Postgraduate Diploma
2D Animation

tech global university

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Postgraduate Diploma
2D Animation

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Credits: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/videogames/postgraduate-diploma/postgraduate-diploma-2d-animation

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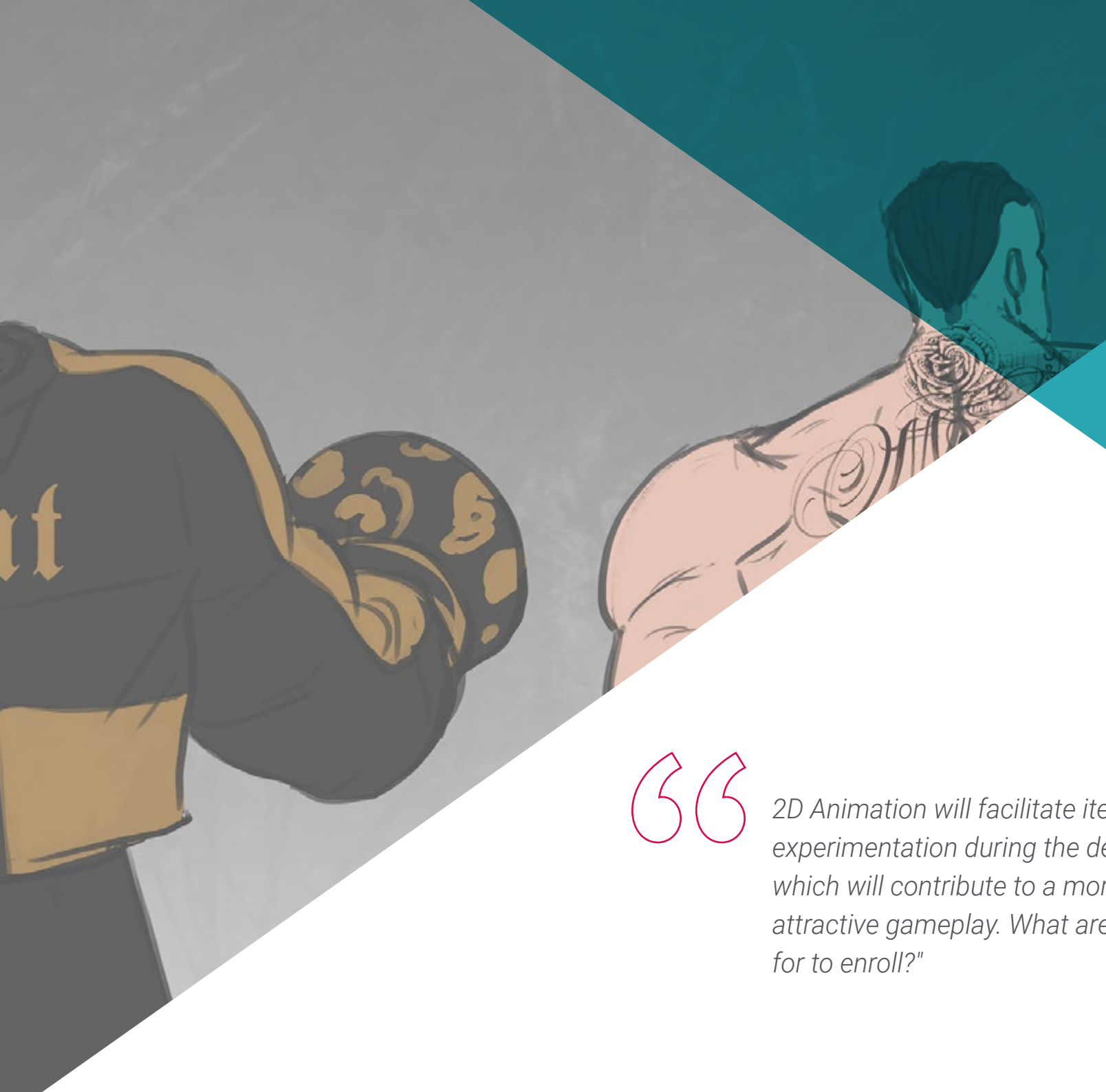
01

Introduction

2D Animation applied to video games offers a number of significant benefits for developers and gamers alike. First, its timeless visual style allows for the creation of memorable worlds and characters with unique charm. In addition, it requires fewer hardware resources compared to its 3D counterparts, resulting in faster development times and greater platform accessibility. Similarly, the range of stylistic possibilities allows creators to explore artistic styles, from pixel artaesthetics to detailed and complex animations. TECH's initiative has materialized in a 100% online, adaptable program that facilitates participation at any time and from anywhere.



2D Animation will facilitate iteration and experimentation during the design process, which will contribute to a more fluid and attractive gameplay. What are you waiting for to enroll?"

2D Animation in video games is characterized by simplicity and a distinctive artistic style, allowing for greater creative flexibility and giving developers the ability to experiment with unique and captivating visual styles. In addition, 2D Animation requires fewer computational resources compared to 3D Animation, making it easier to run on devices with limited capabilities. As a result, more and more companies in the industry are looking for highly qualified specialists.

In this context, TECH has developed this Postgraduate Diploma, covering from the basics of 2D language, to advanced techniques of traditional animation. Therefore, aspects such as frame animation, the elaboration of audiovisual scripts and the use of tools such as Toon Boom Harmony and Adobe Animate will be covered in depth.

The course will also delve into the essential principles of 2D animation, including concepts such as *squash* and *stretch*, anticipation, staging and complementary action. In this way, designers will apply these principles in the creation of fluid and expressive animations, using digital tools to optimize their creative process. In addition, advanced techniques such as animation cycles, full turns and the application of color and shading will be explored to bring characters and scenery to life.

Finally, more specialized aspects such as lip-syncing, creating walk cycles and applying visual effects such as sweeps and blurs will be explored in depth. Likewise, professionals will receive practical instruction in stroke cleaning and rotoscoping techniques, to perfect their skills and prepare them to face the challenges of the professional world of 2D Animation.

The syllabus will provide an unparalleled opportunity for graduates, offering a digital and adaptable format. This will allow them greater flexibility in managing their study schedules, helping them to more effectively balance their daily personal and professional commitments. All based on the revolutionary *Relearning*methodology, a pioneer in TECH.

This **Postgraduate Diploma in 2D Animation** contains the most complete and up-to-date program on the market. The most important features include:

- The development of case studies presented by experts in 2D Animation
- The graphic, schematic and practical contents of the book provide theoretical and practical information on those 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

2D Animation in video games will offer you a combination of timeless aesthetics, development efficiency and creative flexibility that makes it invaluable in this field”

You'll dive into position animation, lip-syncing, walk cycles, full turns, exaggeration and stilling, as well as more advanced techniques, such as rotoscoping, sweeps and color application"

You will delve into the nostalgic aesthetics associated with 2D Animation, evoking emotions and connecting with the audience in a unique way, enhancing the player's immersion in the videogame.

You will acquire knowledge of cinematographic and audiovisual language, exploring shot composition, camera movements and editing techniques. Bet on TECH!

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

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

02

Objectives

This Postgraduate Diploma will provide graduates with comprehensive and specialized education in the techniques, tools and fundamental principles of 2D Animation. Through a modular structure and a hands-on approach, it will enable designers to develop the creative and technical skills necessary for the production of high-quality animated content. From understanding the fundamentals of 2D language, to mastering advanced traditional animation techniques, the program will prepare professionals capable of meeting the challenges of the audiovisual world with technical soundness, creativity and artistic prowess.

You will become familiar with key industry tools, such as Toon Boom Harmony and Adobe Animate, all through an extensive library of the most innovative multimedia resources"

General Objectives

- Master the visual language in the field of 2D animation
- Apply the fundamental principles of 2D animation to create compelling and engaging sequences
- Research and apply trends and technological advances in 2D animation, keeping abreast of innovations and adapting practices to industry standards

You'll master the fundamental principles of 2D Animation, from squash and stretch, to anticipation and staging, preparing you to approach projects creatively and effectively"

Specific Objectives

Module 1. 2D Language

- Develop skills for the creation of specific scripts for 2D animation projects, considering visual storytelling
- Understand and apply key principles of graphic language in the creation of coherent and aesthetically appealing visual elements
- Analyze and apply the concepts of film and audiovisual language to enhance visual storytelling
- Acquire solid knowledge of the language of production, from planning to final delivery

Module 2. Principles of 2D Animation

- Analyze and employ anticipation techniques, understanding the composition of parallel and inverse forces and their narrative value in the creation of animated sequences
- Develop staging skills to optimize the visual presentation of characters and moving objects
- Integrate complementary action and superimposed action strategically to enrich visual narratives, bringing layers of movement and expressiveness to animated characters and objects

Module 3. Advanced Traditional Animation

- Perfect the technique of position animation, ensuring smooth and coherent transitions between different poses to achieve dynamic and expressive visual sequences
- Master the creation of walk cycles, optimizing naturalness and fluidity in basic motion animation
- Integrate complete turns seamlessly into 2D animation, addressing realistic and stylized representation of character and object rotations in different narrative contexts
- Develop advanced skills in the application of color in animation, considering palette, lighting and visual consistency

03

Course Management

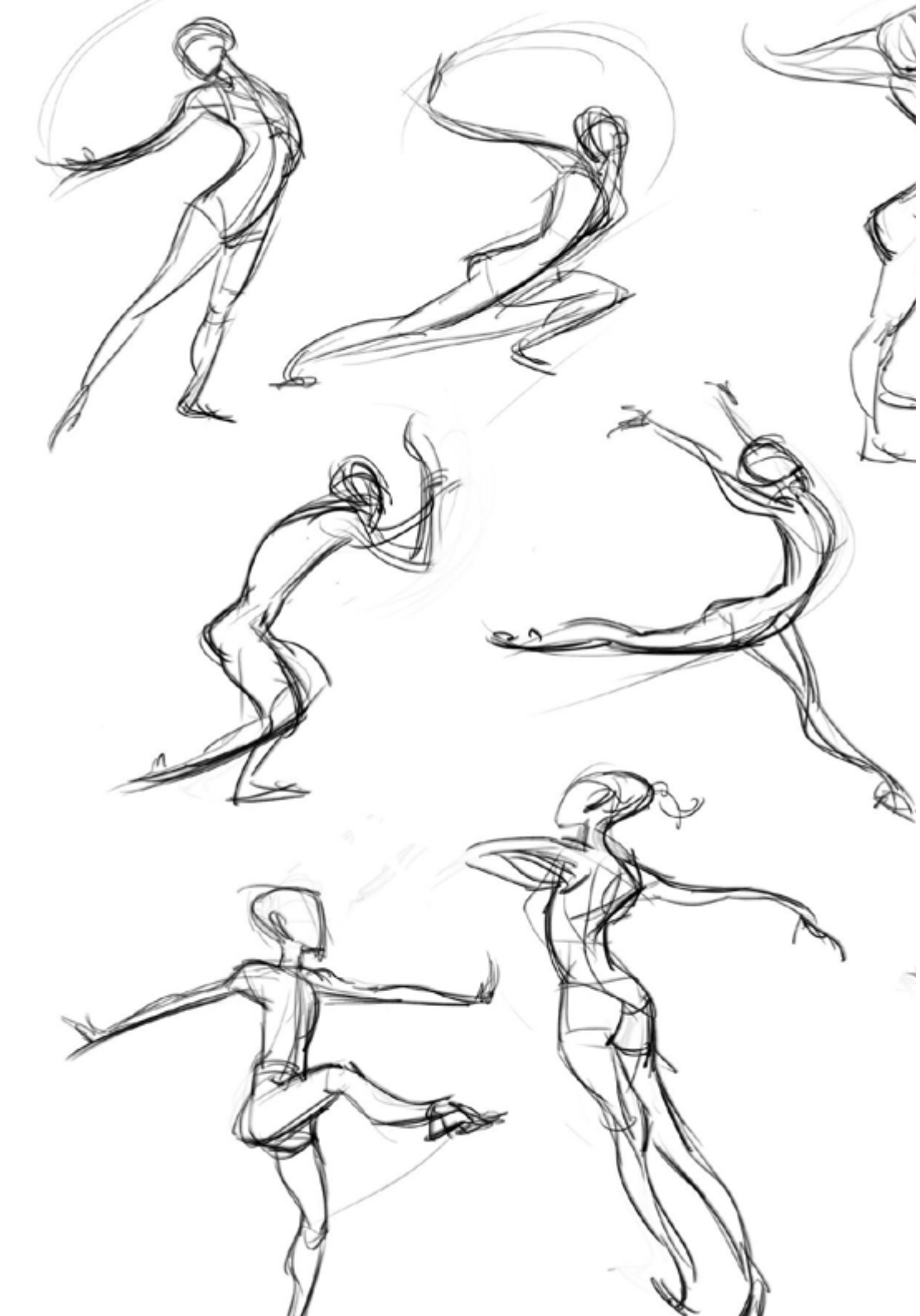
The teachers of this academic program are highly qualified and experienced professionals in the field of Animation, carefully selected for their extensive knowledge and practical experience in the industry. These experts combine solid academic qualifications with an outstanding track record in the creation of animated content, enabling them to teach classes with a practical and relevant approach. In addition, their commitment to educational excellence is reflected in their ability to adapt teaching methodologies to the individual needs of graduates, fostering a dynamic and collaborative learning environment.

With a shared passion for Animation, teachers will pass on technical knowledge and practical skills, inspiring you to reach your full creative potential."

Management

Dr. Larrauri, Julián

- Television and Film Director
- Executive Producer at Capitán Araña
- Managing Producer at Arcadia Motion Pictures
- *Head of Production*, Director and Writer at B-Water
- Executive Producer, Production Manager and Head of Development at Ilion Animation Studios
- Production Manager at Imira Entertainment
- Ph.D. in Humanities from Rey Juan Carlos University
- Professional Master´s Degree in Executive Production of Films and Series by Audiovisual Business School
- Professional Master's Degree in Communication and Advertising Management by ESIC
- Degree in Audiovisual Communication from the Complutense University of Madrid
- Nominated as "Best Production Director" at the Goya Awards for "Mortadelo y Filemón contra Jimmy el Cachondo"



Professors

Mr. Coronado Pozo, Jorge

- Character Animation Specialist
- Animation Supervisor at Dreamwall
- Lead Character Animator/Layout Artist at Arcadia Motion Pictures
- Senior Character Animator in several projects
- Character Animator (2D/3D) at several companies
- Storyboard and layout for television
- Video game animator

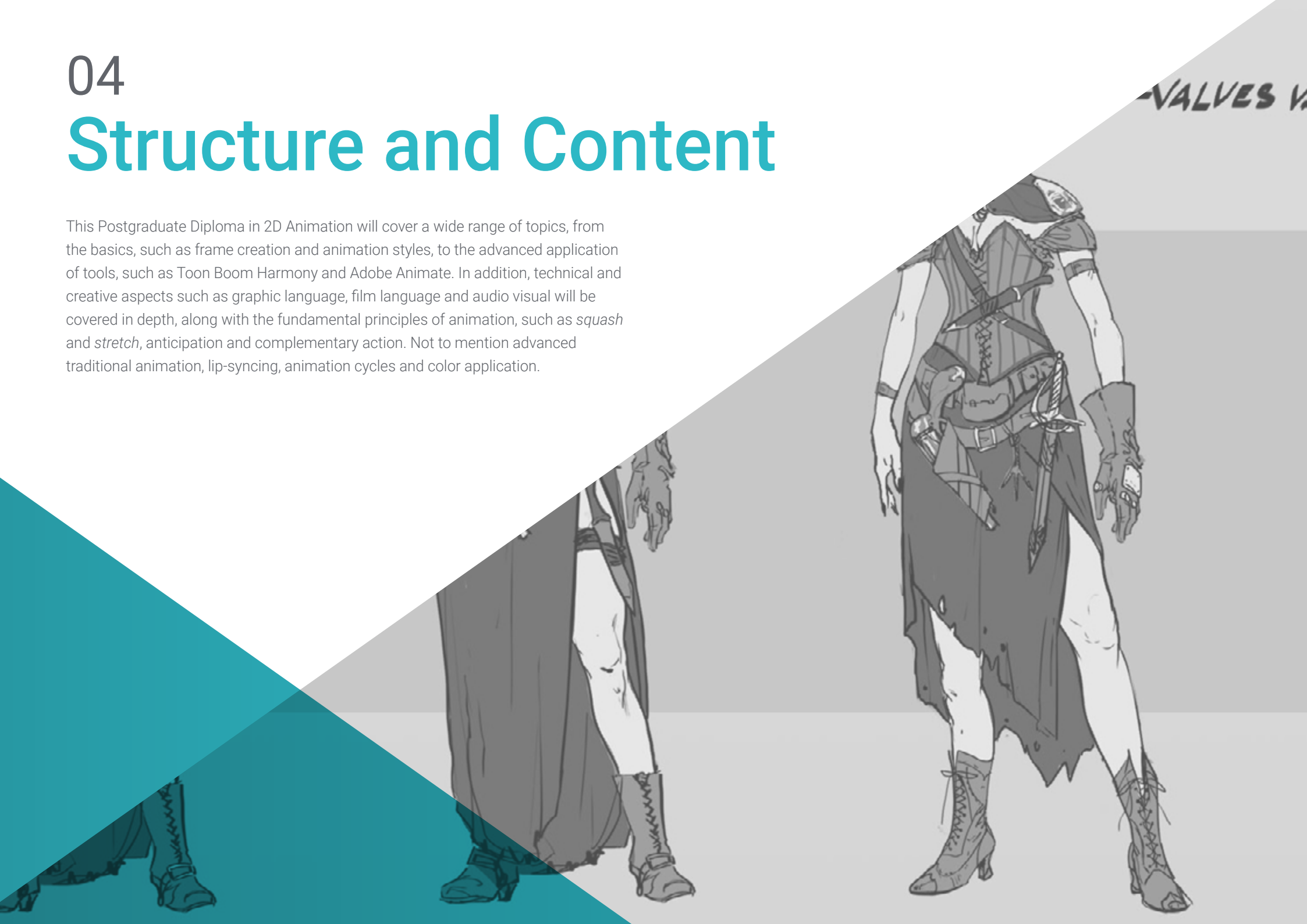
Mr. Amurrio Vesga, Iñaki

- Animation Technical Director and Animation Expert
- Storyboarding Director for the feature film "Blue's Big City Adventure" (Paramount +)
- Animator for the TV show "Tiny toons"
- Animation director for the short film "Amanece la noche más larga" ("Dawn the longest night")
- Animator for the feature film "The rise of Ninja Turtles" (Netflix)
- Animator for the webseries "Bellies" (Famosa)
- Animation director and head of studio for the anime series "Memories of Idhún" (Netflix)
- Animation director and technical director at Imira Entertainment

04

Structure and Content

This Postgraduate Diploma in 2D Animation will cover a wide range of topics, from the basics, such as frame creation and animation styles, to the advanced application of tools, such as Toon Boom Harmony and Adobe Animate. In addition, technical and creative aspects such as graphic language, film language and audio visual will be covered in depth, along with the fundamental principles of animation, such as *squash* and *stretch*, anticipation and complementary action. Not to mention advanced traditional animation, lip-syncing, animation cycles and color application.



You will equip yourself with essential skills for audiovisual scripting, analyzing narrative structure and associated terminology"

Module 1. 2D Language

1.1. 2D Animation
- 1.1.1. Photograms
- 1.1.2. Frame Exposure and Types of Animation
- 1.1.3. 2D Animation Styles

1.2. Script
- 1.2.1. Audiovisual Script
- 1.2.2. Precursors of the Script. Synopsis, Outline and Use of the Storybeats Application
- 1.2.3. Script Structure and Terminology

1.3. Use of Toon Boom Harmony Interface
- 1.3.1. Recognition of the Working Area
- 1.3.2. Timeline
- 1.3.3. Basic Tools

1.4. Graphic Language
- 1.4.1. Drawing
- 1.4.2. Compositional Language
- 1.4.3. Color Language

1.5. Cinematographic and Audiovisual Language -se-en-scène
- 1.5.1. Plans According to the Relation that They Keep with Their Objective
- 1.5.2. Camera Movements, Their Nomenclature and Usefulness
- 1.5.3. Morphological Elements of an Audiovisual Work

1.6. Cinematographic and Audiovisual Language - Semantic Aspect
- 1.6.1. Montage and Editing
- 1.6.2. Transitions and Rhythm
- 1.6.3. Description of Shots and Sequences According to Narrative Purposes

1.7. Production Language
- 1.7.1. Workflow and Flowchart in the Production of an Animated Project
- 1.7.2. The Animator and their Relationship with the Production Area
- 1.7.3. The Animator and their relationship with the Management and Other Creative Areas

1.8. Adobe Animate Interface
  1.8.1. Exploring and Recognizing the Working Area
  1.8.2. Timeline
1.9. Adobe 2D Traditional 2D Animation Applied to Digital Media
  1.9.1. Comparative Terminologies in Toon Boom Harmony
  1.9.2. Comparative Terminologies in Adobe Animate
  1.9.3. Terminologies Unique to Digital Media
1.10. Additional Languages
  1.10.1. Sound Language
  1.10.2. Color and Narrative Language
  1.10.3. Tone, Genre and Discourse of the Audiovisual Work

Module 2. Principles of 2D Animation

2.1. Compressing and Stretching (Squash and Stretch)
  2.1.1. Compressing and Mass Conservation
  2.1.2. Stretching and Mass Conservation
  2.1.3. Application in Digital Media and Other Deformations
2.2. Anticipation, the Composition of Parallel and Inverse Forces and their Narrative Value
  2.2.1. Physical Anticipation
  2.2.2. Narrative Anticipation and Other Types of Anticipation
  2.2.3. Anticipation of Anticipation
2.3. Staging
  2.3.1. Staging
  2.3.2. Visual Appeal and Firm Drawing
  2.3.3. Secondary Animation
2.4. Linear Animation (Straight Ahead)
  2.4.1. Linear Animation
  2.4.2. Pose-by-pose Animation
  2.4.3. Hybrid Animation
2.5. Character Pose Changes (Breakdowns)
  2.5.1. Direct Interleaving and Interleaving with Breakdowns
  2.5.2. Changes of Direction
  2.5.3. Speed Changes

2.6. Complementary and Superimposed Action
- 2.6.1. Complementary Action
- 2.6.2. Combs
- 2.6.3. Superimposed Action

2.7. Accelerations, Decelerations and Rhythm
- 2.7.1. Deceleration
- 2.7.2. Acceleration
- 2.7.3. Acceleration Curves

2.8. Arcs
- 2.8.1. The Pivot and Axis of Rotation
- 2.8.2. Movement Arcs
- 2.8.3. Other Organic Paths of Motion

2.9. Exaggeration
- 2.9.1. Pose Exaggeration
- 2.9.2. Exaggeration in Rhythm
- 2.9.3. Character Reactions (Take and Double Take)

2.10. Contacts and Friction
- 2.10.1. Records
- 2.10.2. Contacts
- 2.10.3. Friction and Resistances

Module 3. Advanced Traditional Animation

3.1. Position Animation
- 3.1.1. Silhouette
- 3.1.2. Lines of Action
- 3.1.3. Counterposes and Reversals

3.2. Lip Synchronization
- 3.2.1. Mouth Movements
- 3.2.2. Vocalization Interleaving and Mouth Performance
- 3.2.3. Digitally Automated Synchronization

3.3. Walking Cycles
- 3.3.1. Contacts and Position Changes
- 3.3.2. Walk Cycle Position Changes
- 3.3.3. Cycling a Linear Walk and Cycles in Animate and Toon Boom

3.4. Walks, Running Cycles and Alternate Cycles
- 3.4.1. Walks
- 3.4.2. Racing
- 3.4.3. Alternative Cycles

3.5. Complete Turns
- 3.5.1. Of the Head
- 3.5.2. Complete and Object
- 3.5.3. Truncated Turns

3.6. Exaggerate and Calm Down
- 3.6.1. Exaggerate
- 3.6.2. Calm Down
- 3.6.3. Bounce

3.7. Rotoscopy, Reference and Documentation
- 3.7.1. Rotoscopy
- 3.7.2. Video Reference
- 3.7.3. Integration with Live Action

3.8. Sweeps, Multiples and Blurs
- 3.8.1. Sweeps
- 3.8.2. Multiples
- 3.8.3. Blurs

3.9. Clean Strokes and Assistance
- 3.9.1. Assistance
- 3.9.2. Interleaving
- 3.9.3. Cleaning of Strokes

3.10. Color Application
- 3.10.1. Shading as a Second Level of Animation
- 3.10.2. Shadow Casting
- 3.10.3. Digital Automation of Color and Shadows using Toon Boom

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

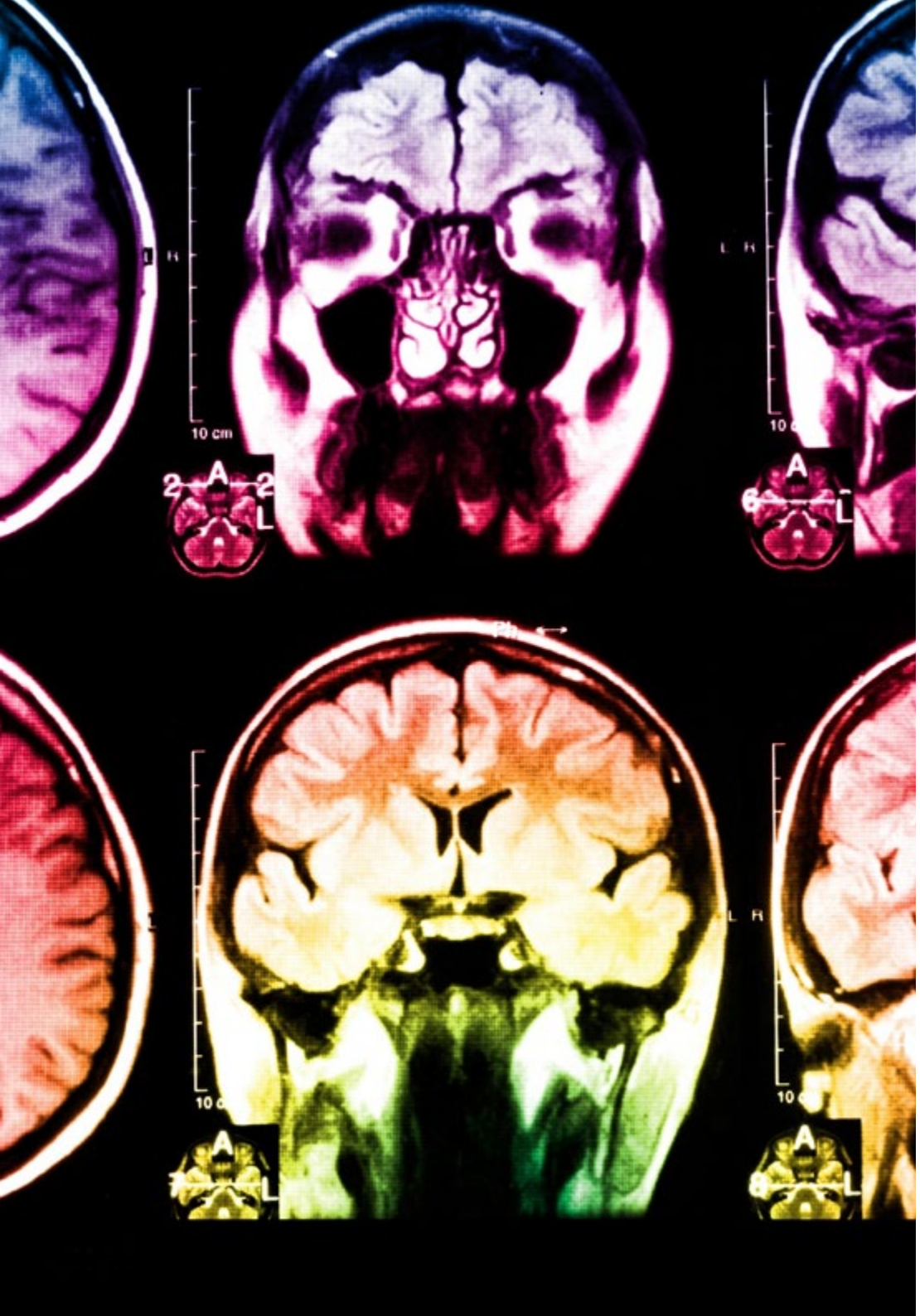
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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.

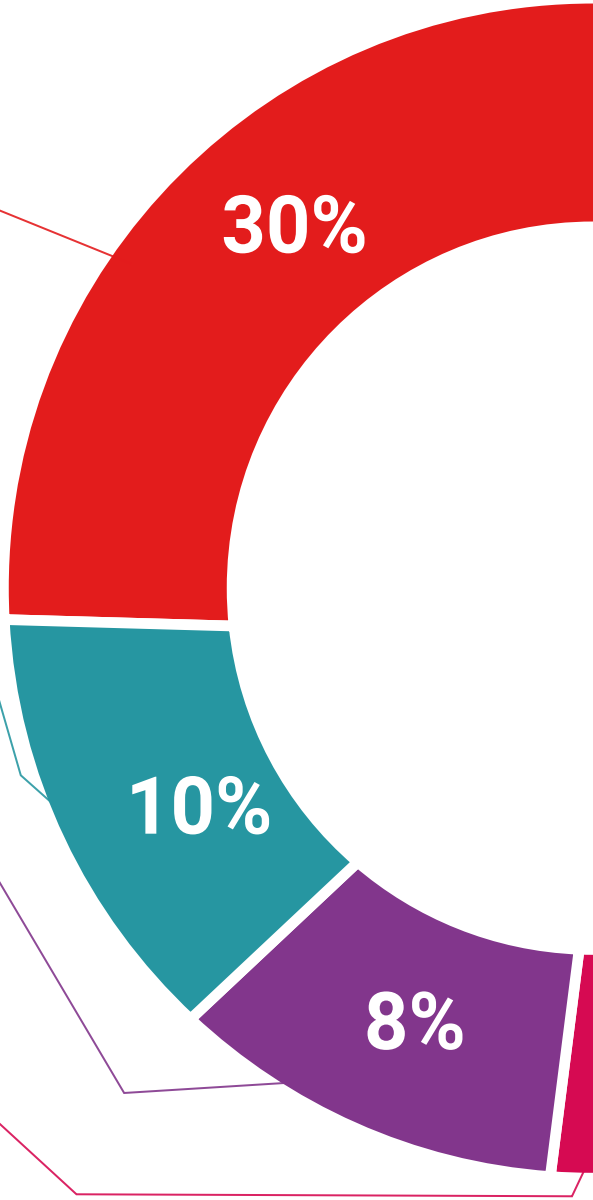
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

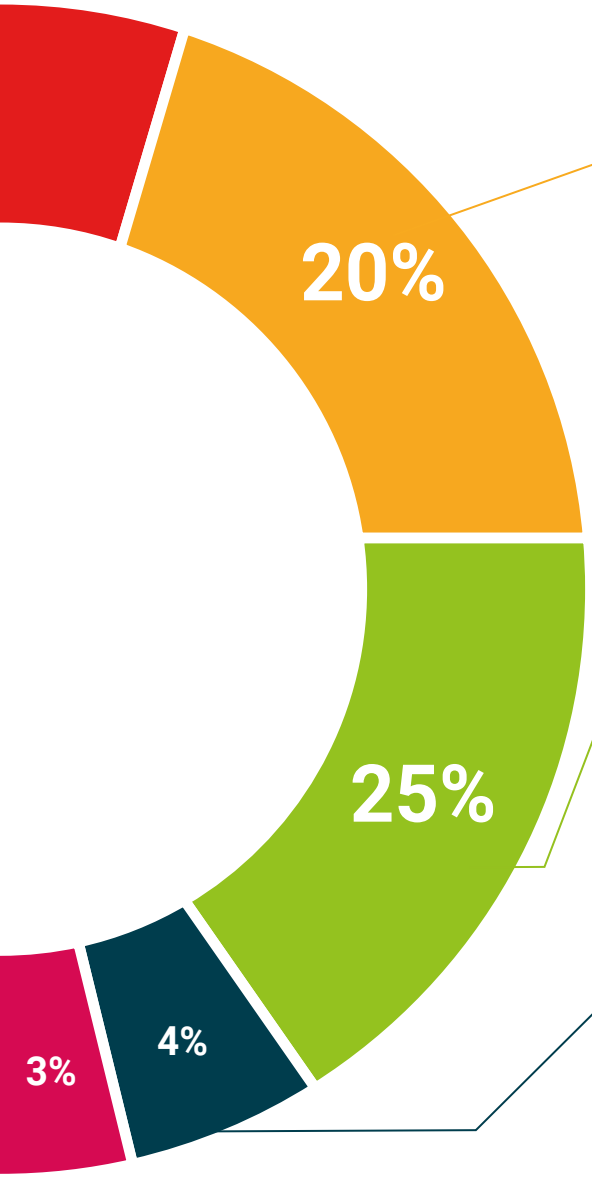
Practising Skills and Abilities

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 Diploma in Animation 2D guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.

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

This program will allow you to obtain your **Postgraduate Diploma in 2D Animation** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (***official bulletin***). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in 2D Animation**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**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Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Postgraduate Diploma in 2D Animation

This is a program of 450 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

Unique TECH Code: AFWORD23S techtitute.com/certificates

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

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