

# 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.techtitute.com/us/videogames/postgraduate-certificate/uvs-3d-texturing-allegorithmic](http://www.techtitute.com/us/videogames/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. 16*

05

Methodology

---

*p. 20*

06

Certificate

---

*p. 28*

# 01

# Introduction

Texturing in video games is critical. Gamers are meticulous when it comes to examining even the smallest detail of their favorite titles, so any error in the mapping of a model will inevitably lead to its discovery, calling into question the work of the 3D modeling department. For this reason, the most advanced mapping and texturing techniques are required to gain access to the best positions in the industry. Thanks to this TECH qualification, the student will learn the secrets hidden in programs such as Substance Painter or Mari in order to master them and move on to better professional positions or projects.







“

*This program will be key when you decide to make the final professional leap to better design studios or to create your own video game”*

The final quality of a 3D model depends to a large extent on correct UV mapping and careful and detailed texturing. With good care in this final process, impressive results can be achieved, worthy of the most powerful triple A titles in the industry.

3D designers who want to obtain a notorious distinction in their work and professional career must be expert connoisseurs of the main mapping and texturing tools, because even in the animation of kinematics, the expertise of the modelers involved is essential to achieve the best possible result.

As it is a complex software with multiple uses, this qualification focuses on the most essential and useful aspects for the students, going directly to the most relevant contents that will position them as an exemplary designer to take on important texturing and model mapping jobs.

A program that, with its 100% online format, allows students the necessary flexibility to combine it with their other tasks or work and personal responsibilities. This training will elevate your professional talent to new levels, allowing you to access much better video game projects.

This **Postgraduate Certificate in Uvs and 3D Texturing with Allegorithmic** 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.

“

*Being an expert in Substance Painter and Mari it won't take long for more ambitious and powerful video game related projects to come your way”*

“

*If you ever thought you could texturize the models of cities like Los Santos, Night City or Rapture, this Postgraduate Certificate brings you closer to that desired future”*

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.

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

*The correct mapping and texturing of your 3D models will give an even more professional finish to your personal portfolio.*

*You will stand out in your department being the reference when it comes to modelling or texturing any kind of work.*



# 02 Objectives

This qualification aims to influence the professional career of its students in a positive way, providing them with a key qualification in the world of 3D modelling to be able to access positions and projects of greater prestige. Thanks to TECH's effort in bringing together a group of teachers with experience in the industry, the student is directing their efforts where it really matters, addressing the most urgent demands of the video game market.







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*Your professional goal is to improve personally, in terms of salary and work. TECH has you covered in every aspect with the most essential 3D market qualification in your field”*

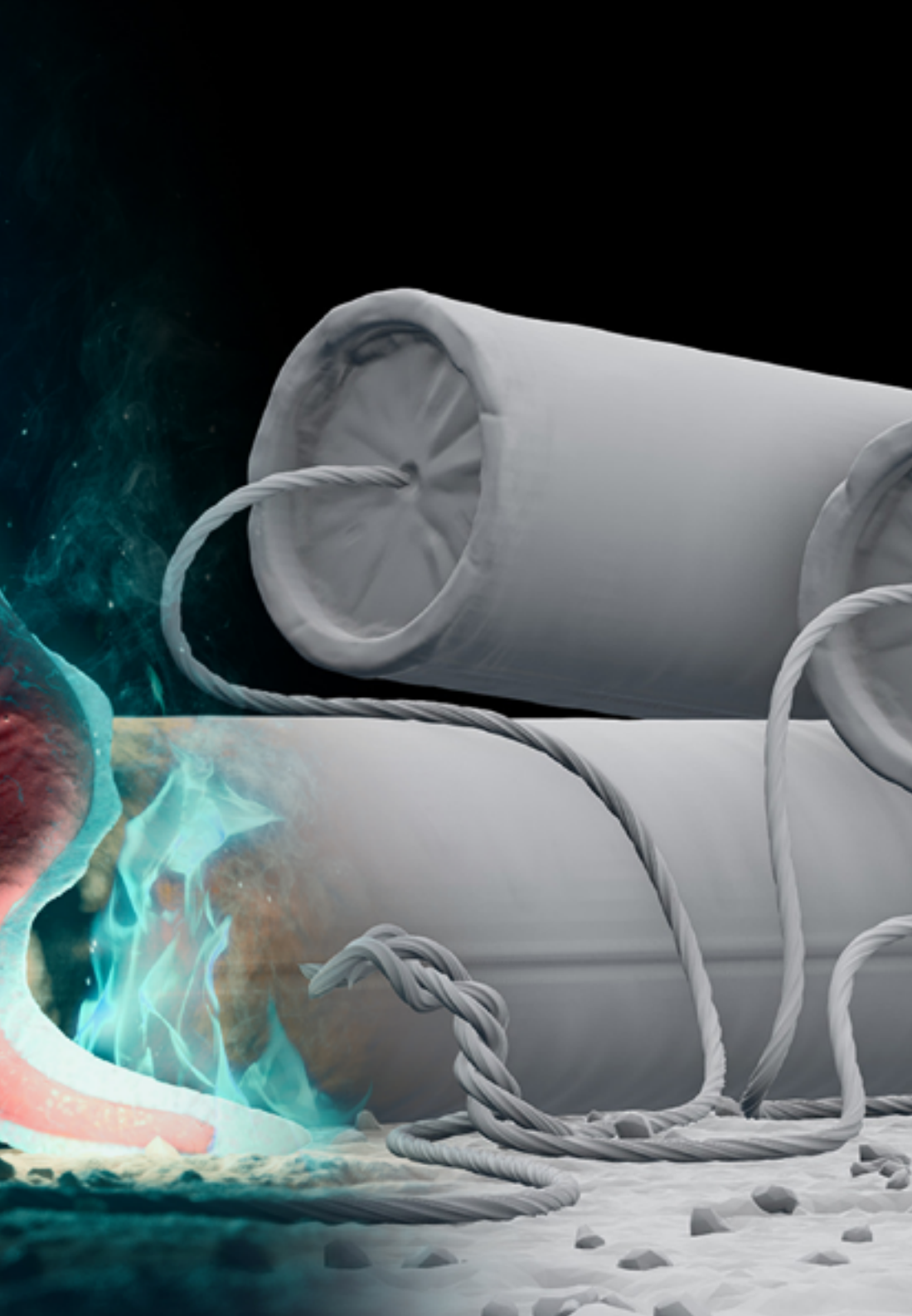


## General Objectives

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- ◆ 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

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- ◆ Study the most optimal form of 'UVs in Maya and UDIM systems
- ◆ Develop the knowledge to texture in Substance Painter for video games
- ◆ Knowledge of texturing 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

“

*If you want to access the best positions in the video game industry you need this training. Don't hesitate and enroll now”*



# 03

## Course Management

The Postgraduate Certificate in UVs and 3D Texturing with Allegorithmic has the most knowledgeable teaching staff in the use of this tool, as their years of experience creating and texturing 3D models guarantee the quality of the content. By joining this program, students benefit from being mentored by instructors who have a thorough understanding of their needs as professionals, what they need to do to achieve their goals and how best to optimize their workflow when creating textures and mappings for their projects.







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*You are about to make a huge leap in quality by choosing the best possible teachers to improve your performance in Substance Painter and Mari”*

## 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

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- 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

Students are looking for maximum efficiency in this kind of courseware, which is why TECH has employed the most cutting-edge educational methodology for all the contents of the syllabus. Through relearning, the student assimilates concepts such as the creation and preparation of UVs or advanced mapping details in a much more natural way. This is complemented by a strong support in practical and factual content, in which the student observes how to correctly texture all types of 3D works and models. This allows a contextual teaching, in which the students improve their own work methodology as the Postgraduate Certificate progresses.





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*You will learn how to texture and create UV maps in a practical way, with the latest versions of Substance Painter and Mari”*



## Module 1. UV's 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. Preparation of UVs for UDIM's Systems Focused on Large Production Models
  - 1.2.1. UDIMs
  - 1.2.2. UDIMs 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
  - 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
  - 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. Hyperrealistic Eye
  - 1.10.3. Touch-ups and Tips

“Fulfill your dreams, improve professionally and create the 3D models you have always dreamed of thanks to this Postgraduate Certificate”

# 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.

“

*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 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 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.



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*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 quality  
development languages  
virtual classroom



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