

# 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.techtitute.com/in/videogames/postgraduate-certificate/advanced-polygonal-modeling-3d-studio-max](http://www.techtitute.com/in/videogames/postgraduate-certificate/advanced-polygonal-modeling-3d-studio-max)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Methodology

---

*p. 20*

06

Certificate

---

*p. 28*

# 01

# Introduction

The leading program in the design of graphics and shapes for videogames and specialized in Advanced Polygonal Modeling, 3D Studio Max, offers a wide range of possibilities to its students. With application not only in this, but in many other areas, this program offers a comprehensive and superior approach to this video game program, fully online and with ease of reconciliation with the daily routine. This plan prepares those who take it to face high levels of demand in the sector and to successfully meet the challenges that arise.







“

*Prepare yourself for the great challenges of the industry, as a designer you will be able to face high levels of demand in Advanced Polygonal Modeling in 3D Studio Max"*

Through this Postgraduate Certificate, you gain access to superior knowledge in advanced polygonal modeling in 3D Studio Max, so that the specialization of the Curriculum Vitae and professional career is achieved. Additionally, added value is provided to companies, which is a consolidated argument in the face of new job opportunities, and a high level of solvency is guaranteed in the face of new challenges that arise in the professional field.

This curriculum takes a look at all the techniques offered by the 3D Studio Max program and focuses them on the development of a specific product. The plan then delves into the development of the component parts of a model, from the most practical part of the experience and from a perspective that allows for the comprehensive development of the most advanced 3D polygonal designs.

In this sense, the fundamental objective focuses on understanding the topology of an aircraft in modeling, through the application of knowledge of technical components to create complex shapes and the development of simple shapes. The aim is also to understand the physiognomy of a bot form.

Thanks to this Postgraduate Certificate in its completely online version, you will be able to balance your studies during the 6 weeks of the program with your day-to-day life. In addition, you will be able to access all the content in multimedia format whenever you need it or want to go deeper into the material.

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 practical cases 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
- ◆ Access to content from any fixed or portable device with an Internet connection



*With a totally practical dimension, this Postgraduate Certificate will provide you with the knowledge to create specific models”*

“ *This Postgraduate Certificate will give you access to superior knowledge in advanced polygonal modeling in 3D Studio Max*”

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 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. This will be done with the help of an innovative system of interactive videos made by renowned experts.

*Understand the topology in the modeling of an aircraft or the physiognomy of a bot shape with this training.*

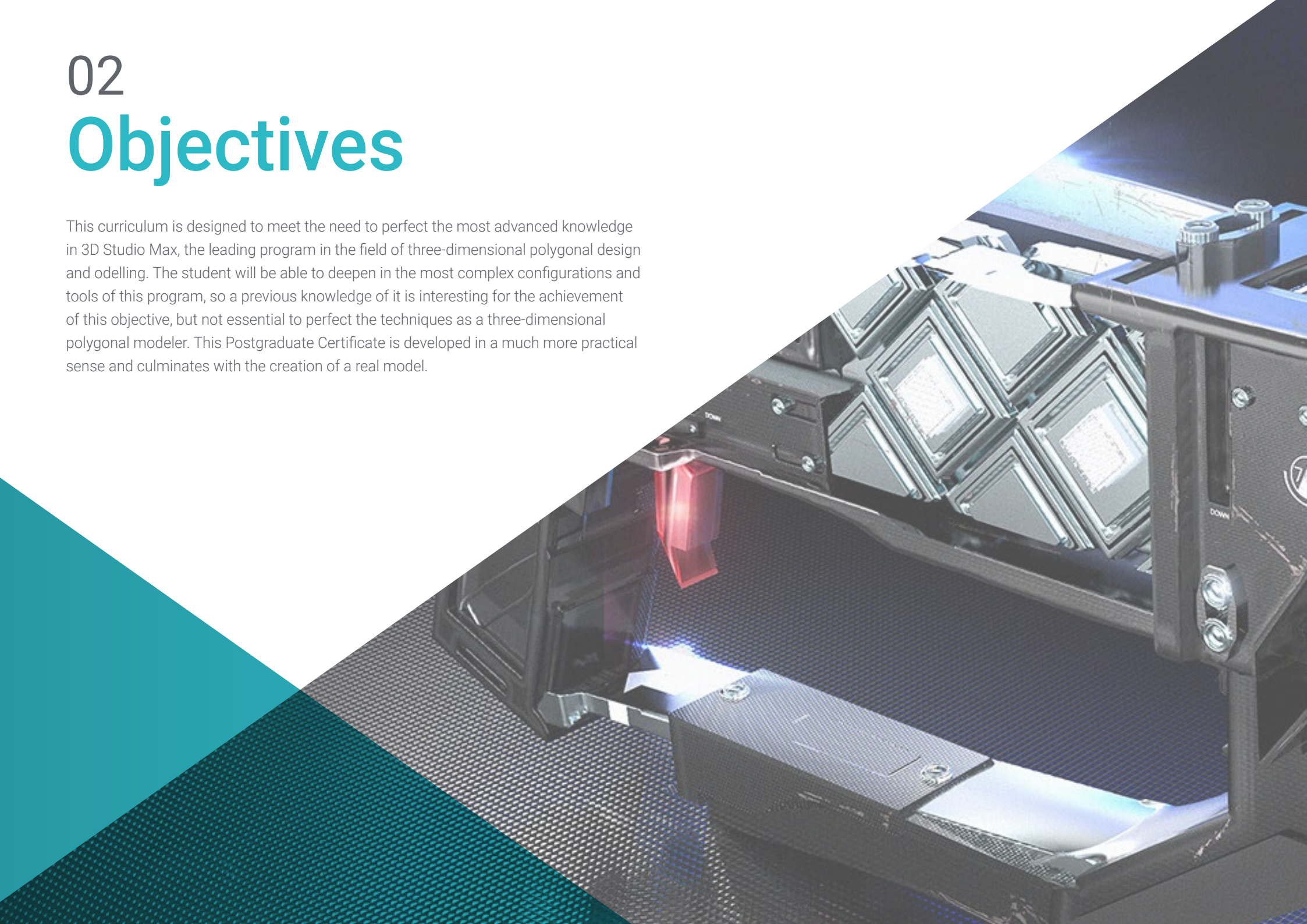
*Get the most out of the 3D Studio Max program in your three-dimensional designs for video games.*





# 02 Objectives

This curriculum is designed to meet the need to perfect the most advanced knowledge in 3D Studio Max, the leading program in the field of three-dimensional polygonal design and modelling. The student will be able to deepen in the most complex configurations and tools of this program, so a previous knowledge of it is interesting for the achievement of this objective, but not essential to perfect the techniques as a three-dimensional polygonal modeler. This Postgraduate Certificate is developed in a much more practical sense and culminates with the creation of a real model.







“

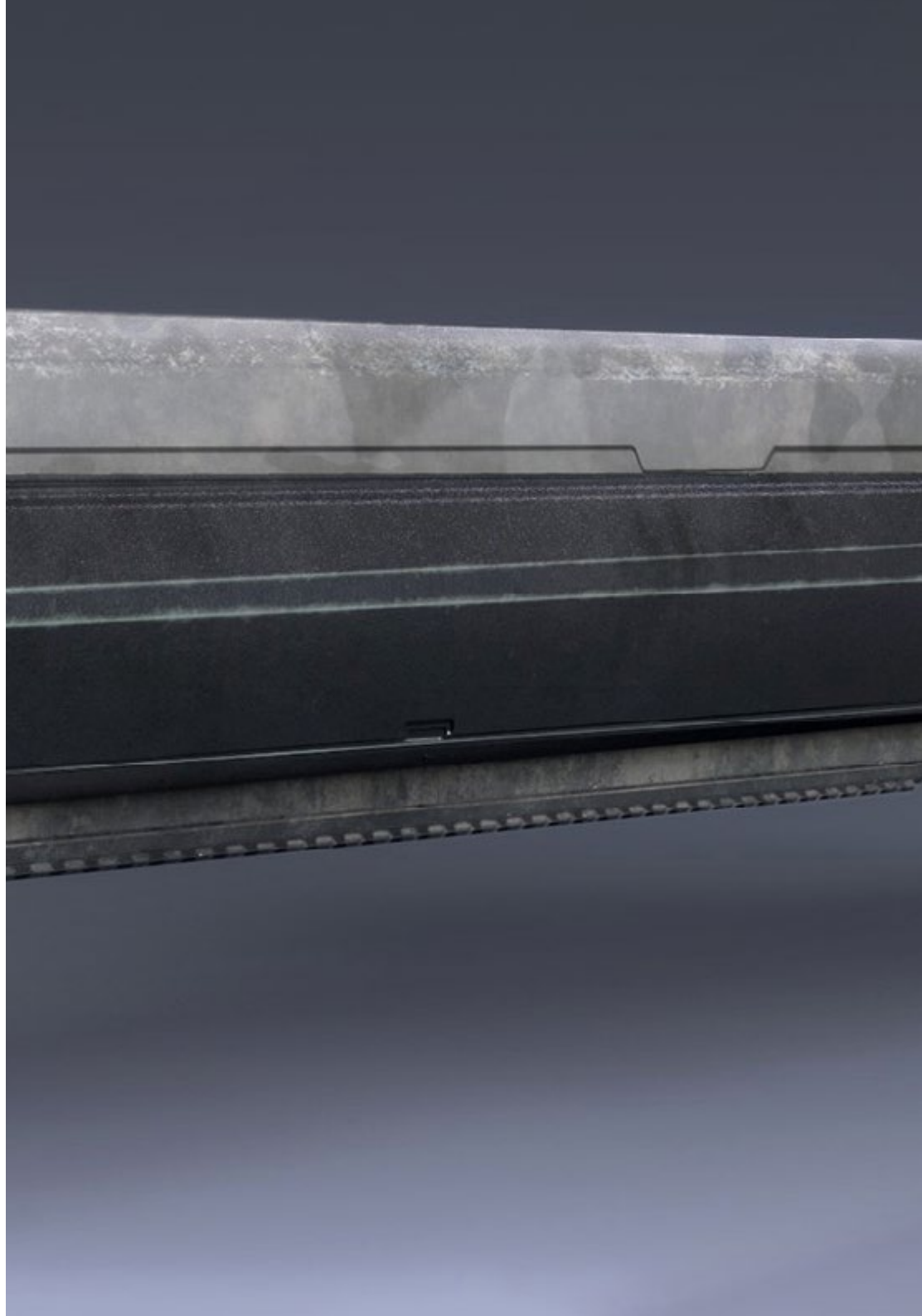
*Delve into the most complex configurations and tools of this industry-leading program, creating complex shapes”*



## General Objectives

---

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





## Specific Objectives

---

- ◆ Apply techniques for specific product development
- ◆ In-depth understanding of component development
- ◆ Gain a broad understanding of aircraft topology in modeling
- ◆ Apply knowledge of technical components
- ◆ Create complex shapes through the development of simple shapes
- ◆ Understand the physiognomy of a bot shape

“

*This online Postgraduate Certificate is designed to help you achieve your goals”*



# 03

# Course Management

Professionals of the highest level are part of the management and teaching staff of this Postgraduate Certificate, in whose study plan their knowledge and perspectives can be appreciated. Therefore, 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. This program has been designed thanks to the expertise of all these professionals and aims to improve the students' skills.





“

*The structure and content, as well as the objectives and subjects of study have been rigorously selected by professionals of the highest level”*

## Management



### Mr. Salvo Bustos, Gabriel Agustín

- 9 years of experience in Aeronautical 3D modeling
- 3D Artist at 3D Visualization Service Inc
- 3D production for Boston Whaler
- 3D Modeler for Shay Bonder Multimedia TV Production Company
- Audiovisual Producer in Digital Film
- Product Designer for Escencia de los Artesanos by Eliana M
- Industrial Designer Specializing in Products National University of Cuyo
- Mendoza Late Contest Honorable Mention
- Exhibitor in Regional Visual Arts Salon Vendimia
- Digital Composition Seminar National University of Cuyo
- National Congress of Design and Production CPRODI

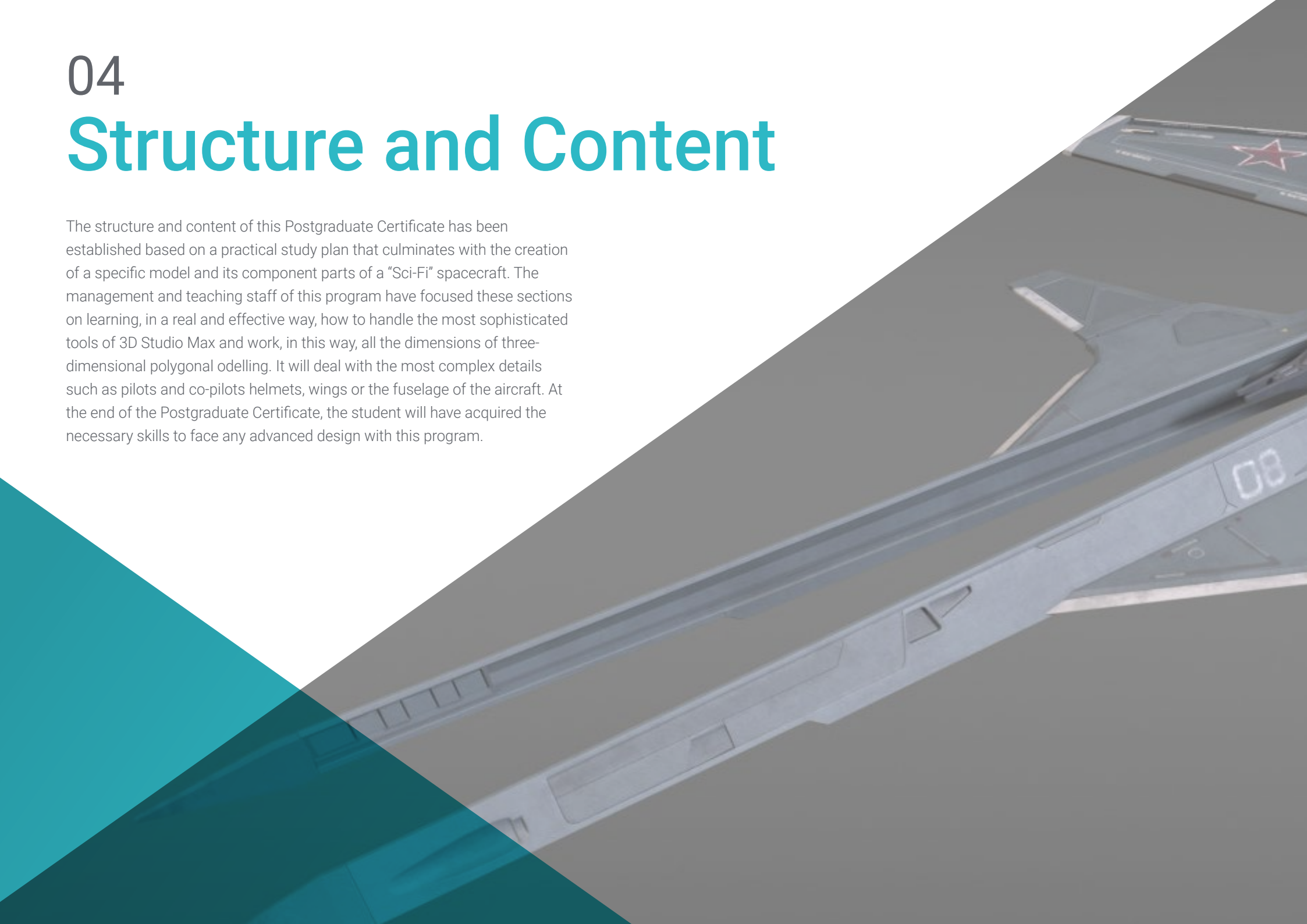




# 04

## Structure and Content

The structure and content of this Postgraduate Certificate has been established based on a practical study plan that culminates with the creation of a specific model and its component parts of a "Sci-Fi" spacecraft. The management and teaching staff of this 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, all the dimensions of three-dimensional polygonal modelling. It will deal with the most complex details such as pilots and co-pilots helmets, wings or the fuselage of the aircraft. At the end of the Postgraduate Certificate, the student will have acquired the necessary skills to face any advanced design with this program.





“ Learn how to create specific models with all their component parts in 3D Studio Max”



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

- 1.1. Modeling a Sci-Fi Spacecraft
  - 1.1.1. Creating our Workspace
  - 1.1.2. Beginning with the Main Body
  - 1.1.3. Wing Configuration
- 1.2. Cabin
  - 1.2.1. Development of Cockpit
  - 1.2.2. Modeling the Control Panel
  - 1.2.3. Adding Details
- 1.3. Fuselage
  - 1.3.1. Defining Components
  - 1.3.2. Adjusting Minor Components
  - 1.3.3. Development of Panel Under the Body
- 1.4. Wings
  - 1.4.1. Creating the Main Wings
  - 1.4.2. Incorporating the Tail
  - 1.4.3. Adding Aileron Inserts
- 1.5. Main Body
  - 1.5.1. Separating Parts into Components
  - 1.5.2. Creating Additional Panels
  - 1.5.3. Incorporating Dock Doors
- 1.6. Engines
  - 1.6.1. Creating Space for Engines
  - 1.6.2. Building the Turbines
  - 1.6.3. Adding Exhausts
- 1.7. Adding Details
  - 1.7.1. Lateral Components
  - 1.7.2. Typical Components
  - 1.7.3. Refining Overall Components





- 1.8. Bonus I-Creation of Pilot Helmet
  - 1.8.1. Head Block
  - 1.8.2. Detail Refinement
  - 1.8.3. Modeling Helmet Collar
- 1.9. Bonus II-Creation of a Pilot Helmet
  - 1.9.1. Refining the Helmet Collar
  - 1.9.2. Steps for Finishing Touches
  - 1.9.3. Completion of the Mesh
- 1.10. Bonus III-Creation of a Co-Pilot Robot
  - 1.10.1. Developing Shapes
  - 1.10.2. Adding Details
  - 1.10.3. Supporting Edges for Subdivision

“*Advanced Polygonal Modeling with 3D Studio Max will have no secrets for you and you will be able to effectively apply what you have learned in this Postgraduate Certificate in your professional career*”



# 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.







“

*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 business 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. Over the course of 4 years, you will be presented with multiple practical case studies. You will have to combine all your knowledge, and research, argue, and defend your ideas and decisions.

## Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 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 we live in.



### 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 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.

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



**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

# Postgraduate Certificate

## Advanced Polygonal Modeling in 3D Studio Max

