

Postgraduate Certificate 3D Modeling with ZBrush



Postgraduate Certificate 3D Modeling with ZBrush

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

Website: www.techtitude.com/us/videogames/postgraduate-certificate/3d-modeling-zbrush

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01

Introduction

ZBrush is a 3D modeling, painting, and sculpting software that, like many of its counterparts, emerged in the 1990s, during the unstoppable rise of the animation and video game industry, creating a new paradigm in 3D design. To this day, ZBrush has established itself as one of the most important 3D design programs in the development of graphics and images for screen-based games. It has even been used in specific editions such as Gears of War 1, Batman: Arkham Asylum, and Underworld: Evolution.





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Master ZBrush, the 3D modeling software used in the creation of detailed characters in Gears of War 1, Batman: Arkham Asylum, and Underworld: Evolution”

Mastering this 3D modeling software and its applications in the development of objects, shapes, landscapes, and 3D characters for video games is responding to the growing demand for professionals in an expanding sector. Its functionalities have, in fact, been tested in some fantastic film productions such as Underworld and The Lord of the Rings, but within the video game industry, notable titles such as Gears of War 1, Batman: Arkham Asylum, and Underworld: Evolution stand out.

This Postgraduate Certificate covers both the theoretical and practical dimensions of learning, with a special emphasis on creating real models. Furthermore, students will learn to optimize ZBrush as they work with it, avoiding refinement issues and learning to overcome technical difficulties that may arise.

The curriculum focuses on explaining each of the software's tools, helping students understand when and why to use them. The course also covers the Hard Surface tool, which allows for inorganic modeling within the program. Additionally, the course provides all the necessary knowledge to start from scratch on a character or creature and develop the model without any issues until the final design.

Learning in-depth one of the most widely used programs in organic modeling is now easier with this Postgraduate Certificate. The course is offered in an online format, allowing for flexibility in balancing educational updates with daily routines. Since all multimedia content is uploaded to the digital platform, students can access it anytime as long as they have an internet connection. Moreover, it is taught using the learning by doing methodology, focusing on practical knowledge that can be applied to real-world professional challenges.

This **Postgraduate Certificate in 3D Modeling with ZBrush** 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 with ZBrush
- » 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



*Design your complex characters
with this cutting-edge 3D
modeling software"*

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Did you know that ZBrush is the most widely used program for organic modeling in the market?”

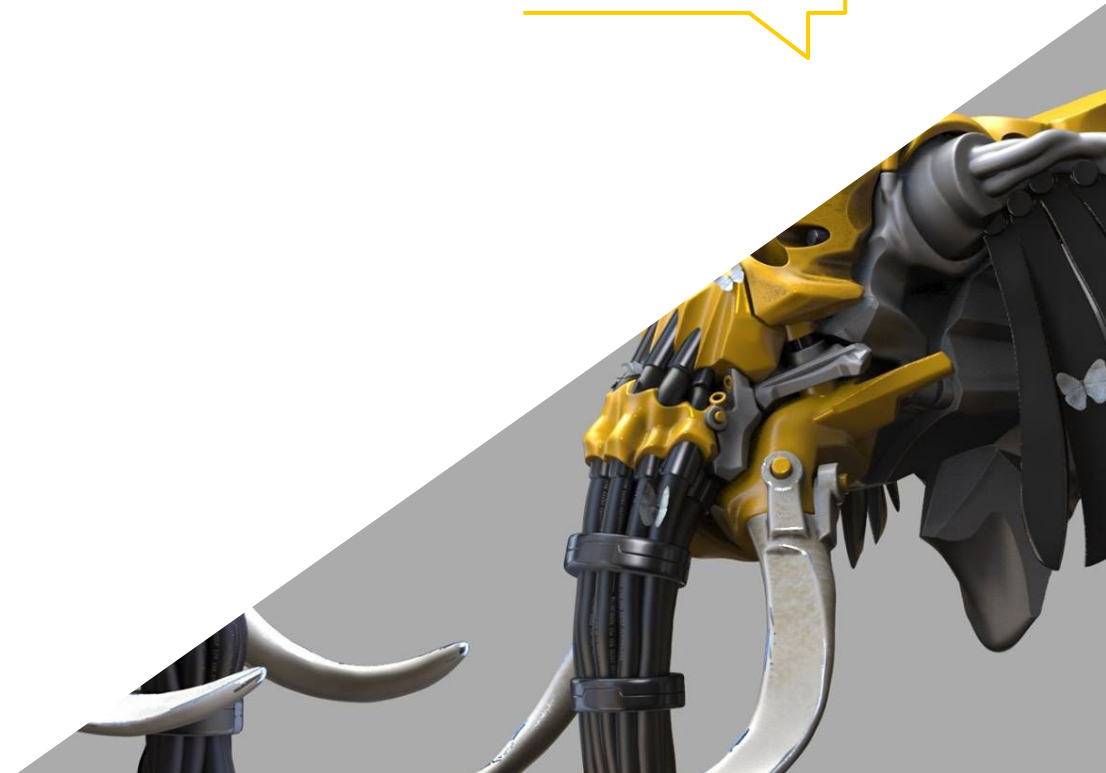
The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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.

Learn to use ZBrush with the pioneering learning by doing methodology, so you can practically apply the concepts you acquire.

Open yourself to new professional projects with this Postgraduate Certificate in 3D Modeling with ZBrush.



02 Objectives

With this Postgraduate Certificate in 3D modeling with ZBrush, you will be able to create a character or creature model from start to finish without any issues. The training offered by TECH Global University is always backed by authentic professionals in the field being taught. For this reason, the management team and faculty design the study systems to ensure that the objectives are met within the 6-week period. Moreover, the knowledge is structured based on market demands, simulating real-world scenarios as closely as possible.





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The faculty of this course designs the study systems to ensure that the objectives are achieved within the six-week period”



General Objectives

- » Gain a deep understanding of all the steps required to create a professional-level 3D model
- » Learn and understand in detail how textures work and how they influence 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

- » Gain an in-depth understanding of ZBrush, the most widely used program for organic modeling in the market
- » Optimize the model as you work on it, avoiding potential problems after refinement
- » Understand each of the program's tools, knowing when to use each one and why
- » Learn the Hard Surface tool, which allows inorganic modeling within the program.
- » Knowing different methods to perform organic modeling
- » Apply everything necessary to start a character or creature from scratch and perform smoothly until the end of the project.

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Learn to apply all the features of ZBrush to become a true professional in 3D modeling”



03

Course Management

This training has been designed following the guidelines of esteemed professionals in the field. They are active experts who have dedicated much of their careers to developing their 3D modeling and texturing techniques, remaining at the forefront of the industry and working on high-profile animation studios and international projects. Through the content they will present and the diverse didactic materials they have developed, the student will receive the most current and requested knowledge of this industry.





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This training has been designed following the guidelines of esteemed professionals in the field”

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

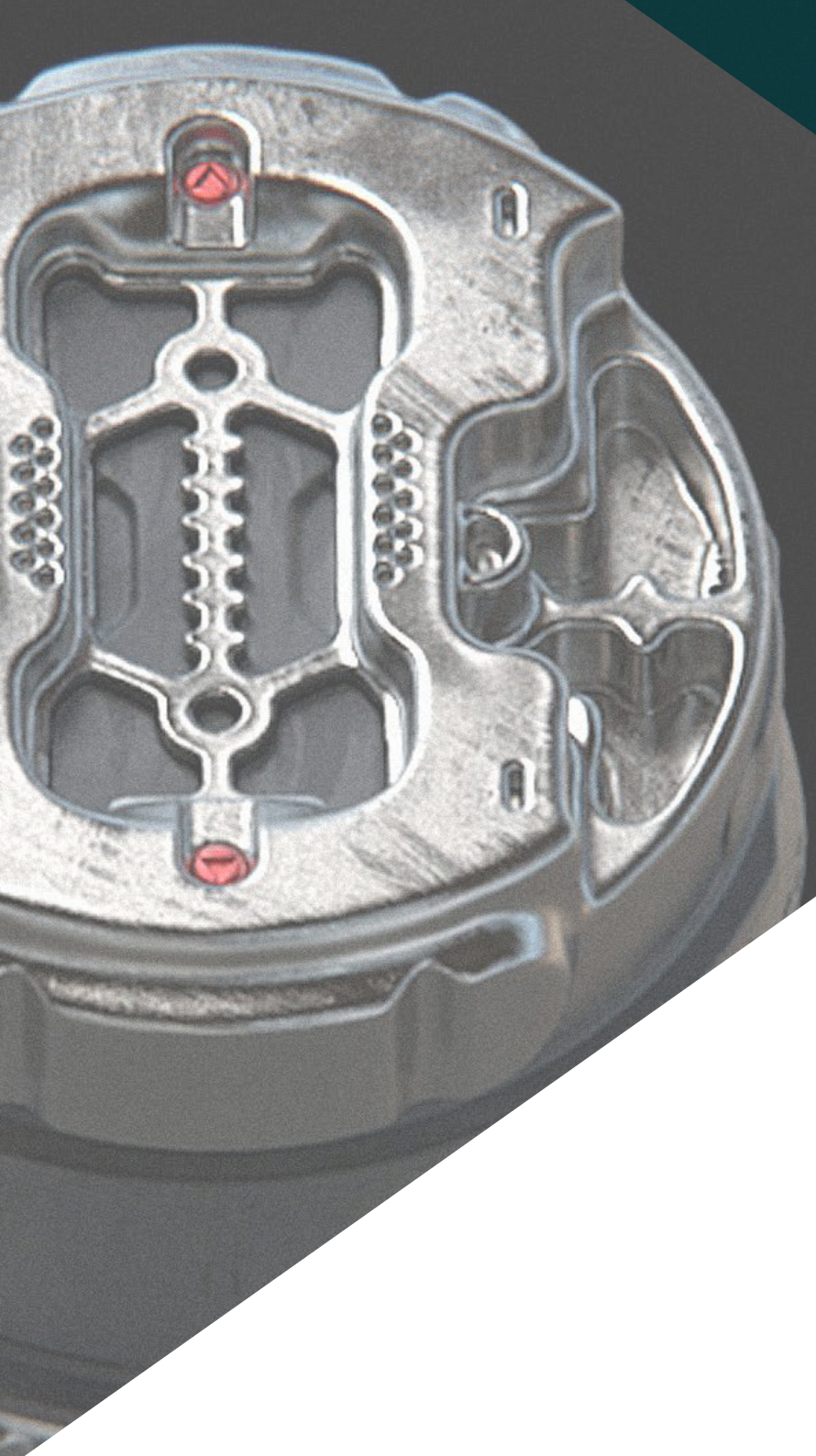


04

Structure and Content

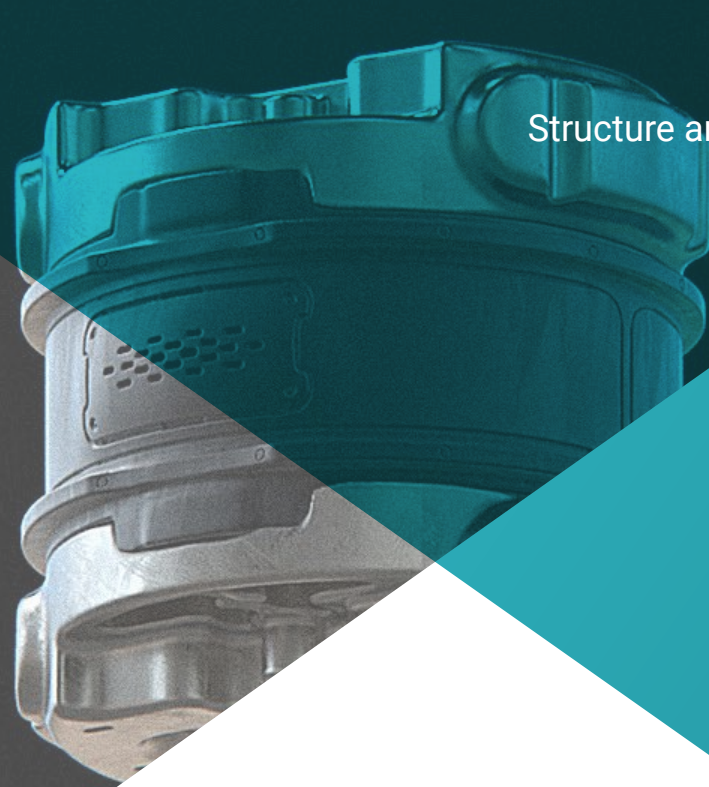
This Postgraduate Certificate has been designed to make learning 3D modeling with the ZBrush software easier. This program, considered one of the most widely used on the market, will be easily manageable thanks to the concepts taught in this course, which includes an explanation of the interface and basic controls, among other aspects. The content covers the main modification tools as well as the most advanced features: the Adaptive Skin, Hard Surface tools, and modifiers are all explained. Finally, the model created using the Transpose Master tool will be presented, allowing the student to pose the character or creature they have crafted.





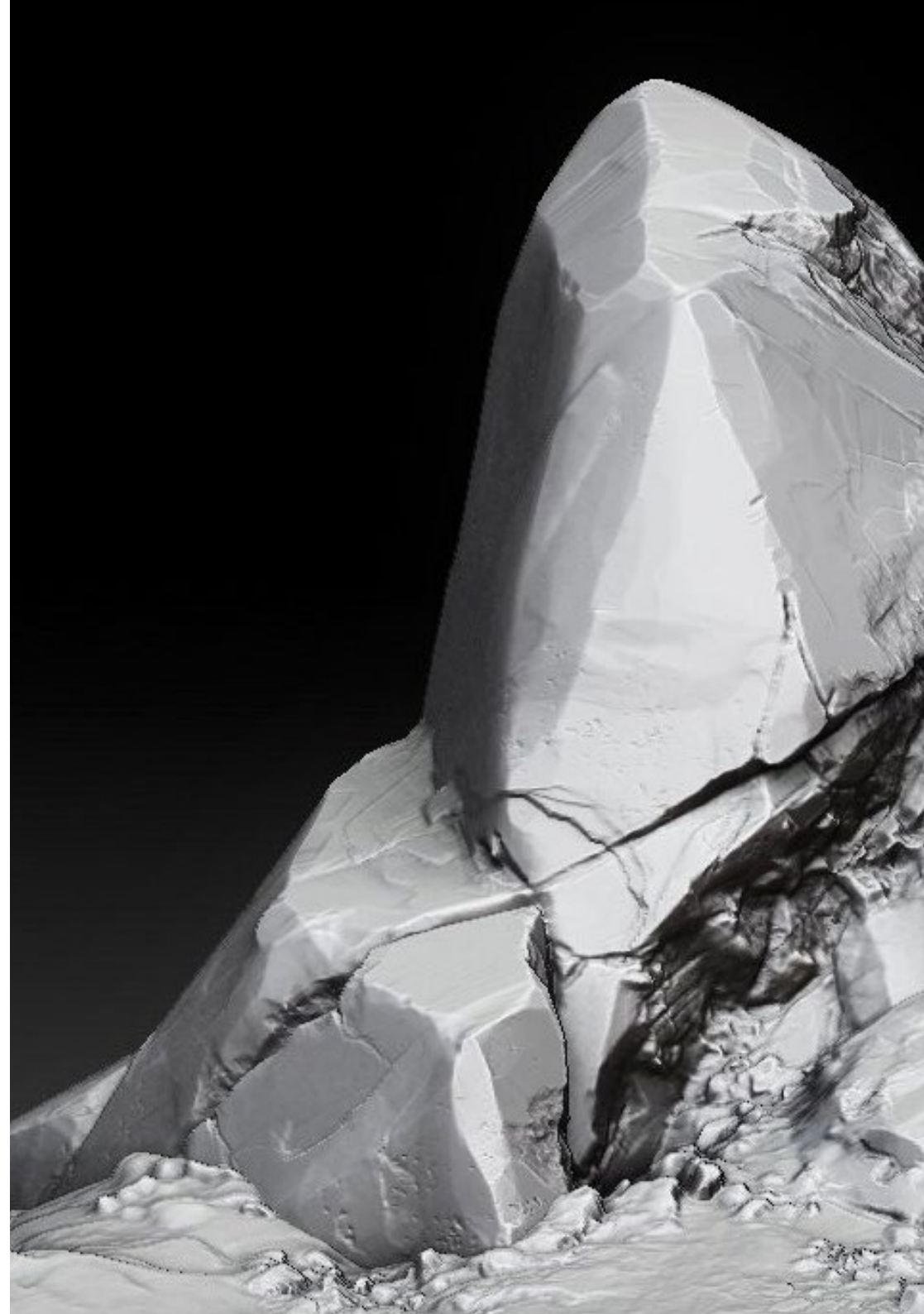
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Become an expert in creating, refining, and posing the character or creature you have created yourself”



Module 1. 3D Modeling with ZBrush

- 1.1. ZBrush
 - 1.1.1. Interface and Basic Controls
 - 1.1.2. Subtools, Symmetry, Transpose and Deformation
 - 1.1.3. Brushes and Alphas
- 1.2. Main Tools
 - 1.2.1. Masks and Polygroups
 - 1.2.2. Subdivisions, Dynamesh y ZRemesher
 - 1.2.3. Modify Topology, Matcaps and BPR
- 1.3. Modification Tools
 - 1.3.1. Insert Multi Mesh
 - 1.3.2. Layers and Morph Target
 - 1.3.3. Projections and Extract
- 1.4. Advanced Tools
 - 1.4.1. Crease and Bevel
 - 1.4.2. Surface and Shadowbox
 - 1.4.3. Decimation Master
- 1.5. ZSpheres and Adaptive Skin
 - 1.5.1. ZSpheres Controls
 - 1.5.2. ZSketch
 - 1.5.3. Adaptive Skin
- 1.6. Dynamesh and advanced Zremesher
 - 1.6.1. Booleans
 - 1.6.2. Brushes
 - 1.6.3. Zremesher using guides
- 1.7. Curve Brushes
 - 1.7.1. Controls and Modifiers
 - 1.7.2. Curve Surface and Other Brushes
 - 1.7.3. Creating Brushes with Curve



- 1.8. Hard Surface
 - 1.8.1. Segments with Masks
 - 1.8.2. Polygroupit
 - 1.8.3. Panel Loops
 - 1.8.4. ZModeler
 - 1.8.5. Primitives
- 1.9. Modifiers
 - 1.9.1. Extend and Multi Slice
 - 1.9.2. Deformer and Blend Twist
 - 1.9.3. Taper and Flatten
 - 1.9.4. Bend Arc and Bend Curve
- 1.10. Transpose Master
 - 1.10.1. Posing a Character with Transpose Master
 - 1.10.2. Corregir detalles
 - 1.10.3. Prepare Character for Rendering



Learn the keys to organic modeling with ZBrush and how to use its most complex tools"

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.

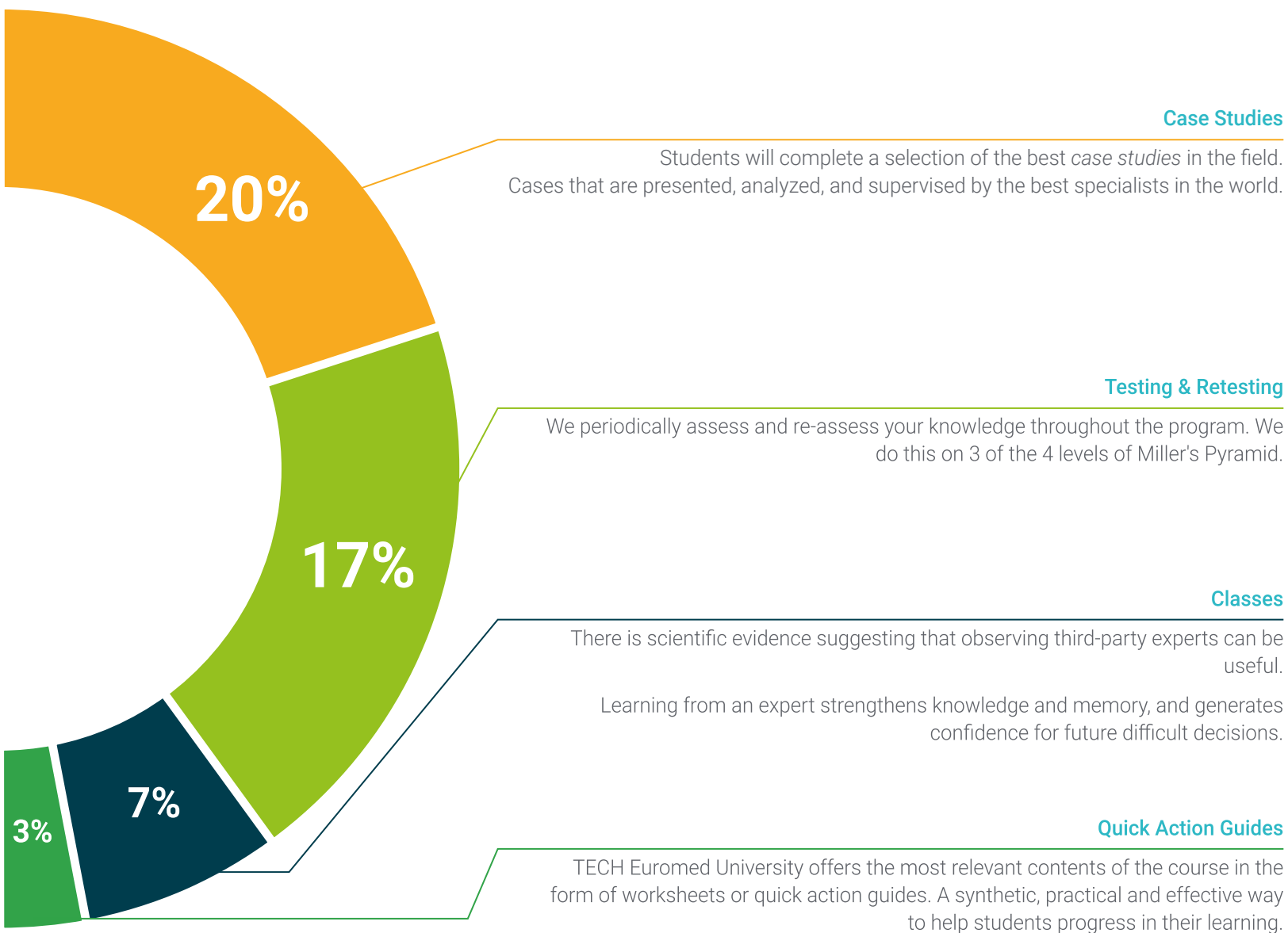
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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 3D Modeling with ZBrush guarantees students, 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 **Postgraduate Certificate in 3D Modeling with ZBrush** 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 3D Modeling with ZBrush**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**





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