to get to build characters with the most realistic look possible”*

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 the professional a situated and contextual learning, that is, a simulated environment that will provide an immersive education programmed to prepare 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.

*Delve into Substance Painter and you will be able to do anything you set your mind to in the best possible way.*

*With Mari software, you will get the famous hyper-realistic models that appear in the film industry.*



# 02

## Objectives

The program design of this Postgraduate Certificate will allow the graduate to expand their knowledge in 3D Texturing with Allegorithmic in order to obtain the famous hyper-realistic models seen in the film and video game industry. To do so, you will learn to work with and master software such as Mari and Substance. All this, under the creation of an optimal and dynamic work, acquiring the most demanded skills and knowledge in the 3D industry.







“

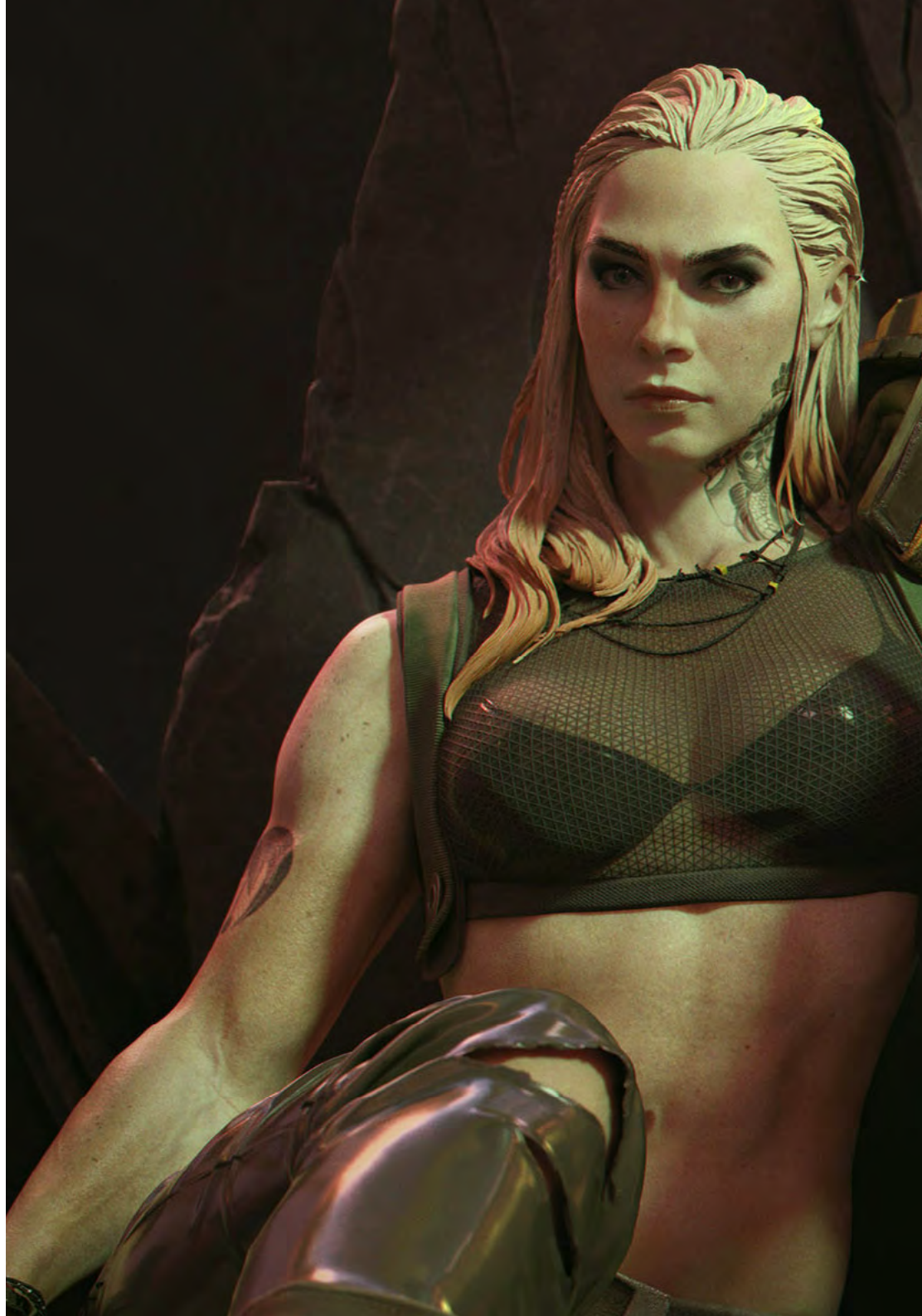
*Learning to work with Mari will give you an edge over many artists in the industry making you stand out from the rest”*



## 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





## Specific Objectives

---

- ◆ Study the most optimal way to UVS's in Maya and UDIM systems
- ◆ Develop the knowledge to texture in Substance Painter for video games
- ◆ Know how to texture in Mari for hyper-realistic models
- ◆ Learn how to create XYZ textures and displacement maps on our models
- ◆ Delve into the import of our textures in Maya

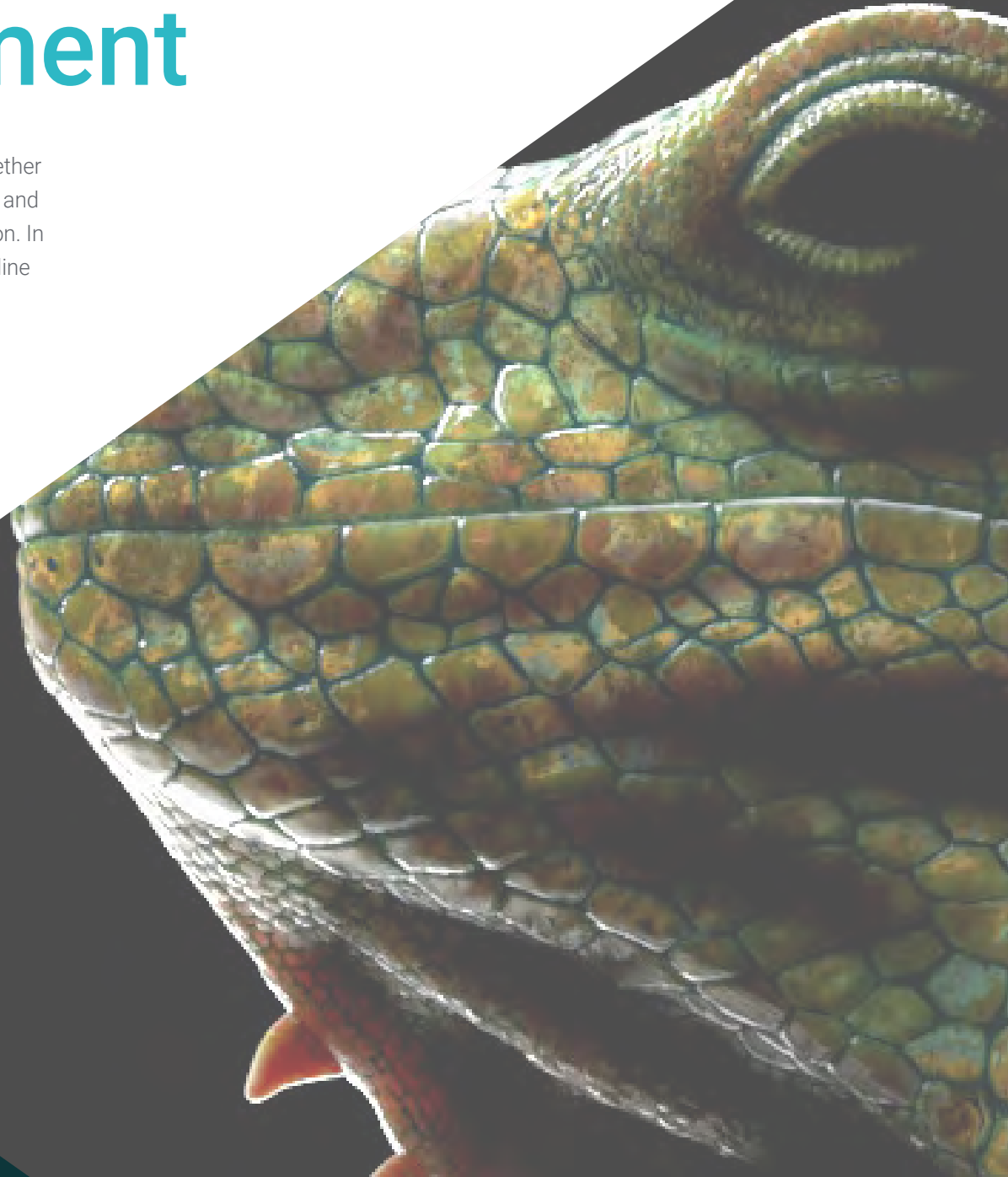
“

*You'll get to direct your career to the most prestigious design teams in video games and even Hollywood”*

03

# Course Management

TECH always seeks to offer quality education and for this purpose has brought together 3D modeling professionals who have extensive experience in different types of UVs and 3D Texturing work with Allegorithmic for both the video game industry and animation. In addition to this, the use of an innovative educational methodology by the largest online University, which allows students to get even more out of all their programs.





“

*Study a theory adapted to the realities of today's market, mastering the aspects most in demand by companies and that are not taught in traditional computer science faculties"*

## 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 Animation Specialist
- ♦ Concept Artist, 3D Modeler and Shading in Timeless Games Inc
- ♦ Vignettes and animations design consultant for commercial proposals in Spanish multinationals
- ♦ 3D Specialist at Blue Pixel 3D
- ♦ 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

The syllabus has been designed based on the requirements of computer science applied to the specificity of UV maps and 3D Texturing, bringing together a study plan with a module that offers a broad perspective of high-level UV mapping in Maya, XYZ textures to generate hyperrealism and the use of Substance Painter for details such as scars, freckles, tattoos, paintings or makeup, etc.. In addition, important elements such as Displacements maps in Zbrush and Mari, among others, are added.





“

*Enroll today in this TECH Postgraduate Certificate and give your career in 3D design a real boost”*

## Module 1. Uvs and Texturing with Allegorithmic Substance Painter and Mari

- 1.1. Creation of High-Level Uvs in Maya
  - 1.1.1. Facial Uvs
  - 1.1.2. Creation and Layout
  - 1.1.3. Advanced Uvs
- 1.2. Uvs Preparation for UDIM Systems Focused on High Throughput Models
  - 1.2.1. UDIM
  - 1.2.2. UDIM in Maya
  - 1.2.3. Textures in 4K
- 1.3. XYZ Textures: What Are They and How to Use Them?
  - 1.3.1. XYZ. Hyperrealism
  - 1.3.2. MultiChannel Maps
  - 1.3.3. Texture Maps
- 1.4. Texturing: Videogames and Cinema
  - 1.4.1. Substance Painter
  - 1.4.2. Mari
  - 1.4.3. Types of Texturing
- 1.5. Texturing in Substance Painter for Videogames
  - 1.5.1. Baking from High to Low Poly
  - 1.5.2. PBR Textures and Their Importance
  - 1.5.3. ZBrush with Substance Painter
- 1.6. Finalizing our Substance Painter Textures
  - 1.6.1. Scattering, Translucency
  - 1.6.2. Model Texturing
  - 1.6.3. Scars, Freckles, Tattoos, Paints or Makeup
- 1.7. Hyper-Realistic Facial Texturing with XYZ Textures and Color Mapping I
  - 1.7.1. XYZ Textures in ZBrush
  - 1.7.2. Wrap
  - 1.7.3. Correction of Errors





- 1.8. Hyper-Realistic Facial Texturing with XYZ Textures and Color Mapping II
  - 1.8.1. Mari's Interface
  - 1.8.2. Texturing in Mari
  - 1.8.3. Projection of Skin Textures
- 1.9. Advanced Detailing of Displacements Maps in ZBrush and Mari
  - 1.9.1. Texture Painting
  - 1.9.2. Displacement for Hyperrealism
  - 1.9.3. Layer Creation
- 1.10. Shading and Texture Implementation in Maya
  - 1.10.1. Skin Shaders in Arnold
  - 1.10.2. Hyper Realistic Eye
  - 1.10.3. Touch-ups and Tips

“

*A program designed to add value to your professional quality by learning the latest developments and methods in 3D Texturing"*

# 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.*





*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 Information Technology 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. Throughout the course, students 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 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 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 UVs and 3D Texturing with Allegorithmic guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.





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

This **Postgraduate Certificate in UVs and 3D Texturing with Allegorithmic** 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 diploma 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 UVs and 3D Texturing with Allegorithmic**

Official N° of Hours: **150 h.**



\*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION 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  
development language  
virtual classroom



## Postgraduate Certificate UVs and 3D Texturing with Allegorithmic

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

# Postgraduate Certificate UVs and 3D Texturing with Allegorithmic

