

Postgraduate Certificate Rendering



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

Website: www.techtute.com/us/videogames/postgraduate-certificate/rendering

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01

Introduction

The rendering process is a common and necessary step once the design of a piece is completed, whether it's 2D or 3D designs, video or photo editing. For this reason, specific rendering software has been continuously refined over the years to create increasingly intuitive tools that offer the best results. This educational program is designed to explain some of the features of the Marmoset Toolbag software, as well as other rendering tools. Offered entirely online, all educational resources will be available on the virtual platform, allowing students to deepen their understanding of the content at their own pace.



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Learn the best tools and techniques for rendering with this fully online training”

The rendering process is almost essential in the professional path of design. Many professionals only master it at a basic level to navigate the design world with minimal obstacles, and some even start from scratch with this tool. This Postgraduate Certificate in Rendering is designed to ensure that students can fully utilize it.

The curriculum offers an in-depth exploration of the material and rendering tools in Marmoset Toolbag, a software widely used in the industry. Additionally, the course covers light positioning to create an appropriate environmental setup for the model. It also focuses on creating and positioning cameras to achieve a more interesting perspective for the final model.

Furthermore, students will work on exporting professional-level renders, deepening their basic knowledge of camera animation to create animated renders, and using the updated tools of various programs. Finally, students will learn how to create basic renders with other programs such as Iray, ZBrush, Photoshop, and Keyshot.

This fully online Postgraduate Certificate is made available to students through the virtual platform, as TECH Global University supports a teaching methodology based on re-learning. This means that students will not only learn to apply what they have learned but will also be able to progress autonomously through the content.

This **Postgraduate Certificate in Rendering** 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 rendering experts
- ♦ 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



Learn to use lighting and camera positioning to pose your 3D model with this Postgraduate Certificate.

“

Become an expert in the field and gain a competitive advantage over industry professionals with this online educational program”

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.

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 during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned experts.

Enroll now in this online educational program specialized in Rendering and the various tools that can be used in the process.

Learn to use the Marmoset Toolbag tool with this online training.



02 Objectives

To ensure that students gain a deep understanding of all the steps required to create professional-level 3D renders, this Postgraduate Certificate offers highly specialized content to achieve this goal. The curriculum is designed to transform 3D modeling professionals into true specialists in rendering. The program aims to equip students with the knowledge and skills to master and apply different tools to create realistic renders.





“

Learn to create realistic renders with this online Postgraduate Certificate, supported by a faculty specialized in the field”



General Objectives

- ♦ Gain an in-depth understanding of all the steps required to create professional-level renders in 3D modeling
- ♦ Learn and understand in detail how rendering works and how it influences the modeling process
- ♦ Master several programs focused on modeling, texturing and real time used today in the professional world
- ♦ Apply the knowledge acquired in solving modeling problems
- ♦ Expertly use the knowledge acquired to create your own projects and intelligently add them to your portfolio
- ♦ Develop the resources of each program to achieve the best effect for your modeling





Specific Objectives

- ◆ Know in depth the materials and rendering tool of the Marmoset Toolbag program, widely used by 3D modelers and sculptors.
- ◆ Understand how to position lights to create a suitable environmental setting
- ◆ Create and position cameras to achieve a perspective that makes 3D modeling more interesting.
- ◆ Export professional renderings.
- ◆ Basic knowledge of a camera animation to create an animated render to achieve more effects.
- ◆ Know the up-to-date tools of the programs
- ◆ Know how to perform a basic rendering with other programs, such as Iray, Zbrush, Photoshop and Keyshot.



Learn to use Marmoset Toolbag, Iray, ZBrush, Photoshop, and Keyshot with this Postgraduate Certificate, comfortably and at your own pace

03

Course Management

A group of highly esteemed experts has designed this curriculum, tailored to the needs of a rapidly growing industry. The faculty behind this Postgraduate Certificate consists of active professionals who have dedicated much of their careers to mastering the rendering process. Their professional practice has been developed in the best animation studios and their projects are of international stature. The student will receive the most up-to-date and in-demand knowledge in the industry.



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You will receive knowledge directly from a group of internationally renowned experts”

Management



Dr. Vidal Peig, Teresa

- ♦ Specialist in Arts and Technology (digital art, 2D, 3D, VR and AR)
- ♦ Designer and creator of 2D character sketches for mobile video games
- ♦ Designer at Sara Lee, Motos Bordy, Hebo and Full Gass
- ♦ Teacher and director of Master's Degree in Video Game Programming
- ♦ Professor at the University of Girona
- ♦ PhD in Architecture from the Polytechnic University of Catalonia
- ♦ Degree in Fine Arts from the University of Barcelona

Faculty

Ms. Jiménez Vaquero, Laura

- ♦ Organic and props modeler, grooming, texturing and shading artist
- ♦ Organic and Inorganic 3D modeler at Utopia Avatars at EGO W3RLD
- ♦ Development of 3D hard surface modeling for advertising campaigns at Kutuko Studio
- ♦ Development of organic modeling for advertising campaign at Nein Club
- ♦ Development of 3D modeling for interior design at Miltidesign
- ♦ Realization and coordination of the women's collective exhibition "Femenino plural"
- ♦ Image work for 2D animation "Naturaleza Encendida" at the Royal Botanical Garden of Madrid
- ♦ Degree in Fine Arts from the Complutense University of Madrid
- ♦ Master's Degree in Organic Modeling by Lightbox Academy



04

Structure and Content

This program covers the most basic and general concepts related to Rendering and gradually delves deeper into the specific tools used for rendering. Progressively, techniques are explored in detail, and students are taught, through practical cases, how to make the most of each tool. Thanks to its online format, students have access to the material as many times as needed, allowing them to analyze the different stages involved in achieving high-quality 3D image rendering.





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Progressively, you will acquire knowledge of the best tools and texturing techniques”

Module 1: Rendering

- 1.1. Marmoset Toolbag
 - 1.1.1. Geometry Preparation and FBX Formatting
 - 1.1.2. Basic Concepts Importance of Geometry
 - 1.1.3. Links and Materials
- 1.2. Marmoset Toolbag. Sky
 - 1.2.1. Environmental Setting
 - 1.2.2. Lighting Points
 - 1.2.3. Lights outside Sky
- 1.3. Marmoset Toolbag. Details
 - 1.3.1. Shade and Pose
 - 1.3.2. Procedural Materials
 - 1.3.3. Channels and Reflection
- 1.4. Real-Time Rendering with Marmoset Toolbag
 - 1.4.1. Image Export with Transparency
 - 1.4.2. Interactive Export. Marmoset Viewer
 - 1.4.3. Film Export
- 1.5. Marmoset Toolbag. Animated Cameras
 - 1.5.1. Model Preparation
 - 1.5.2. Cameras
 - 1.5.3. Main Camera. Interactive Animation
- 1.6. Marmoset Toolbag. Advanced Animated Cameras
 - 1.6.1. Adding New Cameras
 - 1.6.2. Parametric Animation
 - 1.6.3. Final Details
- 1.7. Marmoset Toolbag 4. Ray Trace
 - 1.7.1. Subsurface
 - 1.7.2. Ray Tracing
 - 1.7.3. Adding Cameras and Map Rendering





- 1.8. Substance Painter Rendering IRay
 - 1.8.1. IRay Settings
 - 1.8.2. Viewer Settings
 - 1.8.3. Display Settings
- 1.9. Rendering with ZBRush
 - 1.9.1. Material Settings
 - 1.9.2. BPR Render and Lights
 - 1.9.3. BPR Masks and Final Rendering in Photoshop
- 1.10. Keyshot Rendering
 - 1.10.1. From Zbrush to Keyshot
 - 1.10.2. Materials and Lighting
 - 1.10.3. Photoshop Compositing and Final Image

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In just 6 weeks, you will learn to successfully render every project you need, entirely online, comfortably and easily”

05

Study Methodology

TECH Euromed University is the first in the world to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This innovative pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and moving away from more conventional methodologies.



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*TECH Euromed University will
prepare you to face new challenges
in uncertain environments and
achieve success in your career”*

The student: the priority of all TECH Euromed University programs

In TECH Euromed University's study methodology, the student is the main protagonist. The teaching tools for each program have been carefully selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions on the labor market.

With TECH Euromed University's asynchronous educational model, students have the flexibility to choose when and how much time they dedicate to studying, as well as how they establish their routines, and all this from the comfort of their preferred electronic device. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities can be completed at a time that is convenient for the student, allowing them to decide when and where they want to study.

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At TECH Euromed University you will NOT have live classes (which you might not be able to attend)”



The most comprehensive study plans at the international

TECH Euromed University is distinguished by offering the most complete academic itineraries on the higher education landscape. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs enable students to keep up with market changes and acquire the skills most valued by employers. As a result, those who complete their studies at TECH Euromed University receive a well-rounded education that provides them with a significant competitive edge to advance their careers.

Moreover, they can access their studies from any device-PC, tablet, or smartphone.

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TECH Euromed University's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want”

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH Euromed University. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



Relearning Methodology

At TECH Euromed University, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH Euromed University offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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



A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH Euromed University focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH Euromed University students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH Euromed University graduates.

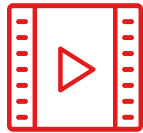
The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH Euromed University is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.



As such, the best educational materials, thoroughly prepared, will be available in this program:



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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



Interactive Summaries

We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

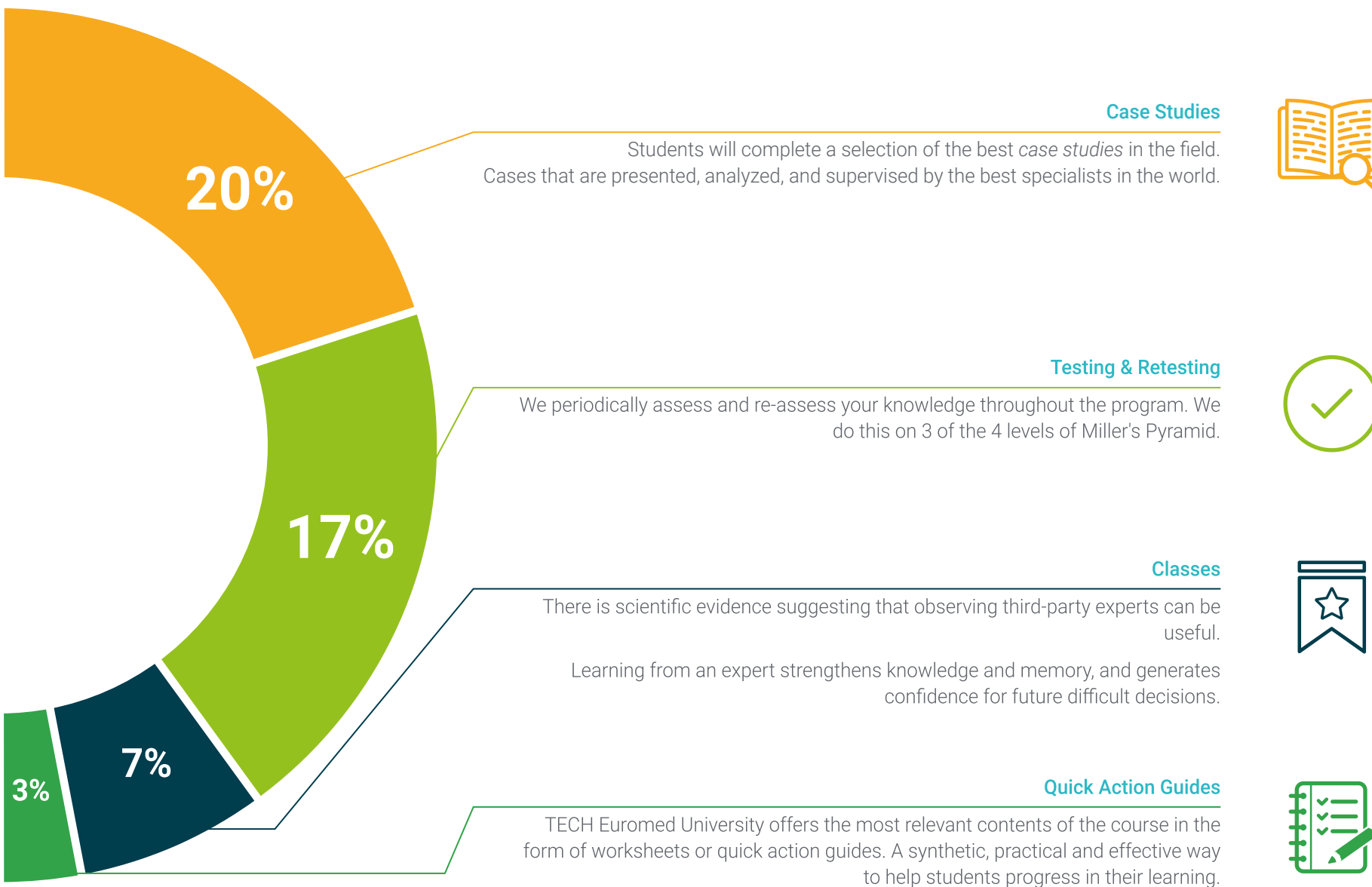
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





06 Certificate

The Postgraduate Certificate in Rendering guarantees students, in addition to the most rigorous and up-to-date education, access to a diploma for the Postgraduate Certificate issued by TECH Global University.



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

This private qualification will allow you to obtain a **Postgraduate Certificate in Rendering** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

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Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**





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