

# Postgraduate Certificate

## Advanced Polygonal Modeling in 3D Studio Max





## Postgraduate Certificate Advanced Polygonal Modeling in 3D Studio Max

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

Website: [www.techtute.com/in/information-technology/postgraduate-certificate/advanced-polygonal-modeling-3d-studio-max](http://www.techtute.com/in/information-technology/postgraduate-certificate/advanced-polygonal-modeling-3d-studio-max)

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# 01

# Introduction

The leading 3D polygonal modeling software, 3D Studio Max, offers a wealth of utilities and possibilities for application in many fields of three-dimensional graphics design. Among some of the fields that currently use 3D models, 3D printing, model and blueprint creation or models for industrial production, ranging from parts and components to clothing, footwear and a wide range of products, stand out. Therefore, this educational plan is focused on enhancing the tools of this software and implementing them in designs and modeling. All this in a fully online program that provides the student with all the material and educational resources on the virtual platform.





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*Be able to implement the most advanced 3ds Max utilities in your modeling and design, get the most professional results"*

This Postgraduate Certificate, focused on delving into the theory of the creation of shapes in order to develop true professionals in the field, is designed to enable the student to apply all the techniques to achieve a specific product. The program also delves into the development of the component parts of an aircraft and explains the topology of the aircraft in a model.

On the other hand, the student must be able to apply knowledge of technical components, create complex shapes through the development of simple shapes and understand the physiognomy of a bot shape. Thanks to this educational program, you gain access to more advanced knowledge in polygonal modeling with 3ds Max, so that you can take on more complex projects and goals related to this field, as well as distinguish your resume above other competitors.

A completely online educational program, which makes it easier to reconcile academic recycling with other personal and professional projects. In addition, the student has constant access to all the audiovisual material and educational content through the virtual classroom and has the support of a teaching staff made up of real experts and professionals in the three-dimensional modeling sector.

This **Postgraduate Certificate in Advanced Polygonal Modeling in 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 Advanced Polygonal Modeling in 3D Studio Max
- ◆ The graphic, schematic, and practical contents with which they are created, provide scientific and 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
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



*Enhance your skills in just 6 weeks with this online Postgraduate Certificate in Advanced Polygonal Modeling in 3ds Max"*

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*This Postgraduate Certificate teaches the students in an eminently practical way, getting them to model an aircraft with all its components”*

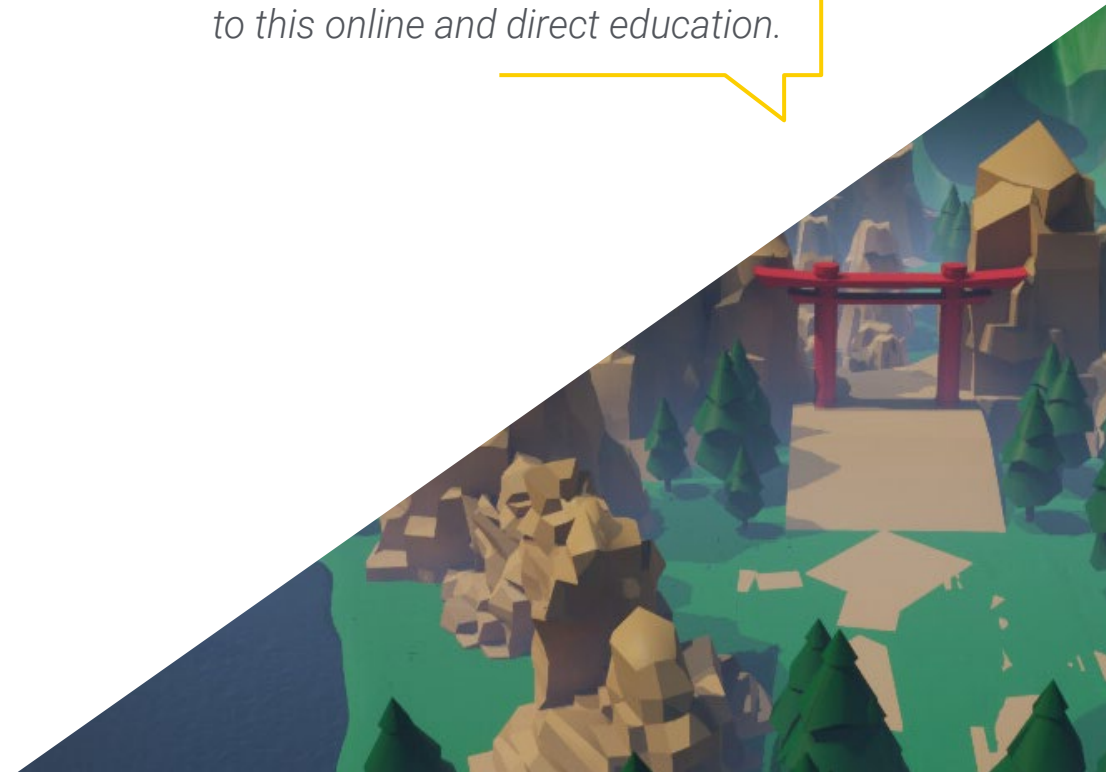
The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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 throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Conveniently and completely online, this educational program is the ideal way to advance in the use of 3ds Max.*

*Specialize your knowledge in the advanced use of 3ds Max thanks to this online and direct education.*



# 02 Objectives

This educational program has been designed for the student to become an advanced user of 3ds Max and therefore produce more elaborate and professional modeling. A previous knowledge of the software is interesting for the achievement of this objective, but not essential to perfect your techniques as a three-dimensional polygonal modeler. This Postgraduate Certificate puts into practice the students' skills and abilities, since it is based on the elaboration of a concrete model with all its component parts.







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*Become an advanced user  
of 3D polygonal modeling  
with 3D Studio Max”*



## General Objectives

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- ◆ Delve into the theory of shape creation in order to develop shape masters
- ◆ Learn in detail the basics of 3D modeling in its different forms
- ◆ Generate designs for different industries and their application
- ◆ Know all the tools involved in the 3D modeling profession
- ◆ Acquire skills for the development of textures and FX of 3D models





## Specific Objectives

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- ◆ Apply all the techniques for specific product development
- ◆ In-depth understanding of component parts development
- ◆ Understand the topology of an aircraft in modeling in depth
- ◆ Apply knowledge of technical components
- ◆ Creating complex shapes through the development of simple shapes
- ◆ Understand the physiognomy of a bot form

“

*Apply all the most advanced techniques and configurations of 3ds Max for the development of a specific product with this Postgraduate Certificate”*

03

# Course Management

Professionals of the highest level are part of the management and teaching staff of this Postgraduate Certificate. In addition to providing a theoretical and practical dimension of the content, they also instruct students in the use of their own judgment and the development of skills and abilities in three-dimensional polygonal modeling. The structure and content, as well as the objectives and subjects of study have been rigorously selected to guarantee the most up to date and specific learning in the sector.





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*In addition to providing a theoretical and practical dimension to the content, the faculty of this Postgraduate Certificate also instructs students in the use of self-judgment and the development of skills and abilities”*

## Management



### Mr. Salvo Bustos, Gabriel Agustín

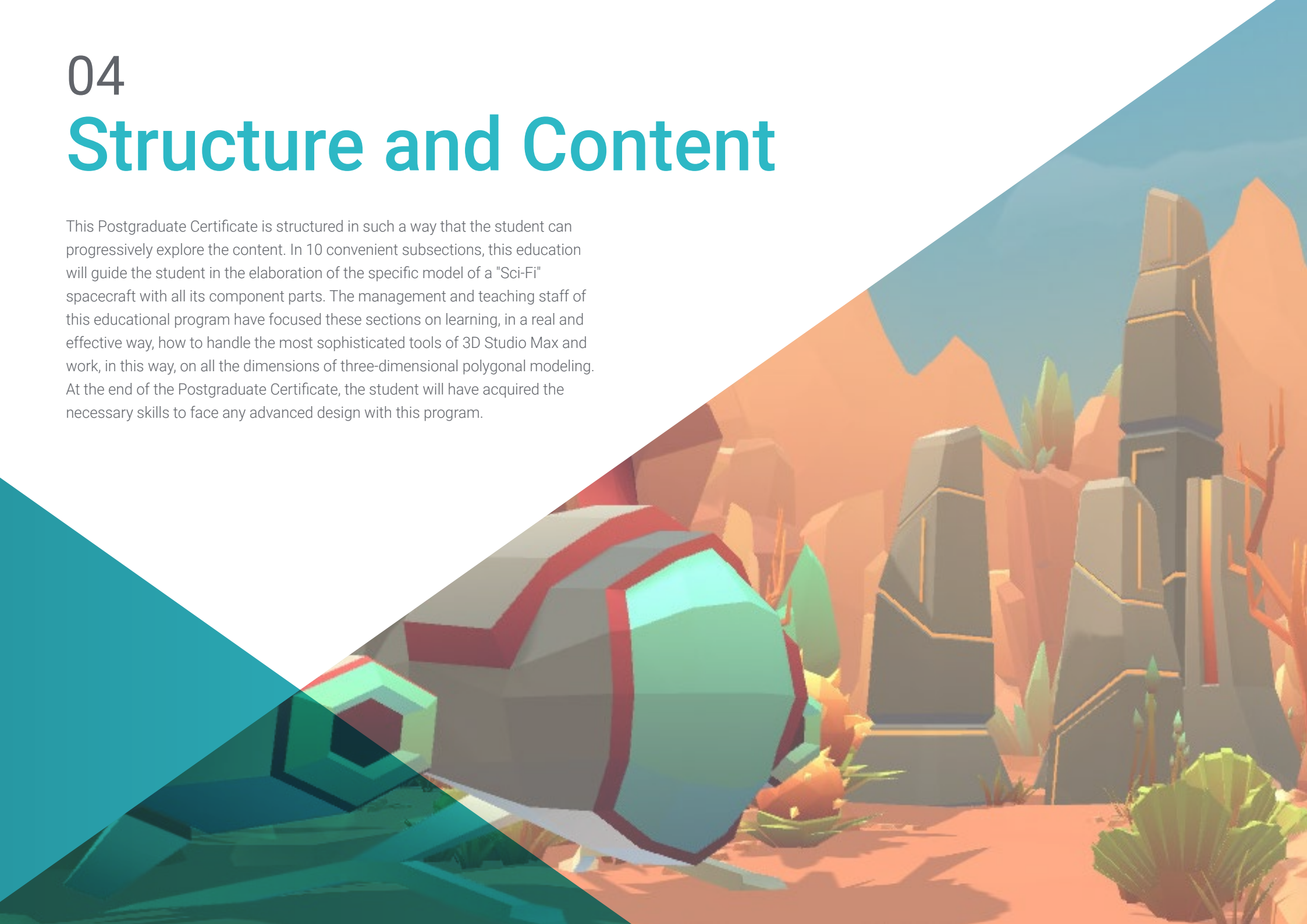
- ◆ 3D Artist at 3D VISUALIZATION SERVICE INC.
- ◆ 3D Production for Boston Whaler
- ◆ 3D Modeler at Shay Bonder Multimedia TV Production Company
- ◆ Audiovisual Producer at Digital Film
- ◆ Product Designer for Escencia de los Artesanos by Eliana M
- ◆ Industrial Designer Specializing in Products. National University of Cuyo
- ◆ Exhibitor at the Regional Visual Arts Salon Vendimia
- ◆ Digital Composition Seminar. National University of Cuyo
- ◆ National Congress of design and production. C.P.R.O.D.I



# 04

## Structure and Content

This Postgraduate Certificate is structured in such a way that the student can progressively explore the content. In 10 convenient subsections, this education will guide the student in the elaboration of the specific model of a "Sci-Fi" spacecraft with all its component parts. The management and teaching staff of this educational program have focused these sections on learning, in a real and effective way, how to handle the most sophisticated tools of 3D Studio Max and work, in this way, on all the dimensions of three-dimensional polygonal modeling. At the end of the Postgraduate Certificate, the student will have acquired the necessary skills to face any advanced design with this program.





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*You will be able to improve your skills in polygonal modeling in 3ds Max, a booming and in demand sector”*

## Module 1. Advanced Polygonal Modeling in 3D Studio Max

- 1.1. Sci-Fi spacecraft Modeling
  - 1.1.1. Creating our Workspace
  - 1.1.2. Starting with the Main Body
  - 1.1.3. Configuration for the Wings
- 1.2. The Cabin
  - 1.2.1. Development of the Cabin Area
  - 1.2.2. Modeling the Control Panel
  - 1.2.3. Adding Details
- 1.3. The Fuselage
  - 1.3.1. Defining Components
  - 1.3.2. Adjusting Minor Components
  - 1.3.3. Developing the Underbody Panel
- 1.4. The Wings
  - 1.4.1. Creation of the Main Wings
  - 1.4.2. Incorporation of the Tail
  - 1.4.3. Adding Inserts for the Ailerons
- 1.5. Main Body
  - 1.5.1. Separation of Parts into Components
  - 1.5.2. Creating Additional Panels
  - 1.5.3. Incorporating the Spring Doors
- 1.6. The Engines
  - 1.6.1. Creating the Space for the Engines
  - 1.6.2. Building the Turbines
  - 1.6.3. Adding the Exhaust
- 1.7. Adding Details
  - 1.7.1. Lateral Components
  - 1.7.2. Characteristic Components
  - 1.7.3. Refining General Components





- 1.8. Bonus I - Creation of the Pilot's Helmet
  - 1.8.1. Head Block
  - 1.8.2. Detail Refinements
  - 1.8.3. Helmet Neck Modeling
- 1.9. Bonus II – Creation of the Pilot's Helmet
  - 1.9.1. Helmet Neck Refinements
  - 1.9.2. Steps for Final Details
  - 1.9.3. Mesh Finishing
- 1.10. Bonus III – Creation of a Co-Pilot Robot
  - 1.10.1. Development of the Shapes
  - 1.10.2. Adding Details
  - 1.10.3. Supporting Edges for Subdivision

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*What are you waiting for? Become an advanced 3ds Max modeler now and set your resume apart from the competition"*

# 05 Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.





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*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.





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.





#### 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.



06

# Certificate

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



“

*Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”*

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

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

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

Title: **Postgraduate Certificate in Advanced Polygonal Modeling in 3D Studio Max**  
Official N° of hours: **150 h.**



\*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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