

Postgraduate Certificate Texturing



Postgraduate Certificate Texturing

- » 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/texturing



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01

Introduction

The texturing process in 3D modeling involves more than just selecting and applying a material to a project; it also requires measuring the degrees of light reflection and refraction to achieve the desired finish. Therefore, it is a complex technique that requires a certain level of expertise to achieve the best results. As the industry continues to evolve, professionals who can navigate this field with ease are increasingly in demand. This is especially true in animation and video game design, where these techniques have become essential for creating high-quality productions.



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The demand for professionals who master texturing techniques in the video game design field is growing, as these skills are essential to achieve high-quality finishes for 3D models”

Designed to provide an introductory experience into the world of 3D model texturing, this Postgraduate Certificate gives you the key tools to familiarize yourself with this process in just 6 weeks.

This educational plan allows you to learn and understand all types of texture maps and their application in modeling, as well as the various types of materials available today, and how they function—whether creating them from scratch or modifying existing ones.

Additionally, the course covers the generation and understanding of mapping coordinates for a 3D model, which is essential for subsequent texturing work, and the assignment of object IDs to work more efficiently with textures.

The training offered by TECH Global University is always focused on the development of both theoretical and practical skills. For this reason, the curriculum also includes working with high and low-resolution models, as well as converting between them to optimize the model while preserving the same level of detail. The course further explores texture creation for 3D models using various programs.

This educational plan is designed for anyone with internet access and a desire to learn. With a completely online format, this course offers all its multimedia content through the virtual platform, accessible without restrictions throughout the course duration.

This **Postgraduate Certificate in Texturing** contains the most complete and up-to-date program on the market. The most important features include:

- ♦ The development of case studies presented by experts in three-dimensional modeling texturing
- ♦ 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



Through this study program you will learn and understand all the texture maps and their application in modeling"

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This Postgraduate Certificate will provide you with the knowledge and understanding necessary to delve into the creation of textures from scratch and their application using different programs”

Learn to generate and compress mapping coordinates for a 3D model for later texturing work.

Learn to measure the degrees of light reflection and refraction to achieve the desired finish.

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.

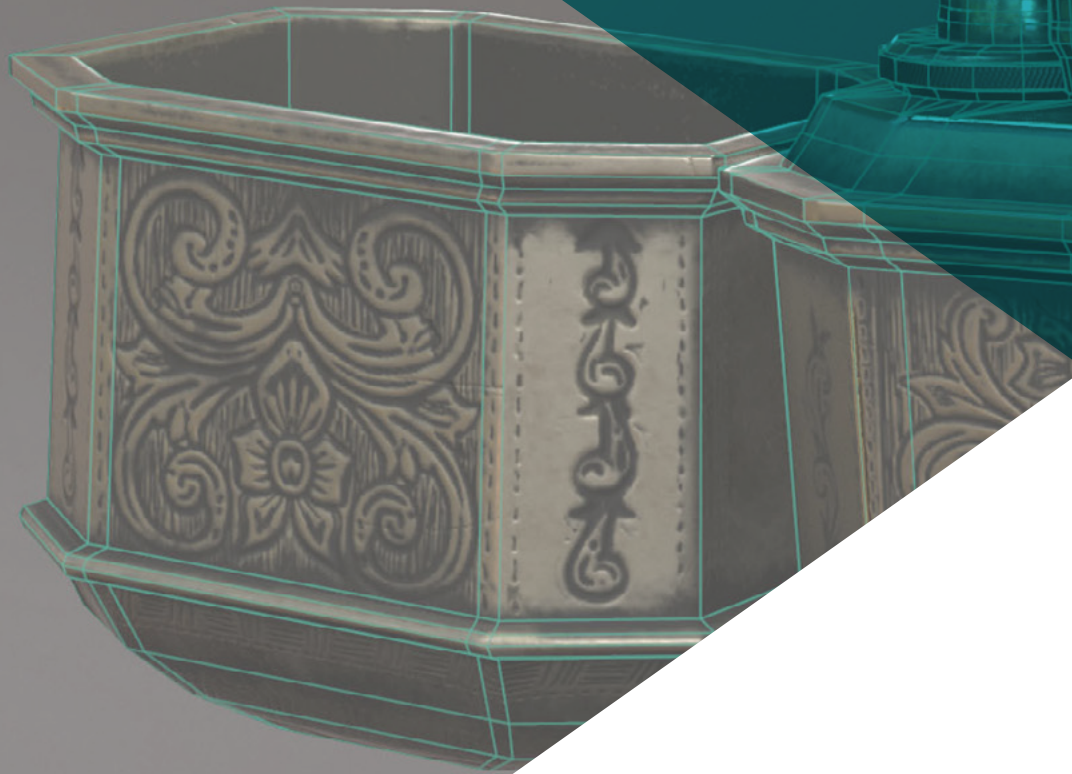


02

Objectives

This training has been developed to ensure that, upon completion, users will clearly understand that the primary requirement is to know and comprehend texture maps and existing materials in order to create them from scratch and apply them to their projects. For this reason, this Postgraduate Certificate focuses on meeting that requirement. The course direction has outlined a series of fundamental topics to master this subject. Additionally, great emphasis is placed on the fact that this specialized training opens up job opportunities and allows for a professional career shift, as students acquire knowledge in highly specific and in-demand areas of the industry.





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The Postgraduate Certificate in Texturing is designed to ensure that students understand and master texture maps and existing materials”



General Objectives

- ♦ Gain a deep understanding of all the steps required to create a professional-level 3D model
- ♦ Understand in detail how textures work and how they influence modeling
- ♦ Master various programs focused on modeling, texturing, and real-time applications currently used in the professional world
- ♦ Apply the acquired knowledge to solve modeling problems effectively
- ♦ Expertly use the acquired skills to create personal projects and smartly add them to your portfolio
- ♦ Develop the resources of each program to achieve the best effects for your modeling work





Specific Objectives

- ◆ Understand and master all texture maps and their application to modeling
- ◆ Learn about the different types of materials available today and how they work, enabling you to create a new one from scratch or modify an existing one
- ◆ Generate and understand mapping coordinates for a 3D model for later texturing work
- ◆ Assign Object IDs to work more efficiently with textures
- ◆ Work with high- to low-resolution models and vice versa to optimize the model while maintaining the same level of detail
- ◆ Create textures for 3D models using various programs



Reorient your professional career with this Postgraduate Certificate and become an expert in 3D modeling texturing"

03

Course Management

This program is designed following the guidelines of a group of experts of the highest prestige, composed of active professionals who have dedicated a large part of their careers to develop their texturing technique, continuing at the forefront of the sector and developing their professional practice in the best animation studios and projects of international stature. Therefore, through the content presented by the faculty and the various teaching materials they have developed, the student will receive the most current and requested knowledge of this industry.



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The student will receive the most current and requested knowledge of this industry thanks to the design that the teaching team has devised”

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



04

Structure and Content

This Postgraduate Certificate is structured into 10 sections, designed to make the student a true professional in the field of texturing for 3D modeling. Each section includes both theoretical and practical concepts. While the initial sections focus more on conceptualization, the subsequent ones delve deeper into mapping coordinates, object IDs, and then introduce texturing and materials in the programs 3ds Max, Photoshop, and ZBrush.



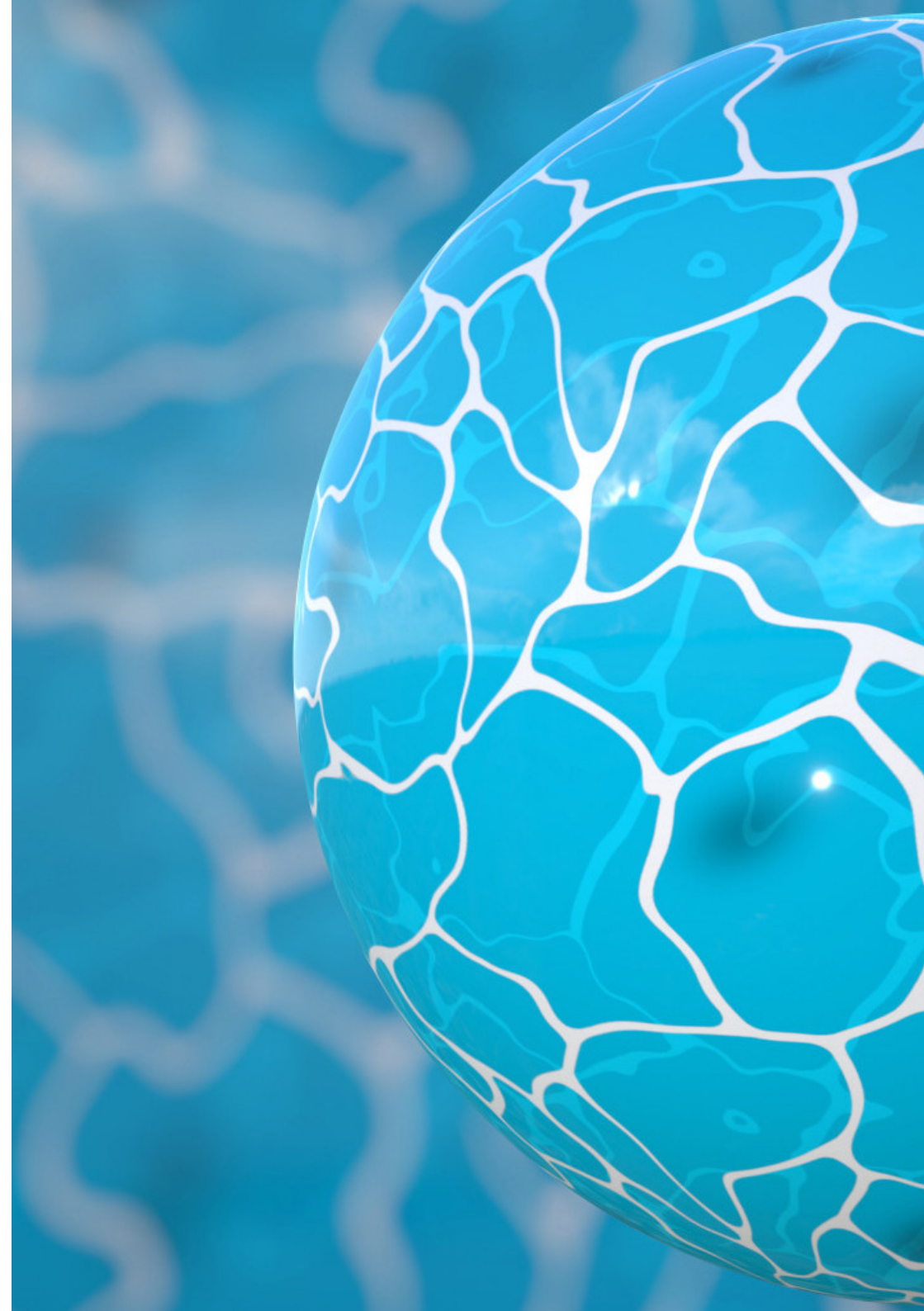


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This syllabus provides an in-depth exploration of the texturing and material options in the programs 3ds Max, Photoshop, and ZBrush”

Module 1. Texturing

- 1.1. Texturing
 - 1.1.1. Baking
 - 1.1.2. PBR. Physically-Based Rendering
 - 1.1.3. Basic and Composite Texturing
 - 1.1.4. Tileable Textures
- 1.2. Mapping Coordinates. UV
 - 1.2.1. Unwrap and Seams
 - 1.2.2. UVW Editor
 - 1.2.3. Editor Options
- 1.3. Object ID
 - 1.3.1. Assigning IDs and Functionality
 - 1.3.2. Multi-Subobject Material
 - 1.3.3. Applying Materials as Instances
- 1.4. HighPoly and Normal Baking in 3ds Max
 - 1.4.1. HighPoly and LowPoly
 - 1.4.2. Projection Settings for Normal Map Baking
 - 1.4.3. Normal Map Texture Baking
 - 1.4.4. Normal Map Adjustments
- 1.5. Baking Other Materials in 3ds Max
 - 1.5.1. Diffuse Map Baking and Application
 - 1.5.2. Composite Material
 - 1.5.3. Mask Adjustment
- 1.6. Retopology in 3ds Max
 - 1.6.1. Retopology Tools
 - 1.6.2. Retopology with Graphite Tool
 - 1.6.3. Retopology Settings



- 1.7. Texturing with 3ds Max
 - 1.7.1. Material Properties
 - 1.7.2. Texture Baking
 - 1.7.3. Textural Toasting. Complete Map, Normal Map, and AO Map
- 1.8. Texturing with Photoshop
 - 1.8.1. Coordinate Template
 - 1.8.2. Adding Details in Photoshop and Reimporting Template with Textures
 - 1.8.3. Tile a Texture
 - 1.8.4. Create Normal Map
- 1.9. Mapping Coordinates with ZBrush
 - 1.9.1. UV Master
 - 1.9.2. Control Painting
 - 1.9.3. Unwrap and Flatten
- 1.10. Texturing with Zbrush
 - 1.10.1. Painting Mode
 - 1.10.2. Noise Maker
 - 1.10.3. Image Projection



In just 10 sections, you will gain comprehensive knowledge of texturing in 3D modeling”

05 Study Methodology

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

This disruptive 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 leaving aside more conventional methodologies.



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

The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

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



The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. 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 allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

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TECH'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. 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, 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 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 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 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 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 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.

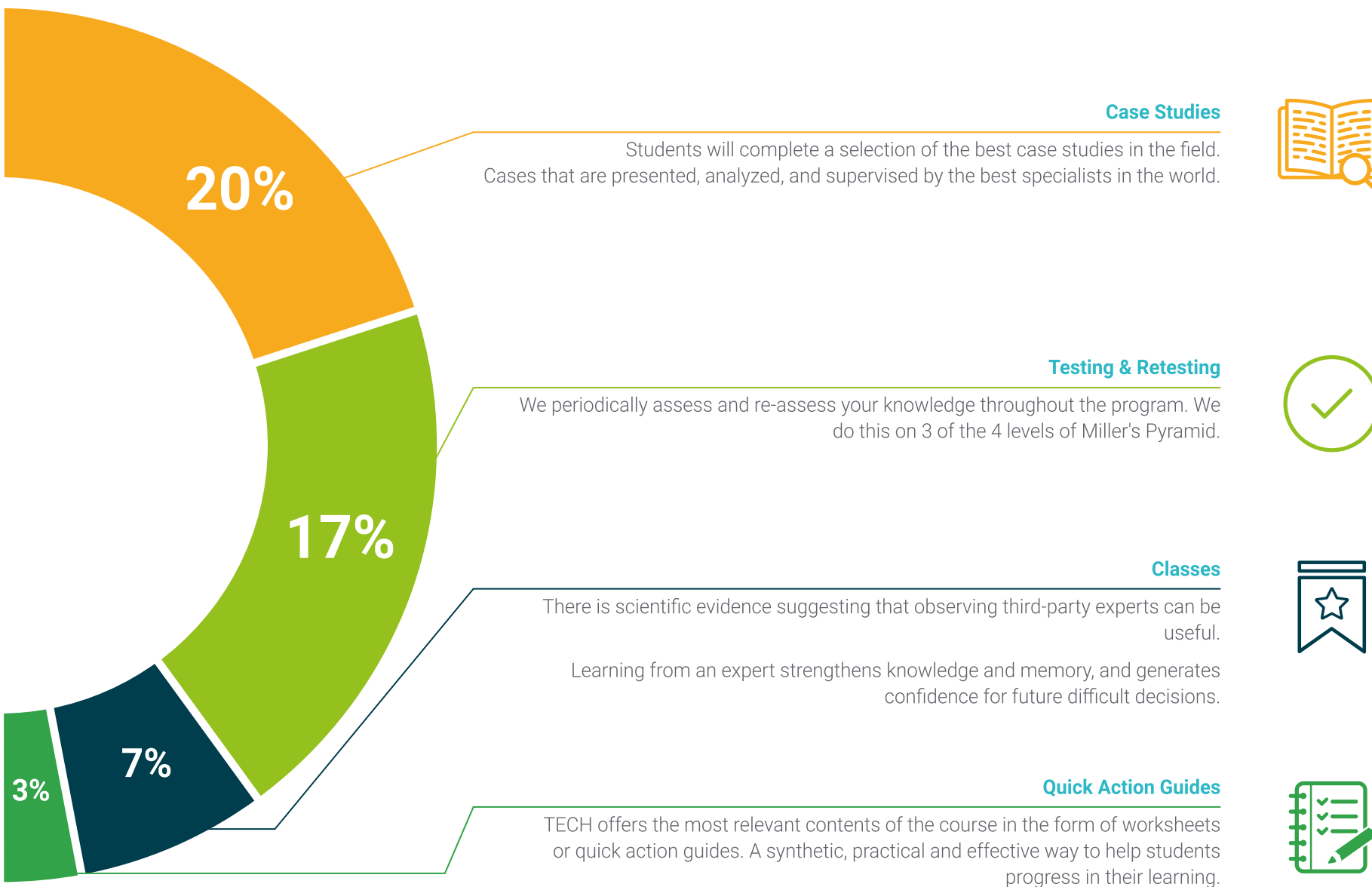
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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

This Postgraduate Certificate in Texturing guarantees, in addition to the most rigorous and up to date education, access to a 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 diploma for the **Postgraduate Certificate in Texturing** 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.

Title: **Postgraduate Certificate in Texturing**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present quality
development languages
virtual classroom



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