

# Postgraduate Certificate

## VRAY Rendering in 3DS Max



## Postgraduate Certificate VRAY Rendering in 3DS Max

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

Website: [www.techtute.com/in/information-technology/postgraduate-certificate/vray-rendering-3ds-max](http://www.techtute.com/in/information-technology/postgraduate-certificate/vray-rendering-3ds-max)

# 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

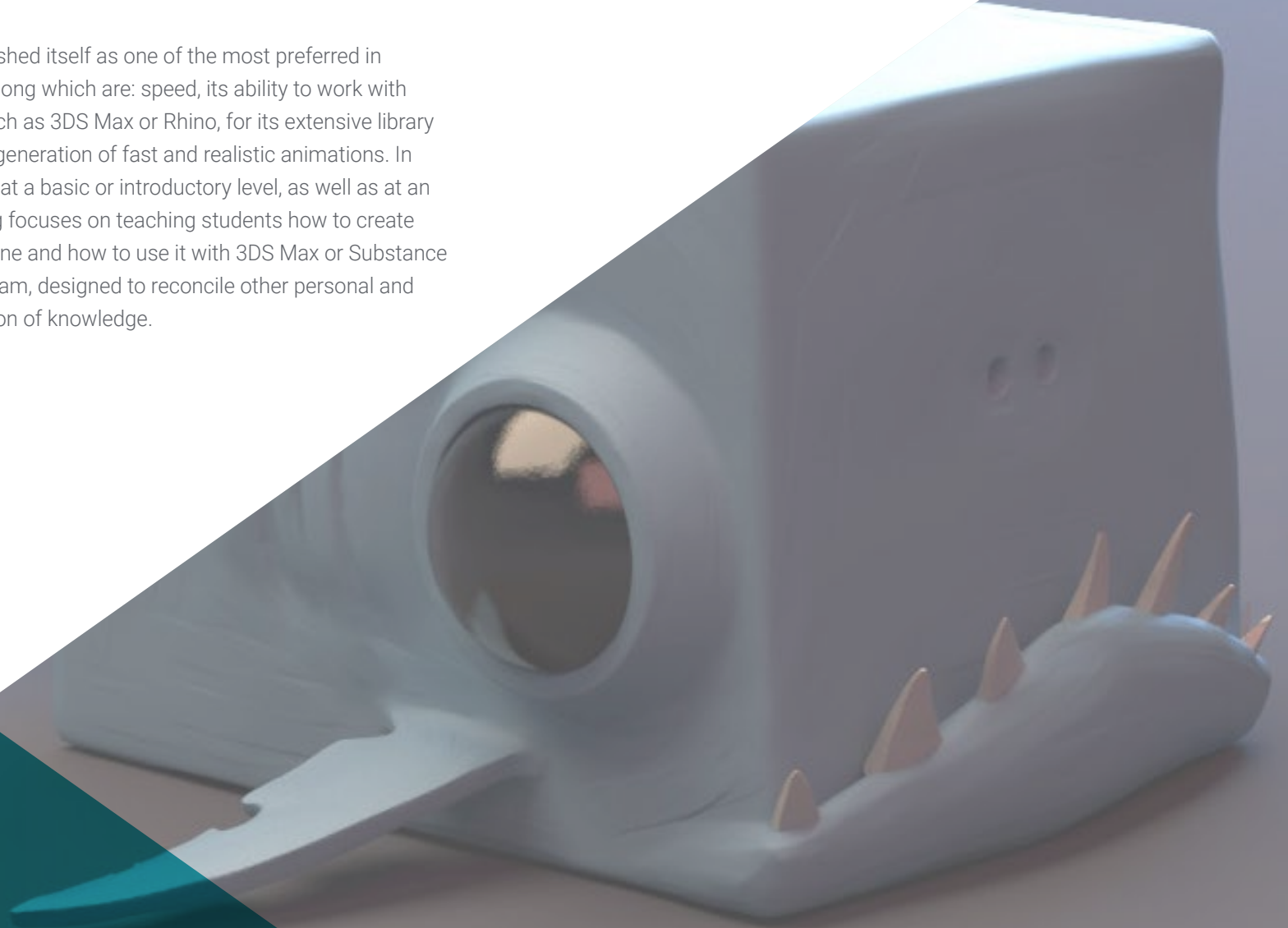
---

*p. 28*

# 01

# Introduction

The VRAY rendering engine has established itself as one of the most preferred in the industry for its marked benefits, among which are: speed, its ability to work with different and also leading programs such as 3DS Max or Rhino, for its extensive library of resources and because it offers the generation of fast and realistic animations. In addition, its design allows it to be used at a basic or introductory level, as well as at an expert and advanced level. This training focuses on teaching students how to create hyper-realistic renderings with this engine and how to use it with 3DS Max or Substance Painter. A fully online educational program, designed to reconcile other personal and professional projects with the acquisition of knowledge.



“

*Learn how to create hyper-realistic renders with VRAY engine, as well as all its utilities with this totally online training"*

The rendering process is an indispensable action in three-dimensional modeling. Images or modeling are made more realistic, are not too heavy and do not lose quality. The VRAY rendering engine, for its multiple and proven benefits, has established itself as a favorite in the industry and can be used in combination with other softwares such as 3DS Max, Rhino or Substance Painter.

This Postgraduate Certificate in VRAY Rendering in 3DS Max is designed to know in depth this engine assigned to 3DS Max, to configure the render options to assign the desired render engine and to know the VRAY materials to work with them through nodes. In addition to that, the curriculum covers how to migrate textures created in Substance Painter to VRAY and how to set up the scene lighting with this engine.

In the same way, the student will acquire skills and abilities to give more detail to the models without the need to change or add geometry, learn to intelligently position the model and the camera to create an interesting scene, as well as to make static and animated renders of the same design.

In a completely online format, this Postgraduate Certificate designed by TECH, will provide all the pedagogical material on the virtual platform and constant advice from the teaching staff. In addition, the qualification is direct, so it will not be necessary to submit a project at the end of the training in order to be accredited. The teaching methodology is based on Relearning and Learning by doing, which guarantees autonomous learning at the student's own speed and pace.

This **Postgraduate Certificate in VRAY Rendering in 3DS Max** contains the most complete and up-to-date educational program on the market. The most important features include:

- ♦ The development of case studies presented by experts in VRAY Rendering in 3DS Max
- ♦ The graphic, schematic, and eminently 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



*The Postgraduate Certificate in VRAY Rendering in 3DS Max has a direct degree system, so it is not necessary to submit a final project for its accreditation"*

“

*Make VRAY rendering in 3DS Max no longer a secret for you: enroll in this complete educational program that will give you the keys to render like a real expert"*

The program's teaching staff includes professionals from 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.

The design of this Program focuses on Problem-Based Learning, by means of which the professional will have to try to solve the different situations of Professional Practice, which will be posed throughout the Program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*TECH develops online training courses to make it easier to combine the updating of knowledge with other personal or professional projects.*

*Designed with Relearning methodology, advance at your own pace in the content and acquire the latest knowledge in VRAY Rendering in 3DS Max.*



# 02 Objectives

The student will get to know in depth all the steps for VRAY Rendering in 3DS Max, with a skill of a professional. This Postgraduate Certificate is designed for students to acquire expert level skills in the elaboration of hyperrealistic renderings with this tool. The knowledge is acquired progressively, as the content delves into the functionalities of the VRAY engine, its materials and applications with other softwares such as 3DS Max or Substance Painter.



“

*Do you want to learn how to make static and animated renders with your model? Enroll now in this online Postgraduate Certificate"*



## General Objectives

---

- ♦ Know in depth all the steps for rendering a 3D modelling akin to that of a professional's
- ♦ Know and understand in detail how rendering engines work and influence modeling
- ♦ Master various programs and engines focused on modeling, texturing and real-time used today in the professional world
- ♦ Apply the knowledge acquired in the resolution of problems of a modeling
- ♦ 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

---

- ◆ In-depth knowledge of the VRAY engine assigned to the 3DS Max program
- ◆ Configure the rendering options to assign the desired rendering engine
- ◆ Know VRAY's own materials and work with them through nodes
- ◆ Migrate textures created in Substance Painter to VRAY engine
- ◆ Set up the lighting of our VRAY scene
- ◆ Give more details to our model without the need to change or add geometry
- ◆ Intelligently position our model and camera to create an interesting scene
- ◆ Perform static and animated renders of our model

“

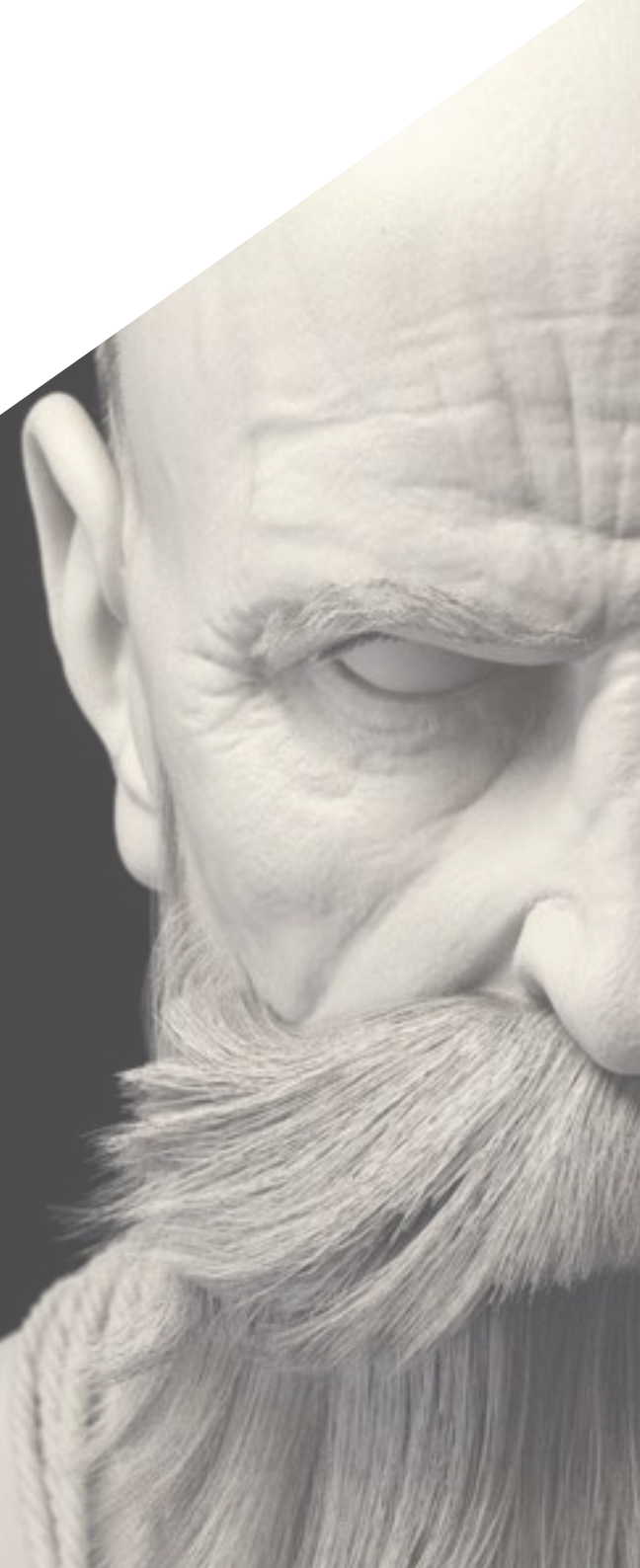
*Develop the best skills and abilities by setting up lighting and generating more details in your modeling thanks to this educational plan"*



03

# Course Management

A select faculty of experts in the field of three-dimensional modeling has designed this educational program. They are professionals of the highest level and the most interested in providing the most current content in the design industry. Thanks to the content they have developed, students will learn about the main tools to achieve optimal rendering and develop skills capable of creating great projects.





“

*Thanks to the content provided by the teaching staff of this training, you will obtain the most up-to-date content in the design industry"*

## Management



### Ms. Sanches Lalaguna, Ana

- 3D Designer at Lalaguna Studio
- 3D Generalist at NeuroDigital Technologies
- Freelance video game figure modeler
- 3D Artist and Narrative Responsible in the videogame "A Rising Bond" (InBreak Studios)
- Master's Degree in Videogame Art and Design (U-tad)
- Diploma in 2D and 3D Animation Filmmaking (ESDIP)
- Winner of the Best Narrative award and nominated for Best Game and Best Art at the PlayStation Awards



# 04

## Structure and Content

The content of this Postgraduate Certificate, perfectly structured to achieve an autonomous and progressive learning by the students, focuses on consolidating the theoretical knowledge and deepening the practical part. The tools that the VRAY engine has will be analyzed and taught in this training, so that the student can know and understand in detail how this engine works and how it influences the modeling. In addition to achieving mastery of various programs and engines focused on modeling, texturing and real time used today in the professional world.





“

*TECH develops the content of its training to achieve autonomous and progressive learning by students”*

## Module 1. Rendering with V-Ray Engine in 3DS Max

- 1.1. V-Ray Render Engine Assignment
  - 1.1.1. Preparation of the Rendering Space
  - 1.1.2. Render Setup Options and Assign Render
  - 1.1.3. Optimize Rendering Time
- 1.2. Lighting and Light Creation
  - 1.2.1. 3-Point Lighting
  - 1.2.2. Light Setup
  - 1.2.3. Render Region
- 1.3. Creation and Application of Materials
  - 1.3.1. V-Ray Materials
  - 1.3.2. V-Ray Materials Settings
  - 1.3.3. Self-Illumination
- 1.4. From Substance Painter to V-Ray
  - 1.4.1. Connect Nodes and Material Settings
  - 1.4.2. Export Presets
  - 1.4.3. Set Up Smart Material in V-Ray
- 1.5. Details and Positioning in the Scene
  - 1.5.1. Application of Shades According to the Position of the Model
  - 1.5.2. Adjust Model and Silhouette
  - 1.5.3. Metallic Base
- 1.6. Surface Rounding
  - 1.6.1. V-RayEdgeTex
  - 1.6.2. Functionality and Setup
  - 1.6.3. Rendering With and Without Rounding
- 1.7. Field of View
  - 1.7.1. Camera and Shot
  - 1.7.2. Camera Aperture
  - 1.7.3. Field of View





- 1.8. Ambient Occlusion and Global Illumination
  - 1.8.1. GI and Render Elements
  - 1.8.2. VRayExtraTex and VrayDirt
  - 1.8.3. Global Illumination Multiplier
- 1.9. Rendering of a Static Frame
  - 1.9.1. Adjust Render Values
  - 1.9.2. Save Final Render
  - 1.9.3. Composition of Ambient Occlusion
- 1.10. Rendering of a Sequence
  - 1.10.1. Camera Animation
  - 1.10.2. Rendering Options for Sequence
  - 1.10.3. Frame Assembly for the Sequence



*Enroll in this Postgraduate Certificate designed by TECH so that in six weeks you will be a true expert in VRAY Rendering in 3DS Max"*

# 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"*

### At TECH we use the Case Method

Our program offers a revolutionary method of skills and knowledge development. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

“

*At TECH, you will experience a way of learning that is shaking the foundations of traditional universities around the world"*



*We are the first online university to combine Harvard Business School case studies with a 100% online learning system based on repetition.*



*The student will learn, through collaborative activities and real cases, how to solve complex situations in real business environments.*

### A learning method that is different and innovative

This intensive Information Technology program at TECH Technological University prepares you to face all the challenges in this field, both nationally and internationally. We are committed to promoting your personal and professional growth, the best way to strive for success, that is why at TECH Technological University you will use Harvard *case studies*, with which we have a strategic agreement that allows us, to offer you material from the best university in the world.

“*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

Our university is the first in the world to combine Harvard University case studies with a 100%-online learning system based on repetition, which combines different teaching elements in each lesson.

We enhance Harvard case studies 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 university 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 relearn). 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.



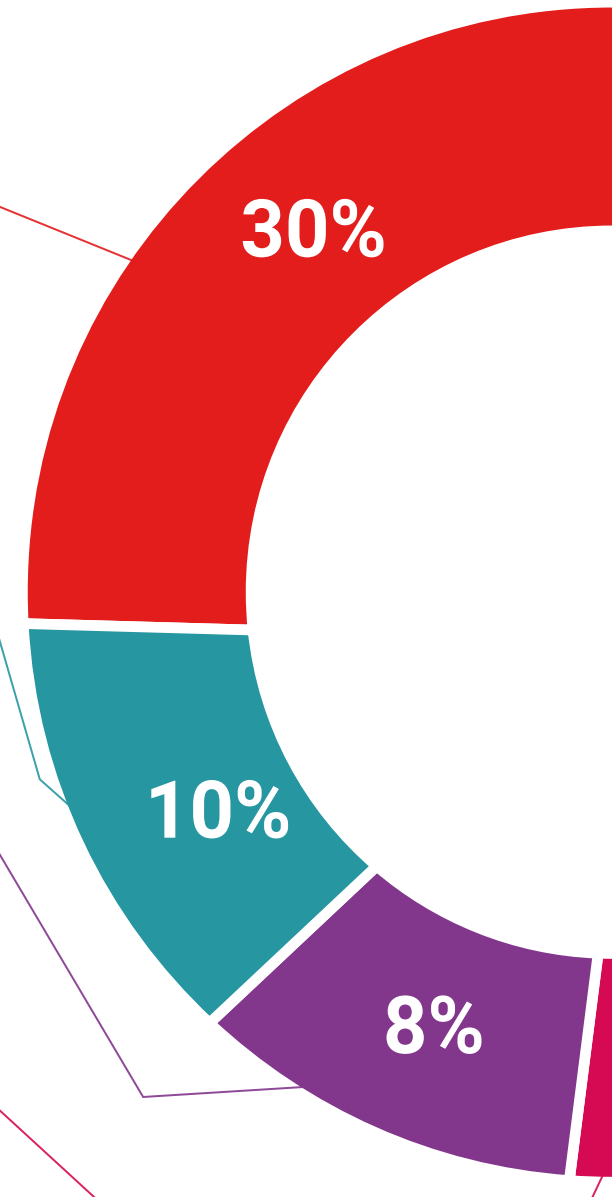
#### Practising Skills and Abilities

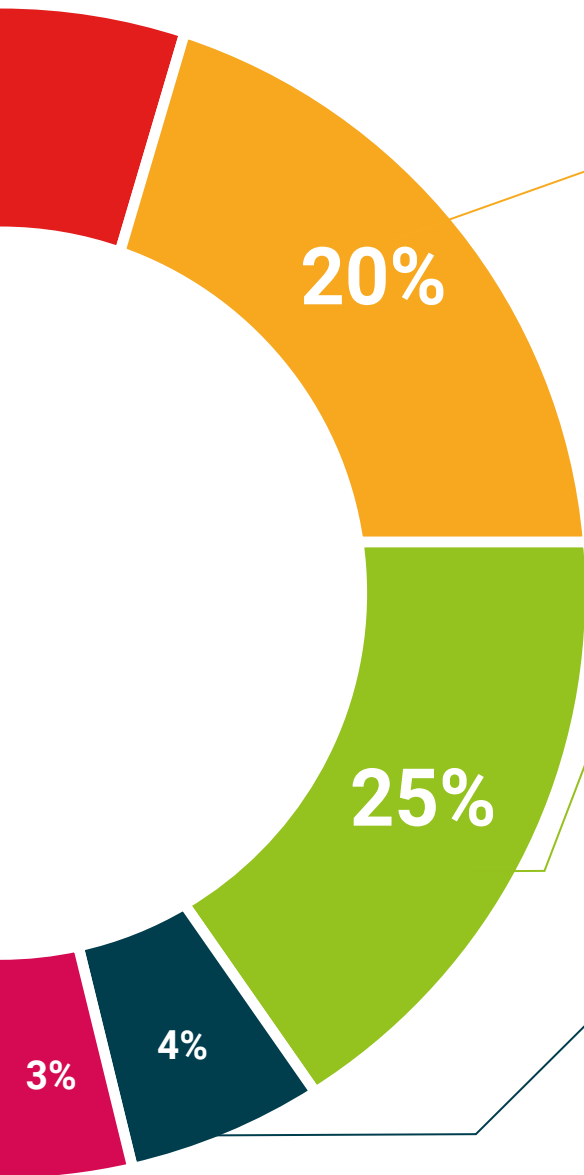
They will carry out activities to develop specific competencies and skills in each thematic area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization we live in.



#### 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

They will complete a selection of the best case studies in the field used at Harvard. Cases that are presented, analyzed, and supervised by the best senior management 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 multimedia content presentation training Exclusive system 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 your goals.



# 06 Certificate

The Postgraduate Certificate in VRAY Rendering in 3DS Max guarantees, in addition to the most rigorous and up-to-date training, access to a certificate issued by TECH Technological University.



“

*Successfully complete this training program and receive your university certificate without travel or laborious paperwork"*

This **Postgraduate Certificate in VRAY Rendering in 3DS Max** 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 certificate issued by **TECH Technological University** will reflect the qualification obtained through the Postgraduate Certificate and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Certificate in VRAY Rendering in 3DS Max**

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.



## Postgraduate Certificate VRAY Rendering in 3DS Max

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

# Postgraduate Certificate

## VRAY Rendering in 3DS Max

