Postgraduate Diploma
3D Modeling with 3D Studio Max

tech technological university

Postgraduate Diploma
3D Modeling with 3D Studio Max

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

Website: www.techtitute.com/in/information-technology/postgraduate-diploma/postgraduate-diploma-3d-modeling-3d-studio-max

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Introduction

Among the leading programs for three-dimensional modeling, the 3D Studio Max software stands out. Any professional who wants to work in this field must know it and, of course, master it, to meet the needs of an industry that demands 3D design experts. This tool is of significant use to professionals who wish to achieve perfect finishes in their modeling. This complete training will allow to know perfectly all the functionalities of this *software*, each interface and controls to edit depending on the modeling to be done, and also in the utilities of the VRay graphic engine. All this in an online format, to which you will have access during the 6 months of duration and with all the pedagogical resources available on the virtual platform.
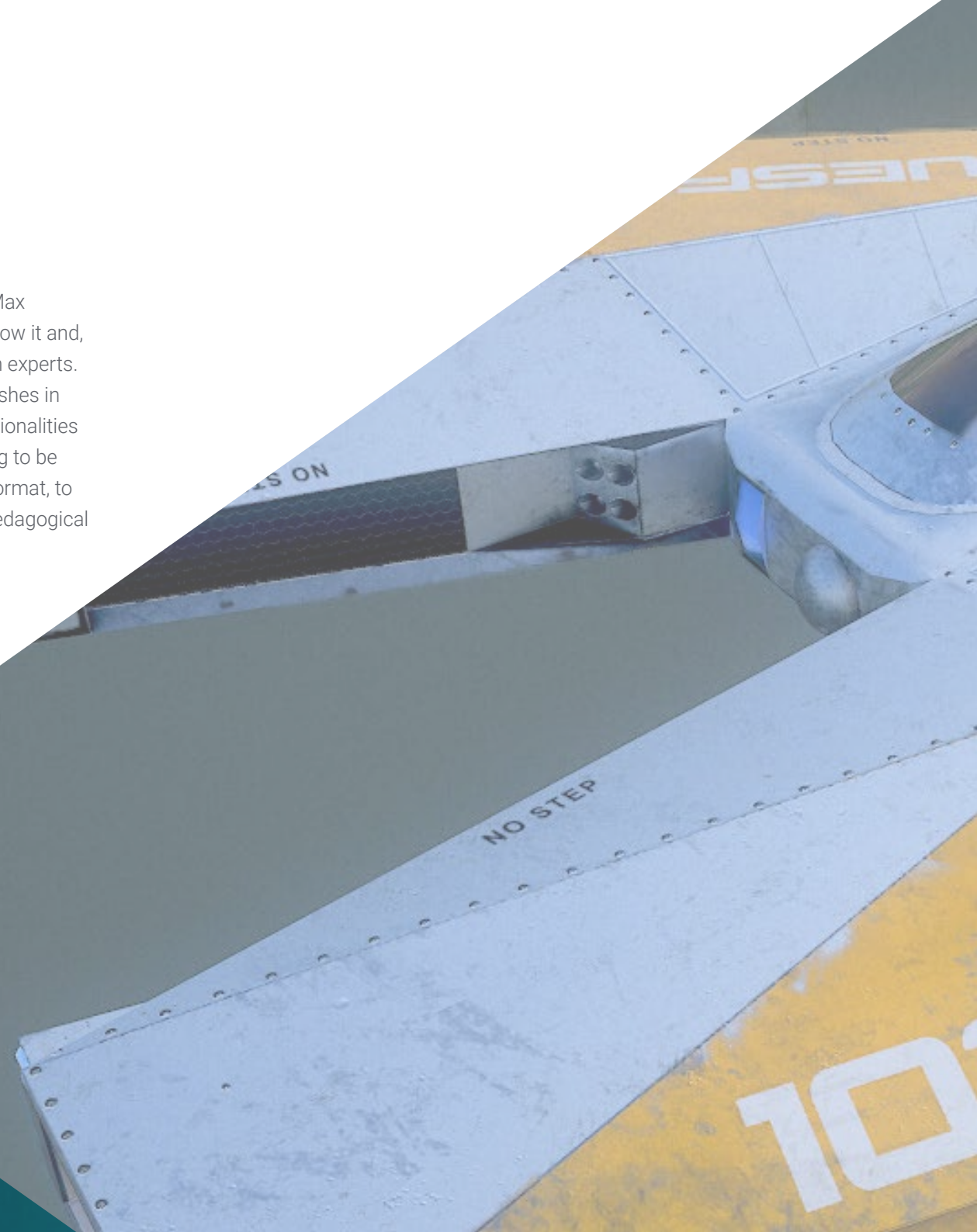
" *Online, practical and easy: learn how to use all dimensions of the leading 3D Studio Max 3D modeling software"*

This leading program in the field of three-dimensional design and modeling, 3DS Max, manages to bring any required modeling to a 3D plane. Its use is increasingly common in the industrial production dimension, 3D printing, drawing and graphics design, or animation and video game development. Either way, having knowledge in 3D Modeling with 3D Studio Max, is to be at the forefront of an industry that increasingly demands more professionals in this sector.

The content of this educational plan covers the basic functionalities of the *software*, its interface and most important controls. In addition, it stops at every type of editing possible with the program to do any modeling that is requested. This Postgraduate Diploma in 3D Modeling with 3D Studio Max, also covers the concept of rendering modeling with VRay engine, which is an extension of Autodesk and allows you to create hyper-realistic *rends*.

It is essential that the student learns to change the basic settings of the *software* and also the tricks of modeling without having to change the geometry of the object, achieving a more rounded effect of the surface. In addition, students will have the practical guidance and constant connection with the faculty, experts and professionals of high prestige in their area.

A Postgraduate Diploma that is taught entirely *online*, allowing students to organize their time and pace of learning according to their personal and professional activities. Thanks to the teaching methodology: *relearning* and *learning by doing*, the student acquires the knowledge in an autonomous way, having access to the best pedagogical resources when required or needed to guarantee the acquisition of the competencies and skills necessary to succeed in the working world.

This **Postgraduate Diploma Degree in 3D Modeling with 3D Studio 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 3D Modeling with 3D Studio 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

Get, through this Postgraduate Diploma in 3D Modeling with 3D Studio Max, to control this leading software even in its most complex dimension"

"*This training, developed by TECH Technological University, is delivered with relearning and learning by doing technology to encourage hands-on learning*"

The teaching staff will accompany you throughout the entire course of this Postgraduate Diploma, so that autonomous and effective learning is guaranteed.

Learn how to use the most advanced and complex 3DS Max configurations with this fully online Postgraduate Diploma.

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.

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.

Objectives

The purpose of this training is for the user or student to be able to develop a model from its original creation to its final rendering. With this, you will learn how to perfectly use each tool offered by the software, using 2D elements and transforming them into 3D or generating them from scratch. Within the various sectors that are increasingly looking for experts in the filed of three-dimensional design, access to more job opportunities is achieved.

Open yourself to new job opportunities by specializing your design skills with 3DS Max"

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. 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 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

Learn to design three-dimensionally, from start to finish, whatever you need: models for 3D printing, plans, graphics, animations, video games, etc"

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Course Management

Professionals and experts highly regarded in their sector, are part of the management and teaching staff of this Postgraduate Diploma, which has been developed by themselves, applying all their work and professional experience to the study plan. Thus, the student not only learns in a theoretical and practical dimension, but also to develop a professional critical sense, thanks to the shared expertise of the teaching staff. In addition, they will be responsible for conducting the classes of each module, as well as providing the bibliographic and practical material in which each content of the program is evidenced in detail.
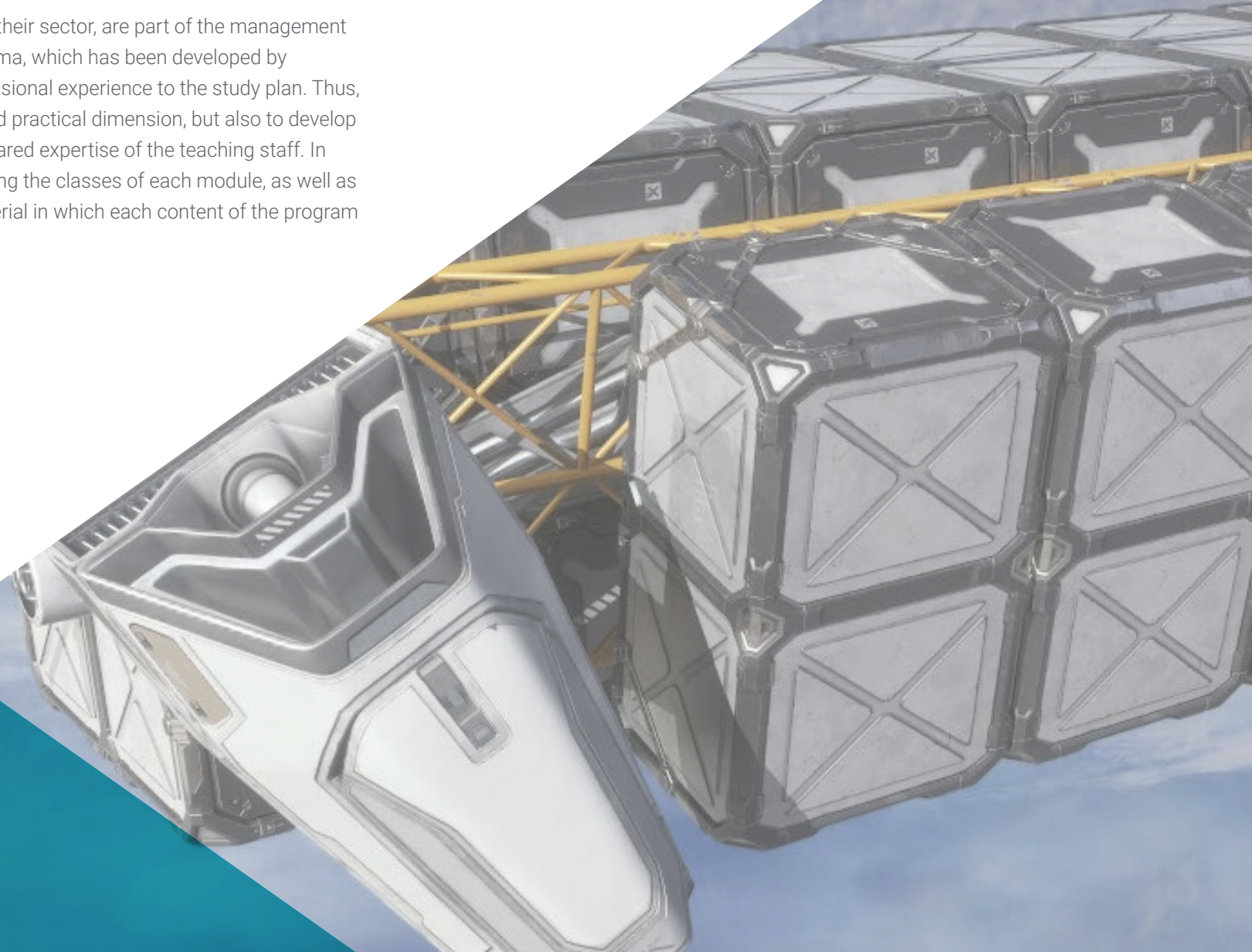
Enjoy learning from a group of experts of the highest prestige in their field"

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)
- Certificate 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

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Structure and Content

This program is designed to make it as easy as possible to understand the interface and functionality of 3DS Max *software*. It has 3 major teaching blocks covering 3D modeling with 3DS max, 3D modeling with 3DS Max Advanced and rendering with VRay engine in 3DS Max. A complete study plan that provides students with all teaching materials, such as high-definition videos and other multimedia materials.

This Postgraduate Diploma provides the knowledge for an advanced use of 3DS Max software"

Module 1. 3D Modeling with 3DS Max

1.1. 3D Modeling with 3D 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* and 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

2.4. Mesh Editing *Surface*
- 2.4.1. Geometry Offset and Deformation Brush
- 2.4.2. Flat Mode and *Editable Mesh*
- 2.4.3. Splines + Surface

2.5. Advanced Mesh Editing
- 2.5.1. Editable Patch
- 2.5.2. *Model Sheet and Setup* for Modeling
- 2.5.3. Symmetry Tracing and *Symmetry*

Module 3. Rendering with VRay Engine in 3DS Max

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.

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

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.

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%

tech

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.

20%

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".

25%

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.

4%

3%

06
Certificate

The Postgraduate Diploma in 3D Modeling with 3D Studio Max guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma qualification issued by TECH Technological University.

Successfully complete this program and receive your university qualification without travel or laborious paperwork"

This **Postgraduate Diploma in 3D Modeling with 3D Studio Max** contains the most complete and up-to-date program on the market.

After the student has passed the evaluations, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** via tracked delivery*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional from career evaluation committees.

Title: **Postgraduate Diploma in 3D Modeling with 3D Studio Max**

Official Nº of Hours: **450 h.**

tech technological
university

Awards the following
CERTIFICATE
to
Mr./Ms. _____, with identification number _____.
For having passed and accredited the following program

POSTGRADUATE DIPLOMA
in
3D Modeling with 3D Studio Max

This is a qualification awarded by this University, equivalent to 450 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

*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.

tech *technological university*

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