

# Postgraduate Certificate Blender in the 3D Industry



## Postgraduate Certificate Blender in the 3D Industry

- » 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/blender-3d-industry](http://www.techtute.com/us/information-technology/postgraduate-certificate/blender-3d-industry)

# 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

It is a fact that Blender is here to stay, as it is increasingly being implemented in the 3D industry. Whether in large productions or personal projects, this complete software offers creative solutions and an indispensable workspace for any design professional. For this reason, as a computer scientist specializing in 3D modeling, knowing Blender in depth is crucial for successful projects. Therefore, this program delves into all the technical issues of the software, providing the student with a complete teaching in the most important tool and that will bring him a remarkable professional improvement.





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*Learn how to use Blender to create 3D objects, animations and computer visuals and adapt them to your productions”*

Blender is a multi-platform computer program that allows you to perform all kinds of design tasks. Its wide variety of tools make it suitable for almost any type of media production. Currently, studios around the world use it for commercial projects such as video games and feature films.

This Postgraduate Certificate instructs the student from texturing to rendering or retooling with the proper use of this software. As such, comprehensive knowledge of all the possibilities of this tool becomes crucial for people interested in improving their professional performance in their job. The content that the student will find is of the highest quality, written by a group of experts who know Blender perfectly and know how to get the most out of the tool.

With motivation and the right teaching material, the student who takes this program will become familiar with Blender and get the necessary knowledge to cope with supervision and technical direction. You will be in this way, to become a 3D computer scientist in film, advertising and video game companies, as well as a great digital sculptor who can *freelance*.

The program is taught completely online, which allows the design professionals to balance it with other activities or with their own personal or professional responsibilities. It is not necessary to do a final project to obtain the certificate, which also lightens the student's workload and is a great advantage when it comes to taking on the study of the entire syllabus.

This **Postgraduate Certificate in Blender in the 3D Industry** 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 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



*You will become a professional in the digital world thanks to the best learning and the tools offered by this Postgraduate Certificate"*

“

*TECH offers you the possibility of balancing your daily professional life with this 100% Postgraduate Certificate, which means that you will continue to improve your career without leaving aside any of your obligations”*

The program’s teaching staff includes professionals from sector who contribute their work experience to this educational 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 education programmed to learn 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.

*You will become a benchmark in Blender and will be the reference for your peers in 3D modeling.*

*This program will attract multiple opportunities for career advancement and higher paying positions.*



# 02 Objectives

This Postgraduate Certificate covers the latest developments of the Blender tool, with the aim of instructing students in the most fundamental issues of this essential software in 3D modeling. Thanks to this Postgraduate Certificate, the computer scientist will handle the different Blender tools, which are totally focused on modeling, assembly, animation, simulation, rendering and creation of three-dimensional models. This will provide the student with multiple opportunities for career advancement and higher paying positions.





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*Blender covers all fields of digital design to create content, effects, animations and physics useful for film and video game production companies"*



## General Objectives

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- ◆ Expand knowledge of human and animal anatomy in order to develop hyper-realistic creatures
- ◆ Master the retopology, UV 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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- ◆ Outstanding software performance
- ◆ Transfer knowledge of Maya and Zbrush to Blender to create amazing models
- ◆ Delve into Blender's node system to create different shaders and materials
- ◆ Render Blender practice models with the two types of render engines: Eevee and Cycles



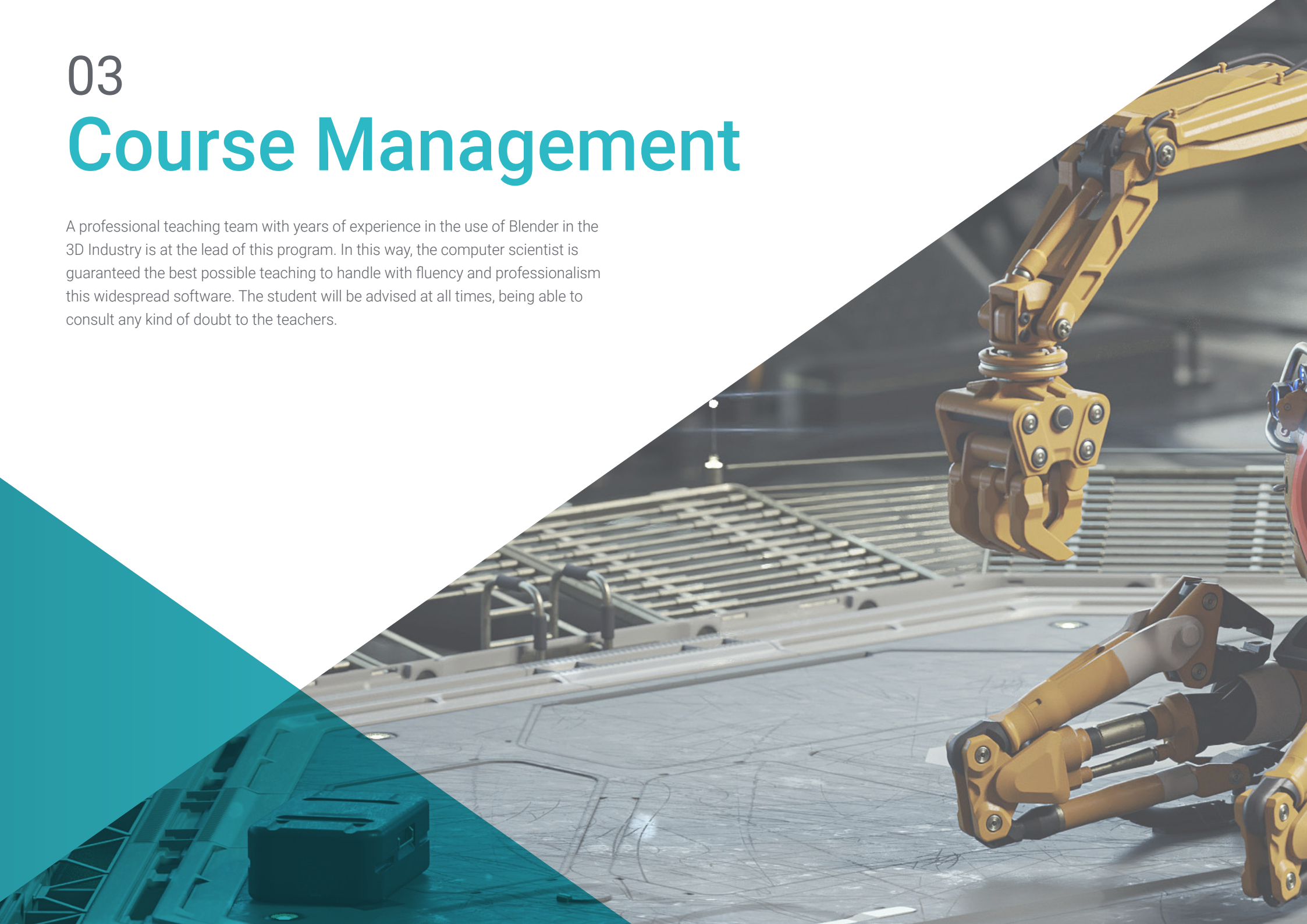
*This Postgraduate Certificate will professionalize you as a computer scientist dedicated to modeling, lighting, rendering, animation and creation of three-dimensional models"*



# 03

# Course Management

A professional teaching team with years of experience in the use of Blender in the 3D Industry is at the lead of this program. In this way, the computer scientist is guaranteed the best possible teaching to handle with fluency and professionalism this widespread software. The student will be advised at all times, being able to consult any kind of doubt to the teachers.





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*The teachers have meticulously created all the contents of this program, including high quality audiovisual material"*

## 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

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*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

This TECH program brings together the most up-to-date content on the market. It is based on the most recent developments of the Blender tool, taking into account its versatility to perform all kinds of tasks of great importance for the computer scientist. Through practical cases, the student will see how to perform nodes, mapping and shading, as well as advanced rendering of 3D models in the software.



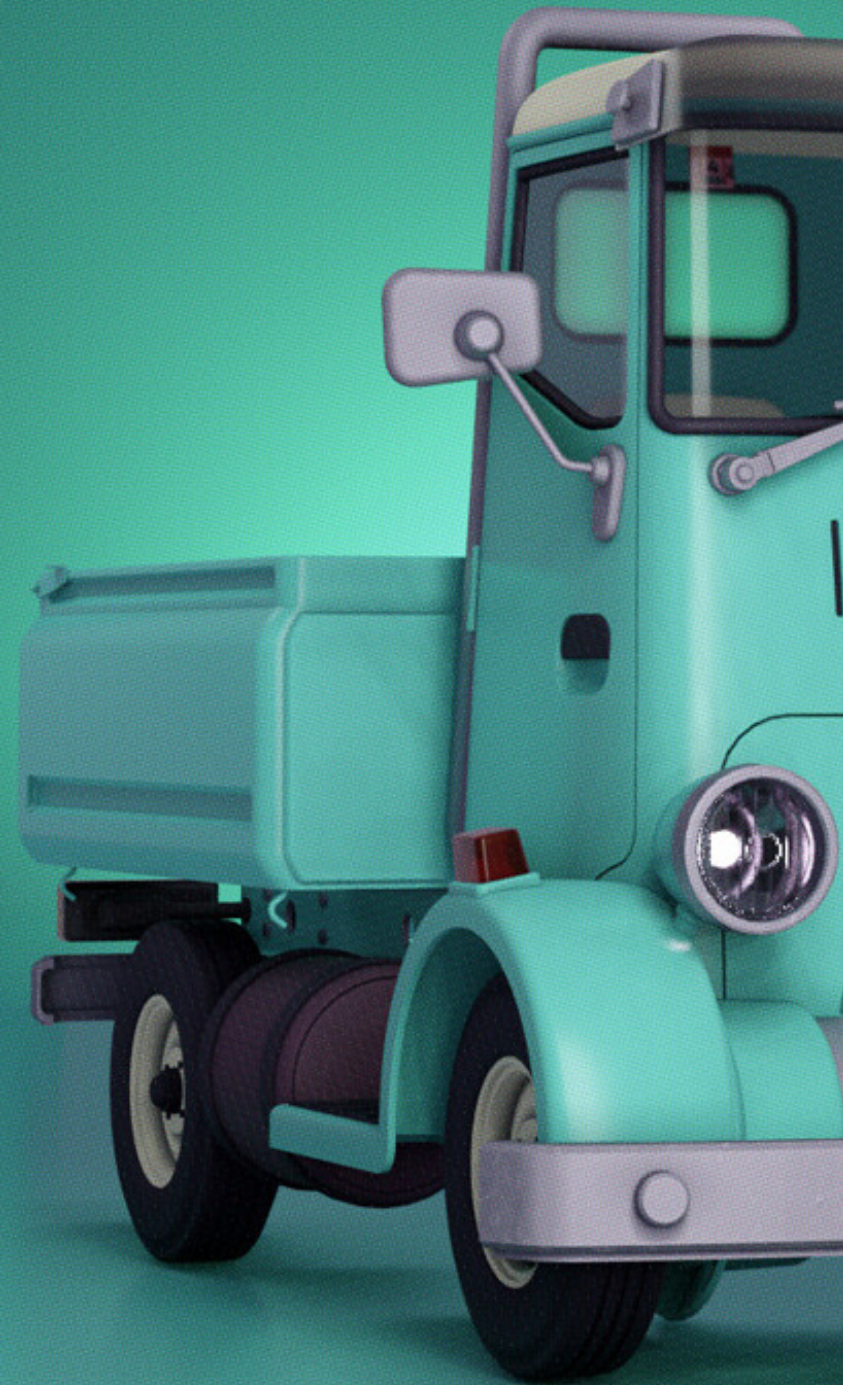


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*The theoretical content of this program contains the latest advances in 3D design in Blender, which will improve the final appearance of your projects"*

## Module 1. Blender: A New Twist in the Industry

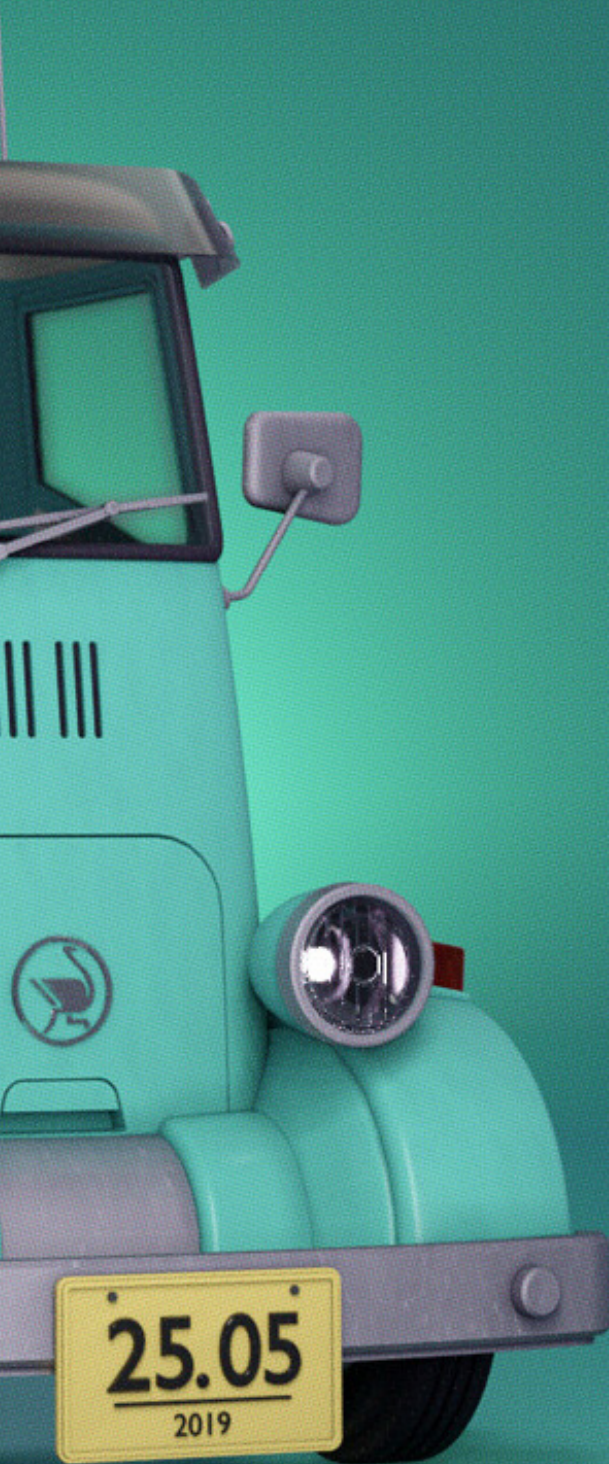
- 1.1. Blender vs. ZBrush
  - 1.1.1. Advantages and Differences
  - 1.1.2. Blender and the 3D Art Industry
  - 1.1.3. Advantages and Disadvantages of Freeware
- 1.2. Blender: Interface and Program Knowledge
  - 1.2.1. Interface
  - 1.2.2. Customization
  - 1.2.3. Experimentation
- 1.3. Head Sculpting and Transpolation of Controls from ZBrush to Blender
  - 1.3.1. The Human Face
  - 1.3.2. 3D Sculpting
  - 1.3.3. Blender Brushes
- 1.4. Full Body Sculpting
  - 1.4.1. The Human Body
  - 1.4.2. Advanced Techniques
  - 1.4.3. Detail and Refinement
- 1.5. Retopology and UV in Blender
  - 1.5.1. Retopology
  - 1.5.2. University of Valencia
  - 1.5.3. Blender UDIMS
- 1.6. From Maya to Blender
  - 1.6.1. Hard Surface
  - 1.6.2. Modifiers
  - 1.6.3. Keyboard Shortcuts
- 1.7. Blender Tips & Tricks
  - 1.7.1. Range of Possibilities
  - 1.7.2. Geometry Nodes
  - 1.7.3. *Workflow*



- 1.8. Nodes in Blender: Shading and Texture Placement
  - 1.8.1. Nodal System
  - 1.8.2. Shaders Through Nodes
  - 1.8.3. Textures and Materials
- 1.9. *Rendering* in Blender with Cycles and Eevee
  - 1.9.1. Cycles
  - 1.9.2. Eevee
  - 1.9.3. Lighting
- 1.10. Implementation of Blender in our Workflow as Artists
  - 1.10.1. Implementation in the *Workflow*
  - 1.10.2. Search for Quality
  - 1.10.3. Types of Exports

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*The numerous complementary practical case studies provided for each topic will expand your knowledge in using Blender to create 3D models"*



# 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.

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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.*





*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 Blender in the 3D Industry 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 Blender in the 3D Industry** 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 Blender in the 3D Industry**

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 language  
virtual classroom



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