Postgraduate Certificate

Blender in the 3D Industry

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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.techtitute.com/us/videogames-design/postgraduate-certificate/blender-3d-industry

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01

Introduction

The tool par excellence to perform any kind of 3D modeling work in video games is Blender. With it you can sculpt, texture or even perform retopology to any type of 3D figure in a simple and direct way. In order to truly succeed in the 3D video game design industry, it is essential that professionals have an in-depth knowledge of this tool, as it will be their primary means of work for the vast majority of projects. This TECH qualification offers a unique opportunity for students to learn Blender's best-kept secrets and significantly improve their job performance and growth options.

You may have already used Blender, but this Postgraduate Certificate will take you to a new level of understanding of this tool"

The 3D designers in the field of video games must handle throughout their careers numerous tools such as Maya, ZBrush or Substance Painter. These complex programs sometimes consume a lot of work time that could be reduced by transferring tasks to a more versatile tool such as Blender.

With a comprehensive and complete use of Blender, the design professional can significantly lighten his workload and be more efficient, since he can make small touch-ups or basic sketches of models that he will then be able to transfer to the rest of the tools to perfect it.

For this reason, this Postgraduate Certificate includes the differences between Blender and software such as ZBrush or Maya, with which the student will better understand when to use each of these programs. Thus, by enhancing your workflow, you will be able to take on more tasks and have greater value in a competitive industry where it is possible to stand out by demonstrating efficiency and versatility.

The program is offered in a 100% online format, which allows the student the necessary flexibility to combine it with other professional work or personal responsibilities. A final project is not required either, which greatly reduces the teaching load.

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 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

This Postgraduate Certificate in Blender will give you the key to the work efficiency you need to be an outstanding and reputable 3D designer"

By learning the secrets of Blender you will understand much better the whole process of creating any 3D model, improving your own performance"

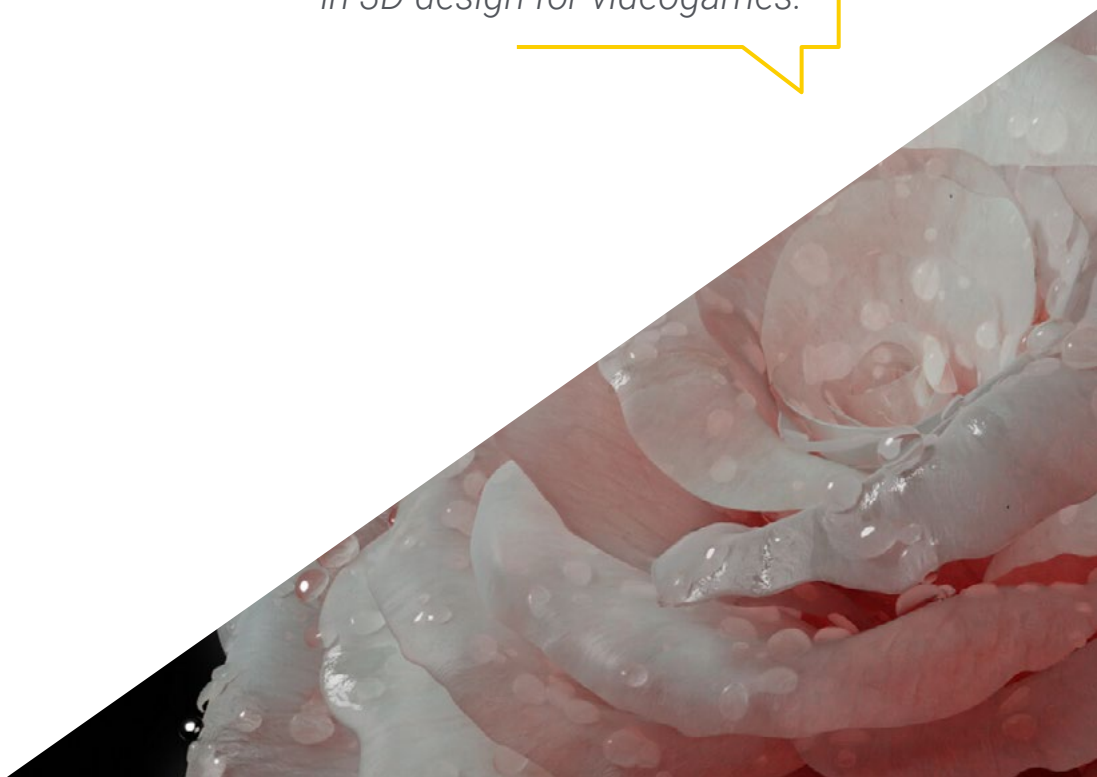
You'll get the most out of one of the most widely followed graphic tools in the world thanks to its open-source spirit.

You will be accompanied by professionals who are looking for the same thing as you: to succeed and climb professionally in 3D design for videogames.

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.



02

Objectives

The main objective of this program is to instruct students in all the ins and outs, tricks and possibilities that the Blender tool offers. Thanks to this they will be able to improve their own workflow, as they will know exactly which processes are easier to perform in Blender and which more complex ones require specialized tools. In this way, your professional value will increase, and you will then be able to apply more strongly for better jobs within the industry.

You have in your hand the possibility to grow professionally by making use of one of the most widespread industry tools"

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 modeling
- Have the skills and knowledge most in demand in the 3D industry to be able to apply for the best jobs

Specific Objectives

- 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

You will comfortably meet the objectives set thanks to your agile use of Blender in your day-to-day work"

03

Course Management

This Postgraduate Certificate is directed by a group of professionals versed in the use of all 3D design tools applied to the field of video games. Thanks to their global understanding, they know how to instruct the student correctly in the proper use of each of them, opting for the preferred option of Blender when it could simplify and speed up the work.

The best professionals in the 3D industry are at TECH. Don't miss the opportunity to specialize with them in the video game 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


SPITFIRE WHEELS - FORMULA FOUR - 99DU - TABLET SHAPE - 51MM
ROULEMENT - Qualité supérieure
ARTHUR ROCHE

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Structure and Content

This program has been structured according to the most urgent and current needs of 3D design professionals, oriented especially towards the use of Blender in the videogame industry. Thus, all the content that the students will find will help them to master this widespread software, and they will be able to incorporate it quickly into their workflow or significantly improve its use in certain tasks. Thanks to the contextualization of all content through practical examples and graphic videos, teaching becomes much more useful and even applicable before the end of the qualification.

You will learn how to use Blender in all kinds of real cases, being an expert in its use and a reference to consult in your department"

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

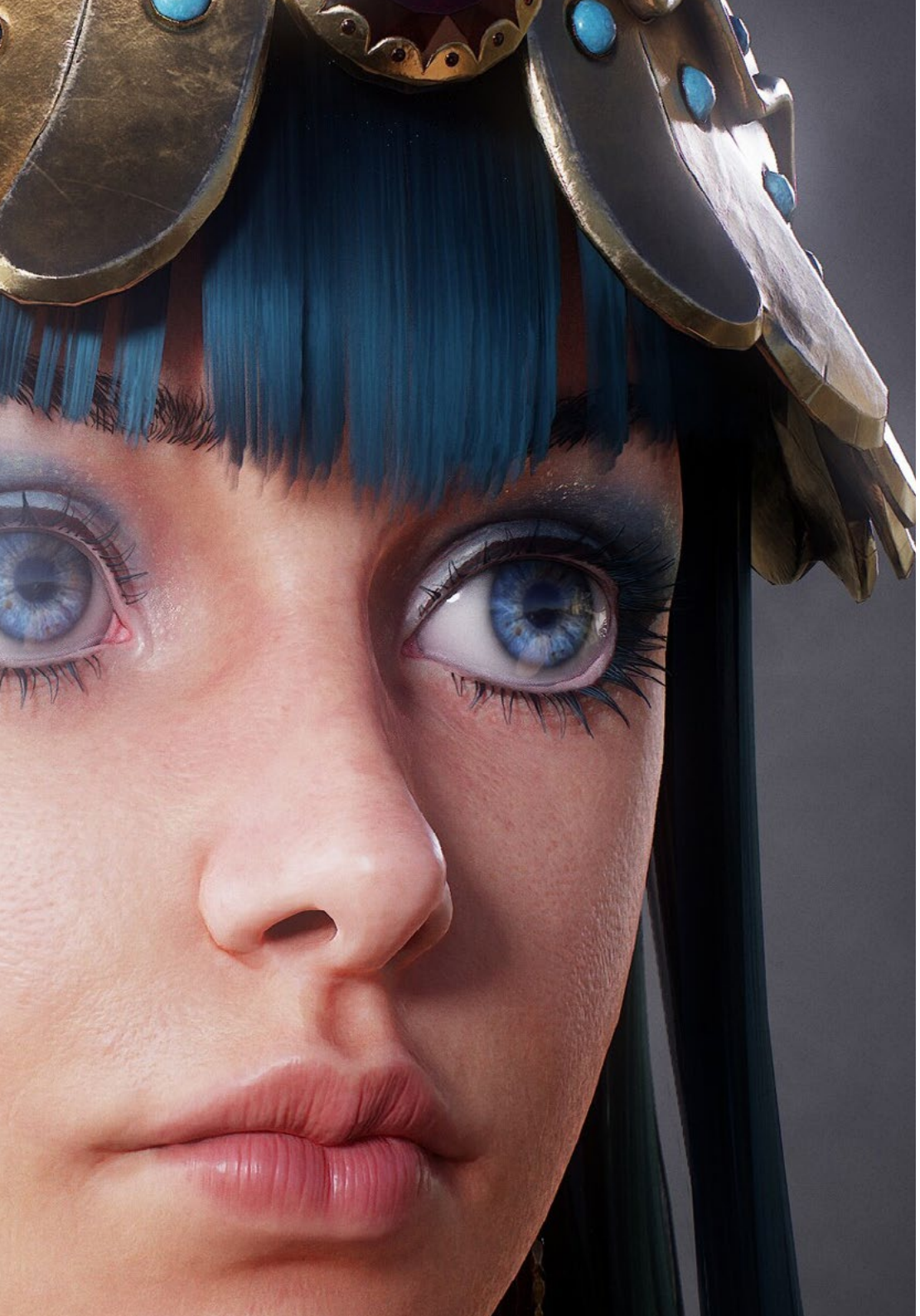
1.2. Blender Interface and Program Knowledge
- 1.2.1. Interface
- 1.2.2. Customization
- 1.2.3. Experimentation

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

The best video game industry needs committed professionals like you. Show them your worth with this Postgraduate Certificate specialized in one of the most widespread tools"

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 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

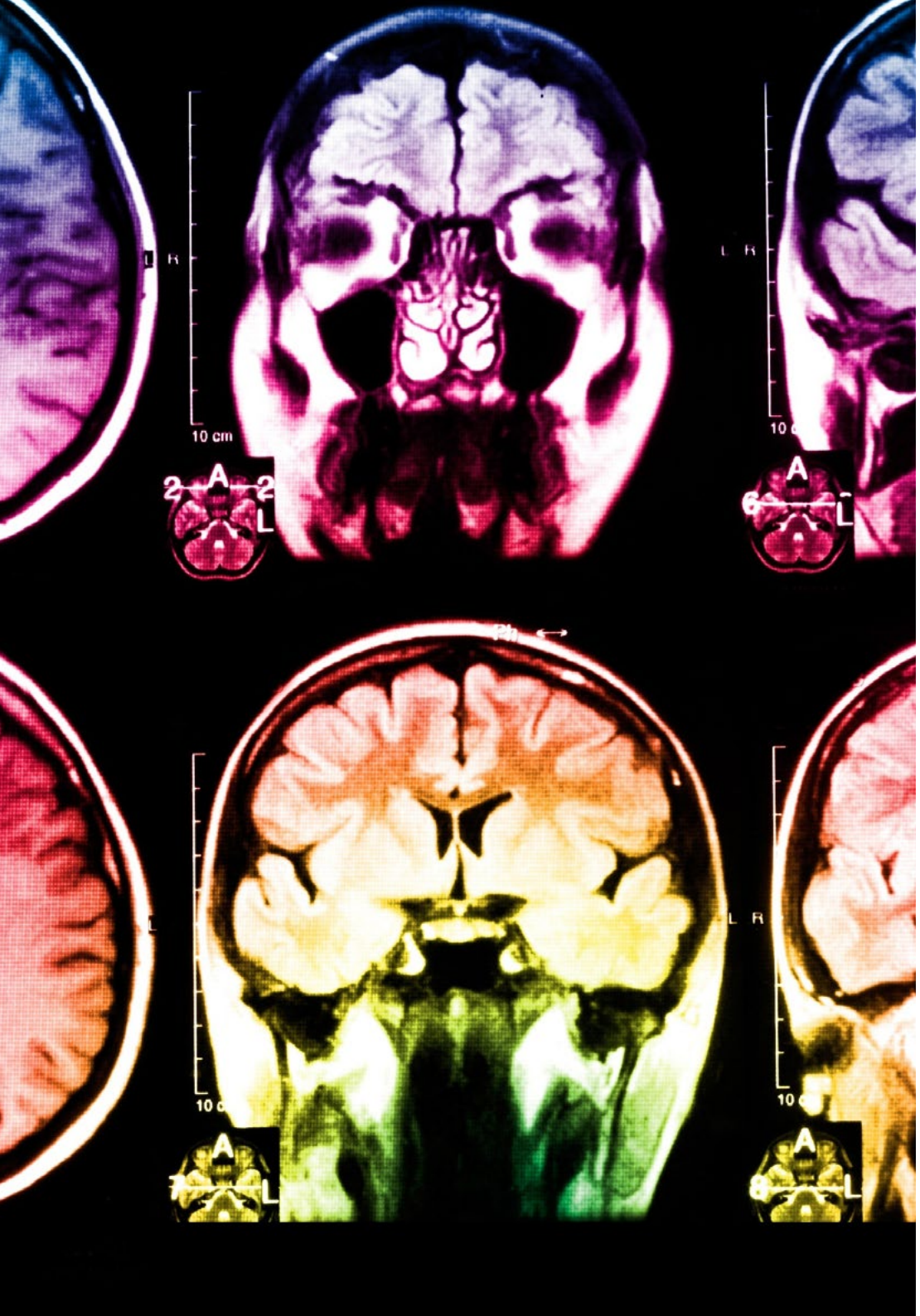
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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.

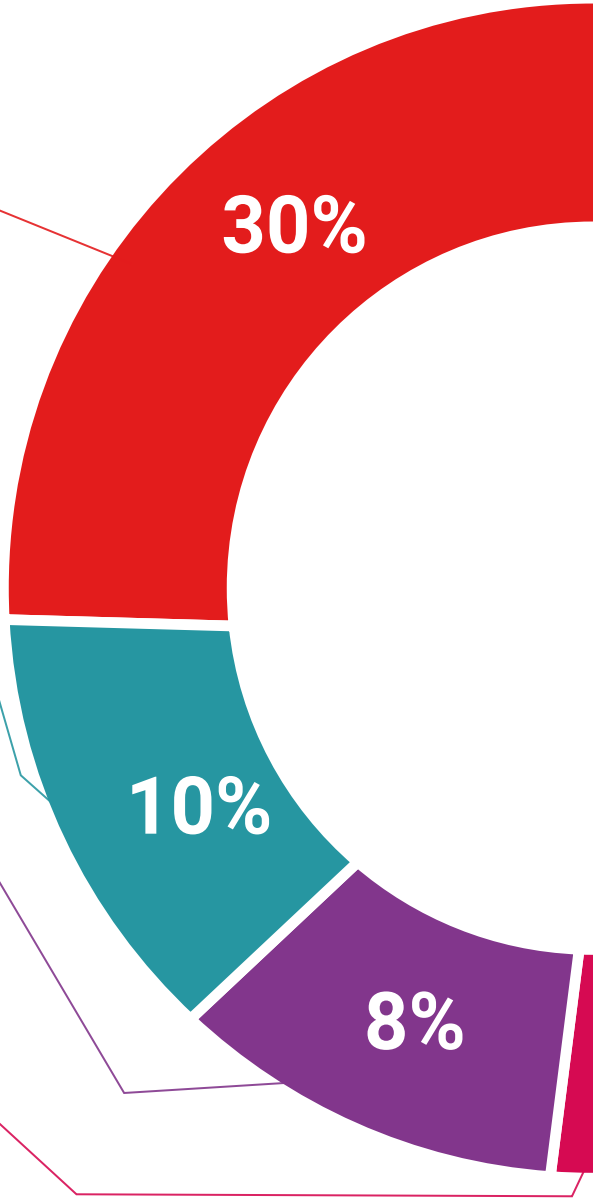
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

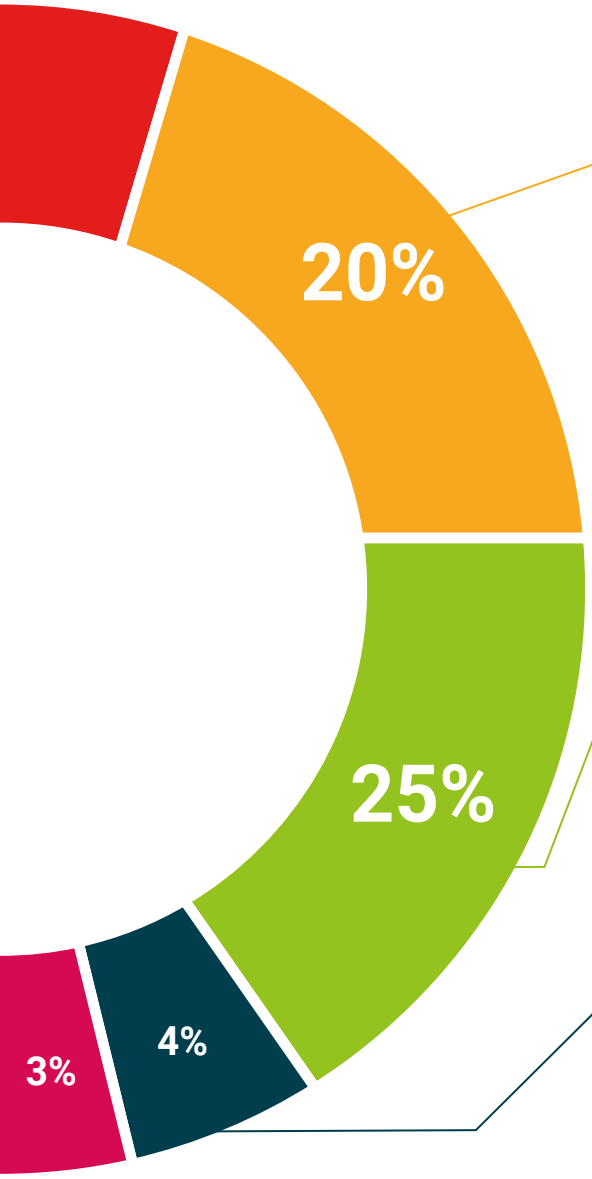
Practising Skills and Abilities

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 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.

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** diploma 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 Nº of hours: **150 h.**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Awards the following

DIPLOMA

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Blender in the 3D Industry

This is a qualification awarded by this University, equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro

Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*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.

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