

# Postgraduate Certificate Blender in the 3D Industry



## Postgraduate Certificate Blender in the 3D Industry

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/design/postgraduate-certificate/blender-3d-industry](http://www.techtute.com/us/design/postgraduate-certificate/blender-3d-industry)

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# 01

# Introduction

Blender is one of the most widespread tools in the field of 3D modeling. Whether for large productions or personal indie projects, this software offers creative solutions and an indispensable workspace for any design professional. Therefore, a thorough knowledge of it is crucial to further improve the workflow and be eligible for better positions in the department or to carry out projects with greater success. Therefore, this TECH program delves into all the technical issues of Blender, providing the student with a complete education in the most important tool and that will lead to a transcendental professional improvement.





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*Blender will have no secrets for you after completing this Postgraduate Certificate in which you will learn all its best kept secrets and tricks”*

Blender is a multifaceted tool that allows the design professional to perform all kinds of tasks. From texturing to rendering or retopology, the proper use of this program is often decisive in the final result of the projects and the professional performance of the 3D designer.

As such, comprehensive knowledge of all the possibilities of this tool becomes crucial for people interested in improving their professional performance in their job. By enrolling in this Postgraduate Certificate, the student will learn in a complete syllabus all that Blender brings to their daily work and the advantages over other applications such as ZBrush or Maya.

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. All of this is sure to have a positive impact on the students' efforts to achieve their career goals.

The qualification 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 qualification, 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 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



*With all the knowledge you will learn in this course you will be the reference of your colleagues in Blender issues, which will increase the confidence of your organization in your job performance”*



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*This Postgraduate Certificate will make a difference in your professional career by making you an expert in the tool you have used the most throughout your working life"*

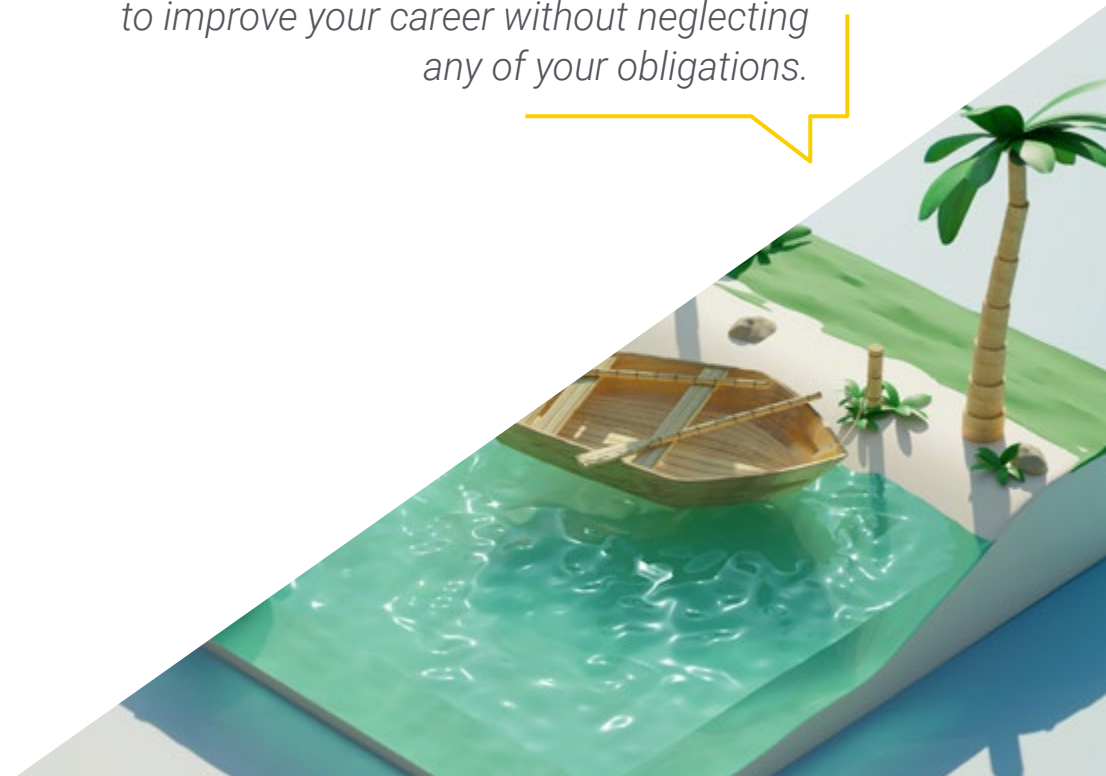
The program's teaching staff includes professionals from the sector who contribute their work experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

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 throughout the program. This will be done with the help of an innovative system of interactive videos made by renowned experts.

*The theoretical content of this program contains the latest advances in Blender modeling that will improve the final appearance of your personal projects.*

*This qualification allows you to balance your professional responsibilities with your studies, which means that you will continue to improve your career without neglecting any of your obligations.*



# 02 Objectives

This TECH program contains the most current developments in the Blender tool, aiming to instruct students in the most fundamental issues of this essential software in 3D modeling. Thanks to this Postgraduate Certificate, students will improve their workflow and personal performance, which will result in multiple opportunities for career advancement and higher paying positions.





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*TECH shares objectives with you. Join the best team of professionals and bet on a bright future in 3D modeling with Blender”*



## General Objectives

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- ◆ 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

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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

“

*The 3D industry requires professionals with a great ability to handle the most common tools on the market, Blender being the most important of them"*

03

# Course Management

This Postgraduate Certificate in Blender in the 3D Industry is led by a professional teaching team with years of experience in the use of this tool, so the student is guaranteed the best possible teaching in the most important intricacies of this software. The student will be advised at all times, being able to consult any type of doubt to the teachers regarding the syllabus or more technical questions of the Blender tool.





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*A teaching staff at the height of your demands  
awaits you in this Postgraduate Certificate in  
Blender in the 3D Industry”*



## 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

The content of this qualification 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 designer. Therefore, through real practical examples the student will see how nodes are made in Blender, mapping and shading, as well as advanced rendering of 3D models. This allows the student to gain knowledge in a contextual way, improving their own workflow even before the end of the program.





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*You will implement Blender in your day-to-day work, even in processes for which you previously used other tools that were worse or slowed down your work enormously”*

## 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 UVs in Blender
  - 1.5.1. Retopology
  - 1.5.2. UVS
  - 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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*Choose the best possible future for you and let TECH professionals, with their expertise in 3D modeling, help you achieve it"*

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.

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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.*



### 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 is the most widely used learning system in the best faculties in the world. 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 we face in the case method, an action-oriented learning method. Throughout the program, the studies 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 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.

With this methodology we have 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, markets, and financial 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.

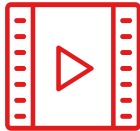
*Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.*

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.



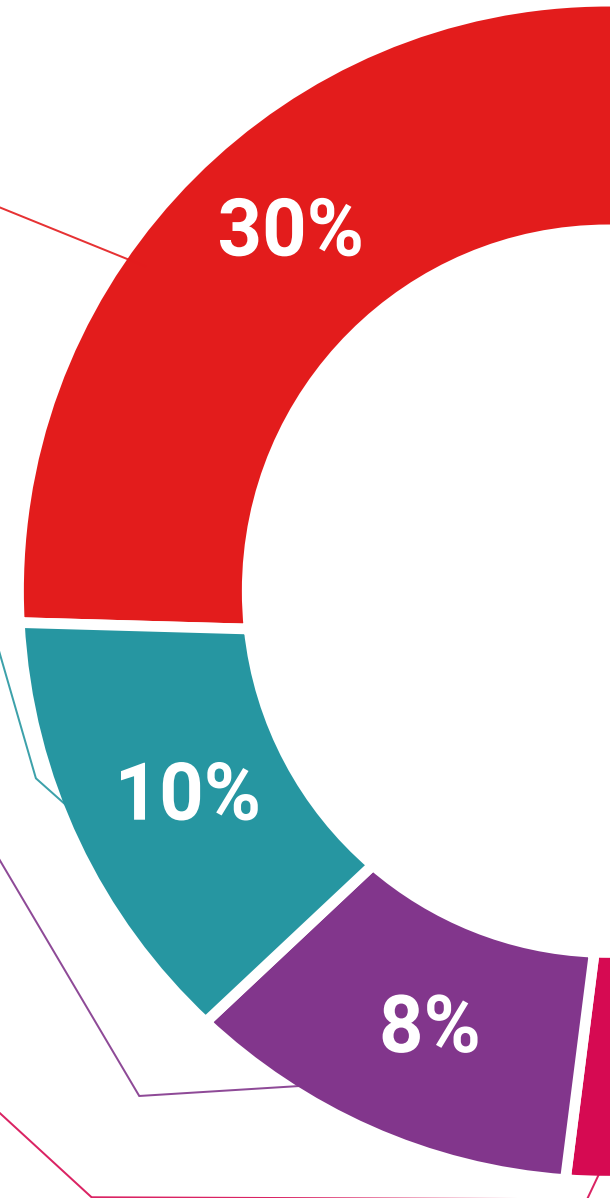
### Practising Skills and Abilities

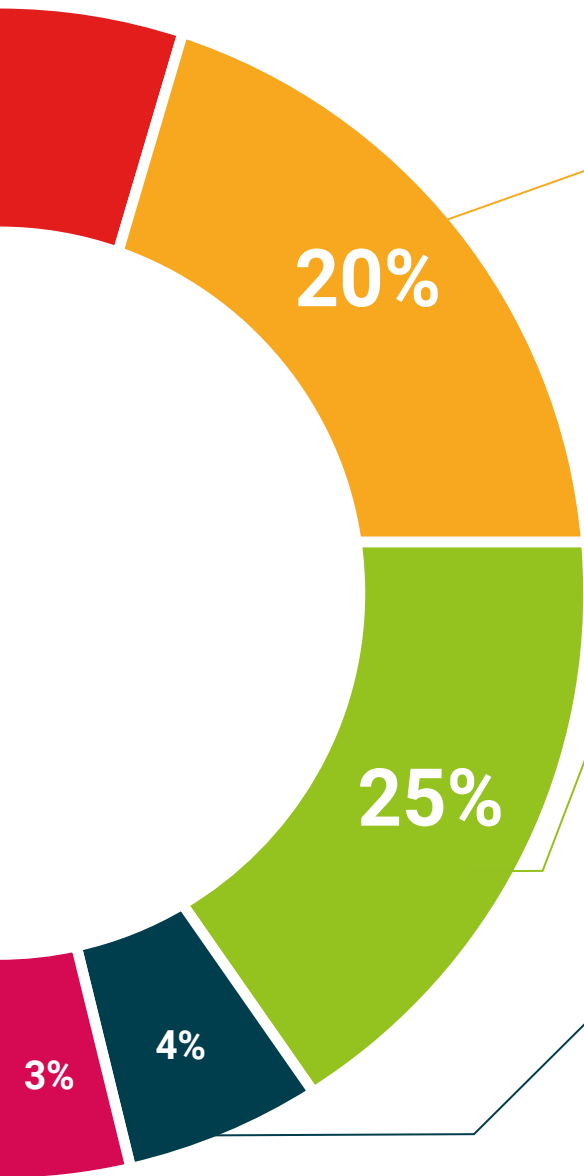
They will carry out activities to develop specific competencies and skills in each thematic area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



### 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 educational 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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