Professional Master's Degree
3D Texture Modeling

tech **technological university**

Professional Master's Degree
3D Texture Modeling

» Modality: **online**
» Duration: **12 months**
» Certificate: **TECH Technological University**
» Dedication: **16h/week**
» Schedule: **at your own pace**
» Exams: **online**

Website: **www.techtitute.com/in/information-technology/professional-master-degree/master-3d-texture-modeling**

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01
Introduction

The texturing process is one of the fundamental steps when producing in 3D because it is what dresses the final model, that is, what gives it a sense of realistic and textured finish, and what takes a flatter dimension to the figure that has been made. The labor market in this field is continually adapting to the demands of an audience that is increasingly focused on rich and complex on-screen entertainment. Therefore, this degree, taught entirely in online format, aims to respond to this demand by providing students with the best computer and technological skills to achieve the best texturing processes.

Acquire the best computer and technological skills to achieve the best texturing processes through this online degree"

A brief tour through the History of Art would show the importance of texturing and its evolution in any artistic production. Bringing light, texture and a sense of superior realism is the achievement that any artist, designer or programmer of animation or video games would like to achieve for their projects. This process has acquired increasingly complex dimensions in the technological field, always in the search for a simpler process but with better and more professional results.

This Professional Master's Degree in 3D Texture Modeling has been designed so that the designer can specialize in the texturing process and in the most complete tools and *software* to master this technique, such as Zbrush, Substance Painter or Unreal Engine. The content starts, in fact, focused on the use of 3DS Max, one of the most widely used programs in the design, animation and audiovisual production industry.

Next, the educational plan goes through the texturing blocks, dedicated to explaining the types of textures and materials that are currently being used. The training delves into the process of preparing the model, from the creation of coordinates to the mapping and rendering of the model at the end, allowing to show the work with different sets of lights and a great image quality. For this purpose, the *Marmoset Toolbag* tool will be explored.

The student will have a module dedicated to exporting in *Unreal Engine,* a development engine that allows to build an animation or simulation. Here, you will learn how to handle yourself with ease within the program, with special emphasis on *lightmaps,* the light maps that greatly influence the quality of the final work and the creation of frames.

This Professional Master's Degree is taught entirely online, in order to favor the autonomous and involved learning of the students. Thanks to the monitoring and explanations of an excellent teaching staff, made up of professionals of the highest level, you will have the pedagogical resources and multimedia material always available on the virtual platform.

This **Professional Master's Degree in 3D Texture Modeling** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of case studies presented by experts in 3D Texture Modeling
- 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 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

Without leaving aside your personal or professional projects, specialize in three-dimensional modeling and texturing thanks to this fully online Professional Master's Degree"

With the support of the teaching staff, a group of true professionals in the industry, you will achieve your goal of specializing in 3D texture modeling"

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.

Learn, totally online, the best texturing tools and software, as well as their application in three-dimensional modeling.

Take advantage of this opportunity to continue expanding your knowledge in 3D texture modeling in a comfortable, easy and practical way.

02
Objectives

The purpose of this degree is to provide the student with the most complete content for the management of the industry's pioneering programs, as demanded by the labor market for audiovisual production, design and animation. Given the importance of textures in any of these areas, an educational plan has been devised in accordance with these objectives: to move from flat, lifeless figures to works of art with a great deal of detail. Thus, upon graduation, the student will be a highly qualified expert to participate in projects of great international importance, or to work on their own account.

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Take this Professional Master's Degree and respond, with a specialized profile, to the demands of a growing technological sector"

General Objectives

- Know in depth all the steps to create a professional 3D Modeling
- Know and understand in detail how textures work and how they influence modeling
- Master several programs focused on modeling, texturing and real time used today in the professional world
- Apply the knowledge acquired in the resolution of modeling problems
- Know how to organize and control the time spent on a complete 3D modeling, learning to value their work in the face of possible jobs
- Know the latest updates in the world of modeling and video games, learning about the most updated and used tools of each program
- Expertly use the knowledge acquired to create your own projects and intelligently add to your portfolio
- Develop the resources of each program to achieve the best effect for your modeling
- Be professionally trained to organize adequate working time for a job
- Solve complex problems and make responsible decisions

Specific Objectives

Module 1. 3d Modeling with 3ds Max
- In-depth knowledge of the functionality of the 3DS Max program
- Know in depth the program interface and its controls
- Transform the geometry to get the shape you want in the fastest and most efficient way
- Learn all the effects of the modifiers and learn how to combine them for greater effect
- Understand Boolean operations and know how to use them to our advantage
- Use 2D elements to combine them with our 3D to create shapes more efficiently

Module 2. 3D Modeling with Advanced 3DS Max
- Learn in depth two ways of editing and use them according to the type of modeling or according to the objective
- Know all types of program editing to create any type of modeling proposed by the user
- Customize the program to use it in the fastest and most efficient way for each professional
- Know and use the most advanced tools of the program
- Introduction to Plugins and Scripts to use them for the benefit of the modeling process

Module 3. 3D Modeling with *Graphite Tool*
- Know in detail the Graphite Tool, the most used by 3DS Max professionals
- Learn its interface and get to grips with it for a more professional result in less time
- Compare each tool with its counterpart in polygonal mode and learn about their benefits
- Know the tools you will use throughout the 3D modeling process and their optimization
- Find errors in 3D modeling and know how to solve them in the most intelligent way

Module 4. 3D Modeling with ZBrush

 • Know in depth the Zbrush program, the most used in organic modeling in the market

 • Optimizie 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 you to perform inorganic modeling within the program.

 • Know different methods to perform organic modeling

 • Learn everything you need to start a character or creature from scratch and get through to the end without any problems

Module 5. Texturing

 • Know and understand all texture maps and their application to modeling

 • Know the types of materials existing today and how they work, being able to create one from scratch or modify an existing one

 • Generate and understand mapping coordinates of a 3D model for further work in texturing

 • Assign Object IDs to work more efficiently on textures

 • Work models from high to low resolution and vice versa to further optimize the model, while retaining the same levels of detail

 • Create textures for the 3D model with different programs

Module 6. Texturing with *Substance Painter*

 • Know in depth the Substance Painter program, the most used for texturing in the world of videogames nowadays

 • Understand the process of baking from a high-resolution model to a low-resolution model

 • Know and understand the different layers of a material and how they affect it

 • Create materials from scratch and modify existing materials to achieve a fully customized material

 • Know how to work with mapping coordinates and masks to correctly apply textures to the model

 • Learn about brushes, how to use them and how to create customized brushes

 • Learn how to use the resources found in the program or externally to improve textures

 • Know different methods to create or modify textures

Module 7. Rendering

 • Know in depth the materials and rendering tools of the Marmoset Toolbag program, widely used by 3D modelers and sculptors

 • Understand how to position lights to create a suitable environmental setting for the model

 • Create and position cameras to achieve a perspective that makes 3D Modeling more interesting

 • Exportar renderizados propios de un profesional

 • 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

Module 8. Rendering with VRay Engine in 3DS Max

- In-depth knowledge of the VRay engine assigned to the 3DS Max program
- Configure the rendering options to assign the desired rendering engine
- Learn about VRay's own materials and work with them through nodes
- Migrate textures created in Substance Painter to the VRay engine
- Configure the VRay scene illumination
- Give more details to the model without changing or adding geometry
- Intelligent positioning of the model and camera to create an interesting scene
- Static and animated renderings of the model

Module 9. Characters

- Create a character or creature from scratch to rendering
- Learn tricks to work faster and more efficiently with Zbrush
- Have the knowledge to know when to use one method or another depending on the situation
- Have a practical guide for sculpting certain elements that may be more difficult to sculpt
- Troubleshooting during the entire course of a modeling run
- Know specific methods to create various types of materials in a modeling
- Generate hair in different styles and with different programs depending on the style, from styling/cartoon to hyperrealism
- Know how to pose the character, knowing the importance of dynamism and silhouette
- Add elements that add importance to the character, such as props, props and the environment
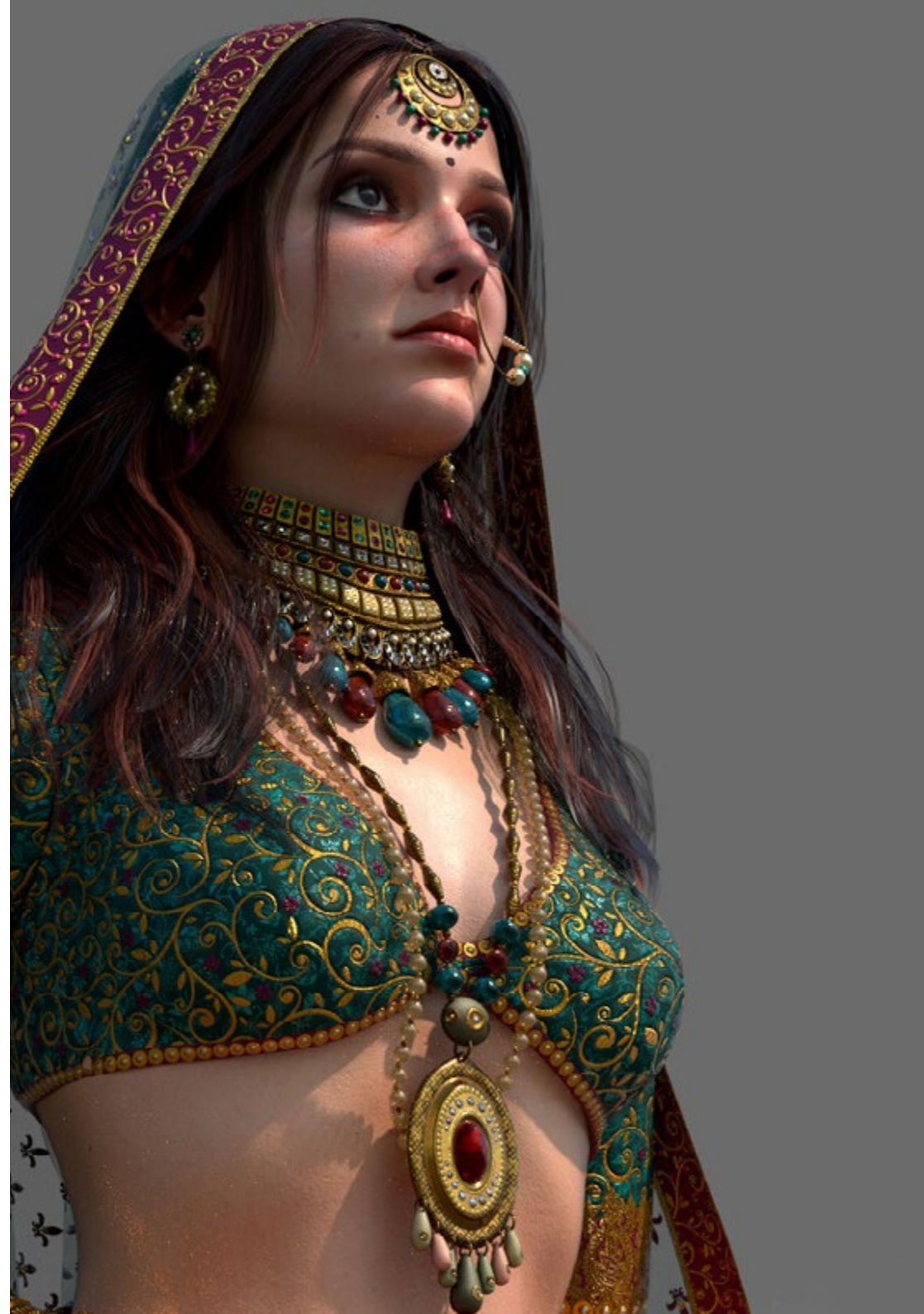
Module 10. Export to Unreal

- Handle the Unreal Engine real time engine in a way that it performs perfectly when working with a 3D model and its textures

- Understand the properties of Unreal materials

- Know how to work with and understand Unreal, material nodes, giving effects to textures to achieve unique materials

- Correctly light an Unreal scene in a realistic way according to the desired ambience

- Configure Unreal Lightmaps, achieving better resolution and optimizing engine performance

- Perform basic post-processing for rendering with good visual effects

03
Skills

The professional competencies that the professional acquires upon completion of this program will enable them to perform a wide range of tasks related to the texturing process, as well as to *software* and leading tools in this field. The student thus acquires the ability to take on any complete challenge and make decisions with responsibility and expertise. With all this you can generate and develop any project that is requested in a large company in the sector or start working on your own.
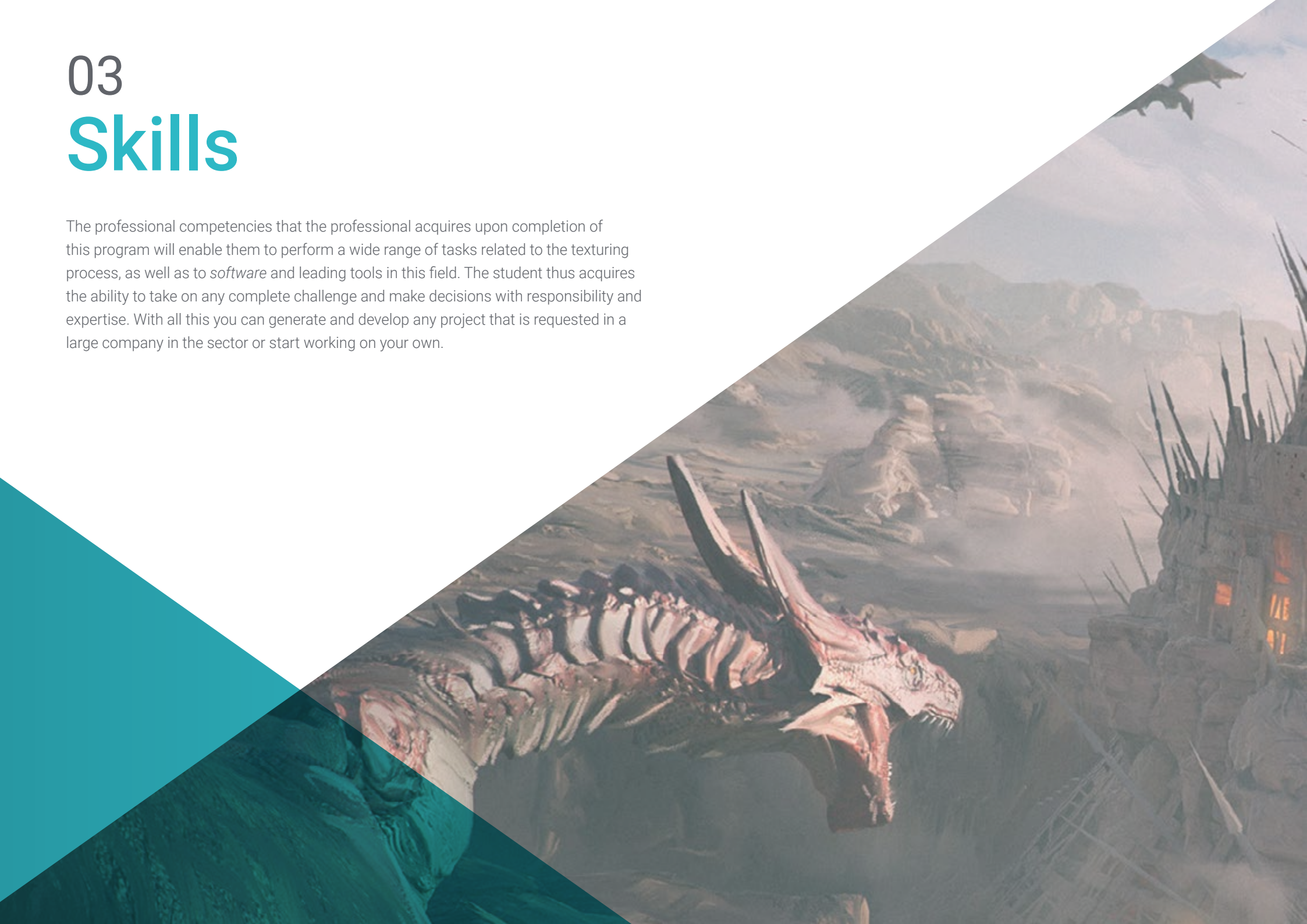
Acquire the best skills in texturing process, as well as with the leading software and tools in this field"

General Skills

- Master the necessary tools for the creation of textures from low quality figures and vice versa
- Apply the knowledge of lighting to improve the texture of the figure
- Proficiency in editing and rendering techniques
- Know how to communicate the ideas and development of the projects you work on

Master the texturing and rendering process to achieve the best finishes in your personal and professional projects"

Specific Skills

- Be able to make realistic figures using 3DS Max programs, also using 2D elements to create more fluid shapes

- Seamless use of two or more forms of editing depending on the modeling objective

- Know the shortcuts and *plugins* to use the programs faster and more efficiently

- Perfectly handle the interface of programs such as Graphite Tool and identify possible errors in order to solve them intelligently

- Be able to perfectly use the ZBrush program to create textures and organic modeling from scratch

- In-depth knowledge of Substance Painter for the creation of materials from scratch, using brushes and layers to achieve neat textures

- Be able to properly configure lighting in ZBrush to generate hair in different styles and hyperrealism

- Master rendering to avoid models that look bad or do not meet required standards

04
Course Management

Prestigious industry experts have designed this training to meet the demands and requirements of a growing industry. They have dedicated their professional life to develop their texturing technique, continuing at the forefront of the industry and developing their professional practice in the best animation studios and projects of international stature. Through the content they will present and the diverse didactic materials they have developed, students will acquire the theoretical, practical and professional knowledge necessary to face new challenges in their careers.

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"
Face new challenges in your professional career thanks to this Professional Master's Degree, designed by real experts and professionals in the sector"

Management

Ms. Sanches Lalaguna, Ana

- 3D Designer at Lalaguna Studio
- 3D Generalist at NeuroDigital Technologies
- 3D Generalist at NeuroDigital Technologies
- 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.

Professors

Mr. Foncubierta Martín, Óscar

- 3D Graphic Designer at Secret 6 Madrid
- 2D Artist at 8Bitamin Games
- Graduated in Video Game Design and Development in ESNE
- Double Master in Character Artist and Modeling and Texturing for AAA at Voxel School

Structure and Content

This Professional Master's Degree has an updated study plan developed by a select teaching staff. Therefore, the student will acquire the necessary knowledge to improve their rendering technique, lighting and, of course, to create realistic and fluid textures. All this, through various teaching materials and teaching resources available on the virtual platform for the duration of the entire degree, which highlights high-definition videos and practical guides updated to the parameters of each design software. This educational plan is based on a *relearning* and *learning by doing* methodology, in order to promote the student's autonomous learning.
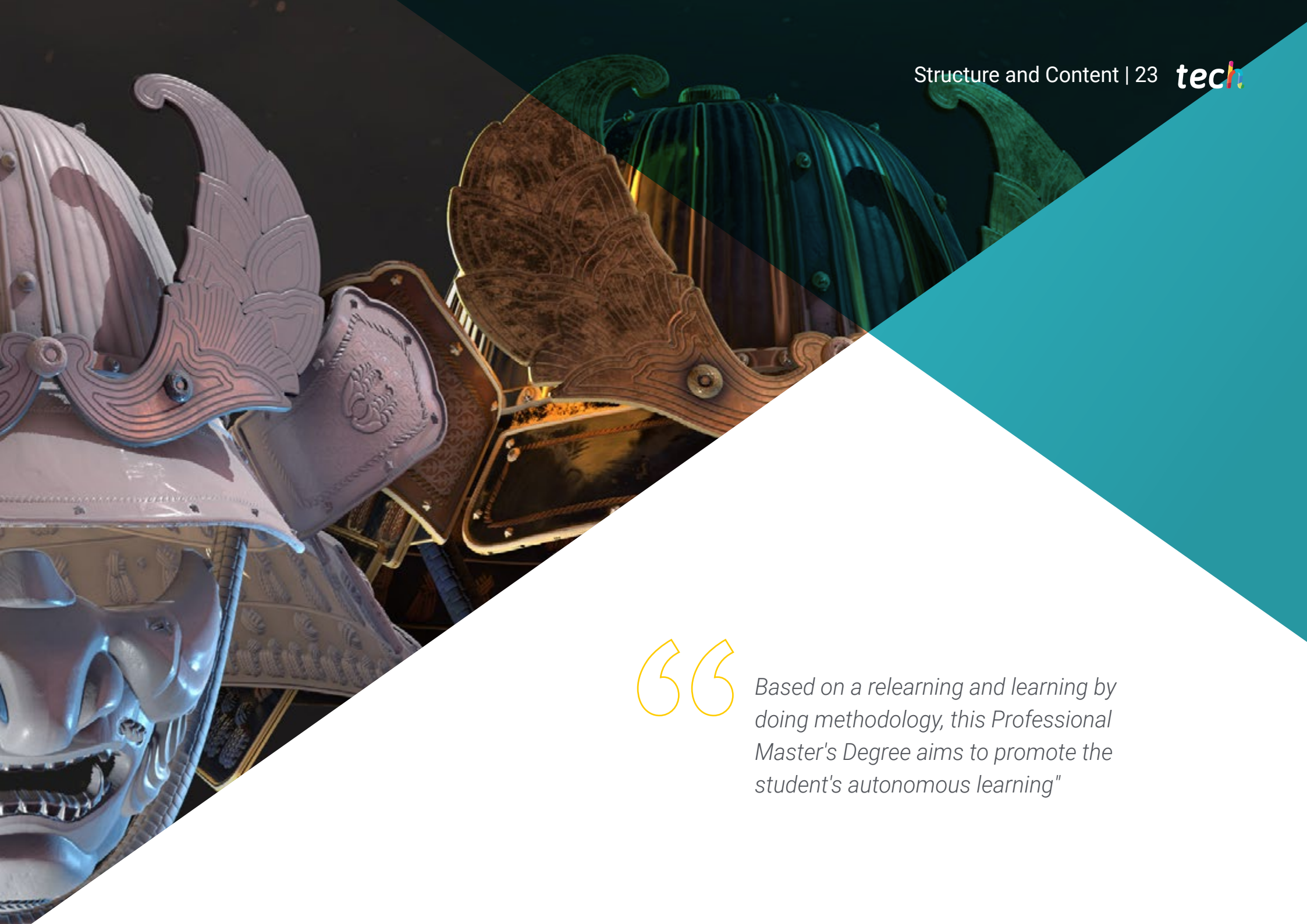
"
Based on a relearning and learning by doing methodology, this Professional Master's Degree aims to promote the student's autonomous learning"

Module 1. 3D Modeling with 3DS Max

1.1. 3D Modeling with 3DS Max
- 1.1.1. Orbit, Scopes and Views
- 1.1.2. Geometry Display Modes
- 1.1.3. Steering Wheels

1.2. Transformations and Geometry
- 1.2.1. Interactive and Parametric Transformations
- 1.2.2. Standard and Extended Primitives
- 1.2.3. Scaling Transformation
- 1.2.4. Select and Place / Select and Rotate
- 1.2.5. Alignment and Symmetry

1.3. Main Operations
- 1.3.1. Duplicate, Interactive Selection and Selection Groups and Elements
- 1.3.2. Layers, Grid, Snap y Pivot Point
- 1.3.3. Links, Coordinate Systems, Actions, Views and Isolate Geometry

1.4. Parametric Modifiers
- 1.4.1. Bend, Taper, Skew and Twist
- 1.4.2. Stretch and Squeeze
- 1.4.3. Ripple, Wave and Noise
- 1.4.4. Spherify, Lattice and Mirror
- 1.4.5. Push and Relax
- 1.4.6. Slice, Shell and CapHoles

1.5. Free Deformation Modifiers
- 1.5.1. FFD Modifiers
- 1.5.2. FFD Cyl
- 1.5.3. FFD Box

1.6. Composition Objects
- 1.6.1. Boolean Operations Boolean and ProBoolean
- 1.6.2. Object Dispersion Scatter
- 1.6.3. Morphism Morph

1.7. 2D Shapes Splines
- 1.7.1. Splines and Its Options
- 1.7.2. The Vertex Line and Types
- 1.7.3. Sub-Object Vertex, Segment and Splines

1.8. 2D Shapes Advanced Splines
- 1.8.1. Editable Spline and Use of Grid and Snap to Create 2D Shapes
- 1.8.2. Parametric Modifiers, FFD and Booleans with Splines
- 1.8.3. Extended Splines and Section

1.9. Spline Modifiers
- 1.9.1. Extrude
- 1.9.2. Bevel
- 1.9.3. Sweep
- 1.9.4. Lathe

1.10. Composition Objects Splines
- 1.10.1. Loft
- 1.10.2. Terrain
- 1.10.3. Sharpe Merge

Module 2. 3D Modeling with Advanced 3DS Max

2.1. Mesh Editing Polygonal Edition
- 2.1.1. Polygonal Edition EditablePoly and EditPoly
- 2.1.2. Panels, Selection and Flexible Selection
- 2.1.3. TurboSmooth Modifier, MeshSmooth and HSDS

2.2. Mesh Editing Geometry
- 2.2.1. Vertex, Edge and Edge Editing
- 2.2.2. Polygon, Element and Geometry Editing
- 2.2.3. Geometry Cutting Planes and Added Resolution

2.3. Mesh Editing Selection Groups
- 2.3.1. Geometry Alignment and Visibility
- 2.3.2. Selection Sub-Objects, Material IDs and Smoothing Groups
- 2.3.3. Surface Subdivision and Vertex Painting

Module 3. 3D Modeling with *Graphite Tool*

Module 4. 3D Modeling with ZBrush

Module 5. Texturing

5.1. Texturing
    5.1.1. Baking
    5.1.2. PBR Physically Based Rendering
    5.1.3. Basic and Compound Texturing
    5.1.4. Tileable Textures
5.2. Mapping Coordinates University of Valencia
    5.2.1. Unwrap and Seams
    5.2.2. UVWs Editor
    5.2.3. Editor Options
5.3. Object ID
    5.3.1. ID Assignment and Functionality
    5.3.2. Multisubject Material
    5.3.3. Application of Materials as Instances
5.4. HighPoly and Baking of Normals in 3DS Max
    5.4.1. HighPoly and LowPoly
    5.4.2. Projection Settings for Normal Map Baking
    5.4.3. Normal Map Texture Baking
    5.4.4. Normal Map Settings
5.5. Other Material Baking in 3DS Max
    5.5.1. Fuzzy Map Application and Baking
    5.5.2. Compound Materials
    5.5.3. Mask Settings
5.6. Retopology in 3DS Max
    5.6.1. Retopology Tools
    5.6.2. Retopology with Graphite Tool
    5.6.3. Retopology Settings
5.7. Texturing with 3DS Max
    5.7.1. Material Properties
    5.7.2. Texture Baking
    5.7.3. Textural Toasting Complete Map, Normal Map and AO Map

5.8. Texturing with Photoshop
    5.8.1. Coordinate Template
    5.8.2. Adding Details in Photoshop and Reimporting Template with Textures
    5.8.3. Tile a Texture
    5.8.4. Create Normal Map
5.9. Coordinates and Mapping with ZBrush
    5.9.1. UV Master
    5.9.2. Control Painting
    5.9.3. Unwrap and Flatten
5.10. Texturing with ZBrush
    5.10.1. Paint Mode
    5.10.2. Noise Maker
    5.10.3. Image Projection

Module 6. Texturing with *Substance Painter*

6.1. Substance Painter
    6.1.1. Create New Projects and Reimport Models
    6.1.2. Basic Controls and Interface 2D and 3D Views
    6.1.3. Bakes
6.2. Baking Layers
    6.2.1. World Space Normal
    6.2.2. Ambient Occlusion
    6.2.3. Curvature
    6.2.4. Position
    6.2.5. ID, Normal, Thickness
6.3. Layers
    6.3.1. Base Color
    6.3.2. Roughness
    6.3.3. Metallic
    6.3.4. Material

6.4.   Masks and Generators

    6.4.1.   Layers and UVs

    6.4.2.   Masks

    6.4.3.   Procedural Generators

6.5.   Material Base

    6.5.1.   Types of Materials

    6.5.2.   Customized Generators

    6.5.3.   Creation of a Base Material from Scratch

6.6.   Brushes

    6.6.1.   Predefined Parameters and Brushes

    6.6.2.   Alphas, Lazy Mouse and Symmetry

    6.6.3.   Create Customized Brushes and Save Them

6.7.   Particles

    6.7.1.   Particle Brushes

    6.7.2.   Properties of Particles

    6.7.3.   Particles Using Masks

6.8.   Projections

    6.8.1.   Prepare Textures

    6.8.2.   Stencil

    6.8.3.   Cloning

6.9.   Substance Share/Source

    6.9.1.   Substance Share

    6.9.2.   Substance Source

    6.9.3.   Textures.com

6.10.   Terminology.

    6.10.1.   Normal Map

    6.10.2.   Padding or Bleed

    6.10.3.   Mipmapping

Module 7. Rendering

7.1.   Marmoset Toolbag

    7.1.1.   Geometry Preparation and FBX Format

    7.1.2.   Basic Concepts Importance of Geometry

    7.1.3.   Links and Materials

7.2.   Marmoset Toolbag Sky

    7.2.1.   Environmental Setting

    7.2.2.   Light Points

    7.2.3.   Lights Outside the Sky

7.3.   Marmoset Toolbag Details

    7.3.1.   Shadow and Pose

    7.3.2.   Procedural Materials

    7.3.3.   Channels and Reflection

7.4.   Real-Time Rendering with Marmoset Toolbag

    7.4.1.   Image Export with Transparency

    7.4.2.   Interactive Export Marmoset Viewer

    7.4.3.   Film Export

7.5.   Marmoset Toolbag Animated Cameras

    7.5.1.   Model Preparation

    7.5.2.   Camera

    7.5.3.   Main Camera Interactive Animation

7.6.   Marmoset Toolbag Advanced Animated Cameras

    7.6.1.   Add New Cameras

    7.6.2.   Parametric Animation

    7.6.3.   Final Details

7.7.   Marmoset Toolbag 4 Raytrace

    7.7.1.   Subsurface

    7.7.2.   Ray Tracing

    7.7.3.   Add Cameras and Map Rendering

7.8.   Rendering with Substance Painter IRay

    7.8.1.   Iray Configuration

    7.8.2.   Viewer Settings

    7.8.3.   Display Settings

7.9.   Rendering With ZBrush

    7.9.1.   Material Configuration

    7.9.2.   BPR Render and Lights

    7.9.3.   BPR Masks and Final Rendering in Photoshop

7.10.   Rendering With Keyshot

    7.10.1.   From Zbrush to Keyshot

    7.10.2.   Materials and Lighting

    7.10.3.   Composition in Photoshop and Final Image

Module 8. Rendering with VRay Engine in 3DS Max

8.1.   VRay Render Engine Assignment

    8.1.1.   Preparation of the Render Space

    8.1.2.   Render Setup Options and Assign Render

    8.1.3.   Optimize Render time

8.2.   Lighting and Light Creation

    8.2.1.   3-Point Lighting

    8.2.2.   Light Configuration

    8.2.3.   Render Region

8.3.   Creation and Application of Materials

    8.3.1.   Vray Materials

    8.3.2.   VRay Material Configuration

    8.3.3.   Self-Illumination

8.4.   From Substance Painter to VRay

    8.4.1.   Connect Nodes and Material Settings

    8.4.2.   Export Presets

    8.4.3.   Configure Smart Material in VRay

8.5.   Details and Positioning in the Scene

    8.5.1.   Applying Shadows According to Model Position

    8.5.2.   Adjust Model and Silhouette

    8.5.3.   Metallic Base

8.6.   Rounding Surfaces

    8.6.1.   VRayEdgeTex

    8.6.2.   Functionality and Configuration

    8.6.3.   Rendering with and without Rounding

8.7.   Field of Vision

    8.7.1.   Camera and Shot

    8.7.2.   Camera Opening

    8.7.3.   Field of Vision

8.8.   Ambient Occlusion and Global Illumination

    8.8.1.   GI and Render Elements

    8.8.2.   VRayExtraTex and VrayDirt

    8.8.3.   Global Illumination Multiplier

8.9.   Rendering of a Still Frame

    8.9.1.   Adjust Render Values

    8.9.2.   Save Final Rendering

    8.9.3.   Composition of Ambient Occlusion

8.10.   Rendering of a Sequence

    8.10.1.   Camera Animation

    8.10.2.   Rendering Options for Sequence

    8.10.3.   Frame Assembly for the Sequence

Module 9. Characters

9.1. Types of Characters
    9.1.1. Realistic and Cartoon/Stylized
    9.1.2. Humanoids and Creatures
    9.1.3. Anatomy and Proportions
9.2. Tips to Work with ZBrush
    9.2.1. Work with Reference and Transparencies Fitting and Transformation from 2D to 3D
    9.2.2. Joining Parts With Dynamesh Working in Pieces or in Conjunction With Polygroups and ZRemesher
    9.2.3. Lazy Mouse and GoZ
9.3. Sculpting a Head in ZBrush
    9.3.1. Primary Shapes and Proportions
    9.3.2. Eyelids and Eyes
    9.3.3. Nose, Ears and Lips
    9.3.4. ZRemesher for a Head
    9.3.5. Eyebrows and Eyelashes
    9.3.6. Details and Refinement
9.4. Clothing
    9.4.1. Clothes
    9.4.2. Armor
    9.4.3. Modeled Detail and With Noise Maker
9.5. Tips for Modeling
    9.5.1. Hands
    9.5.2. Styled Hair
    9.5.3. Extra Details With Alphas
9.6. Tips for Modeling Types of Materials
    9.6.1. Feathers
    9.6.2. Rocks and Minerals
    9.6.3. Scales

9.7. Hair with ZBrush
    9.7.1. Curve Brushes
    9.7.2. Long Hair With Curve Brush
    9.7.3. Short Hair or Animal Hair
9.8. Hair with Xgen
    9.8.1. References and Tool Preparation
    9.8.2. Application of Modifiers and Tools in Depth
    9.8.3. Lighting and Rendering
9.9. Posing With Transpose Master
    9.9.1. TPoseMesh Working with Smooth Masks, Move and Rotate
    9.9.2. The Importance of the Silhouette
    9.9.3. TPose SubTool Correct and Finish Detailing
9.10. Character Props and Environment
    9.10.1. Accessories and Weapons Elements that Speak of the Character's History
    9.10.2. Environment and Background Elements Enhance the Character
    9.10.3. Own Lighting for the Character

Module 10. Export to Unreal

10.1. Unreal Engine
    10.1.1. Game Exporter
    10.1.2. Create New Projects and Controls
    10.1.3. Import Models to Unreal
10.2. Basic Material Properties
    10.2.1. Create Materials and Nodes
    10.2.2. Constant and Its Values
    10.2.3. Texture Sample
10.3. Common Material Nodes
    10.3.1. Multiply
    10.3.2. Texture Coordinate
    10.3.3. Add
    10.3.4. Fresnel
    10.3.5. Panner

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.

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 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.

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

Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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 that we are experiencing.

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.

30%

10%

8%

20%

25%

4%

3%
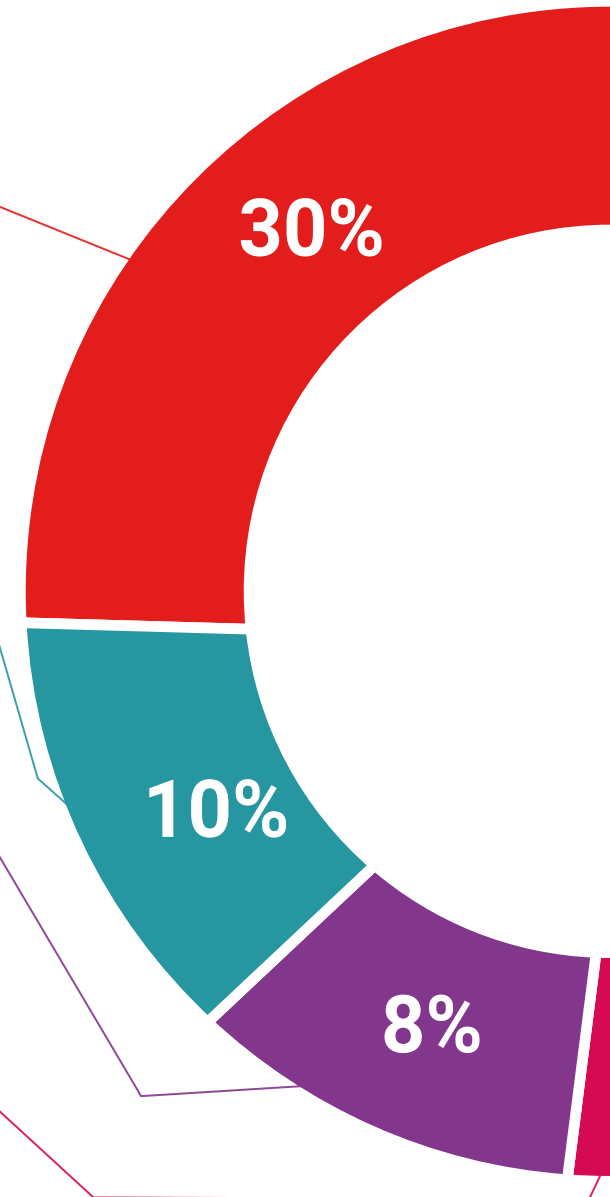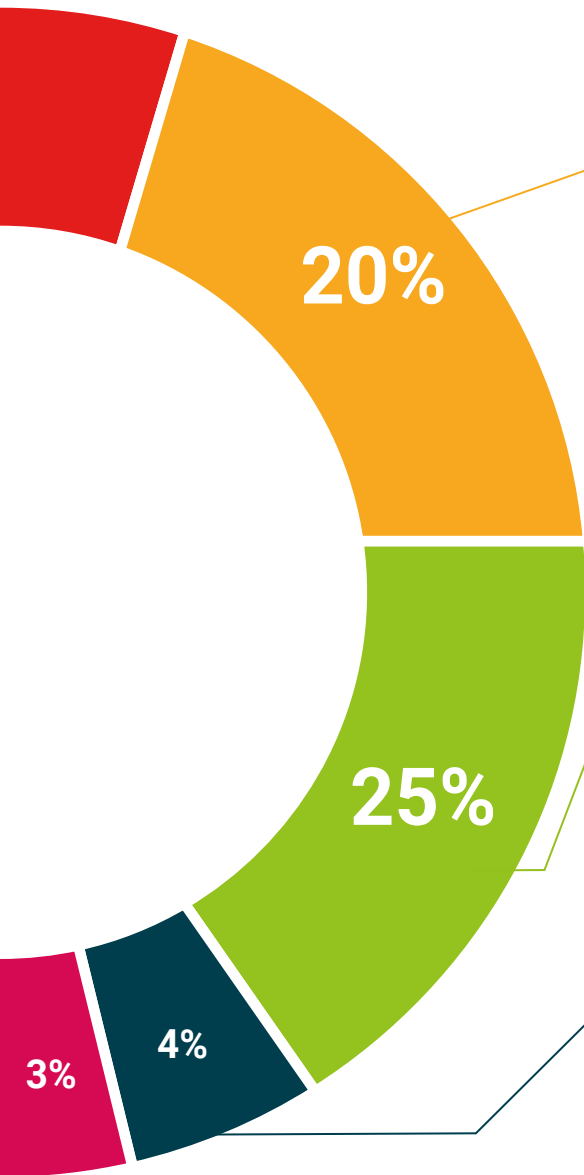
Case Studies

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.

Certificate

The Professional Master's Degree 3D Texture Modeling guarantees students, in addition to the most rigorous and up-to-date education, access to a Professional Master's Degree issued by TECH Technological University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"
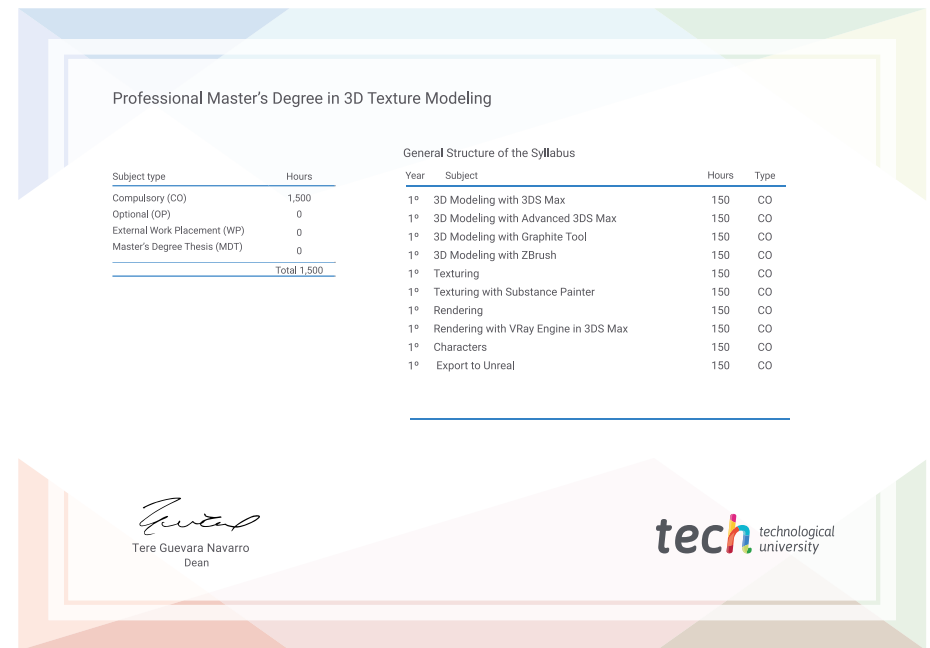
This **Professional Master's Degree in 3D Texture Modeling** contains the most complete and up-to-date scientific program on the market.

After the student has passed the evaluations, they will receive by mail their corresponding **Professional Master's Degree** issued by **TECH Technological** University via tracked delivery*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Professional Master's Degree, and meets the requirements commonly demanded by job exchanges, competitive examinations and professional career evaluation committees.

Title: **Professional Master's Degree in 3D Texture Modeling**

Official Number of Hours: **1,500 h.**

tech technological university

Awards the following
CERTIFICATE
to

Mr./Ms. _____ with identification number _____.
For having successfully passed and accredited the following program

PROFESSIONAL MASTER'S DEGREE
in

3D Texture Modeling

This is a qualification awarded by this University, equivalent to 1,500 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

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Professional Master's Degree in 3D Texture Modeling

Subject type	Hours
Compulsory (CO)	1,500
Optional (OP)	0
External Work Placement (WP)	0
Master's Degree Thesis (MDT)	0
Total 1,500	

General Structure of the Syllabus

Year	Subject	Hours	Type
1º	3D Modeling with 3DS Max	150	CO
1º	3D Modeling with Advanced 3DS Max	150	CO
1º	3D Modeling with Graphite Tool	150	CO
1º	3D Modeling with ZBrush	150	CO
1º	Texturing	150	CO
1º	Texturing with Substance Painter	150	CO
1º	Rendering	150	CO
1º	Rendering with VRay Engine in 3DS Max	150	CO
1º	Characters	150	CO
1º	Export to Unreal	150	CO

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Dean

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*Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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Professional Master's Degree
3D Texture Modeling

- » Modality: **online**
- » Duration: **12 months**
- » Certificate: **TECH Technological University**
- » Dedication: **16h/week**
- » Schedule: **at your own pace**
- » Exams: **online**

Professional Master's Degree
3D Texture Modeling

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