

Master's Degree

2D Animation





Master's Degree 2D Animation

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/videogames/master-degree/master-2d-animation

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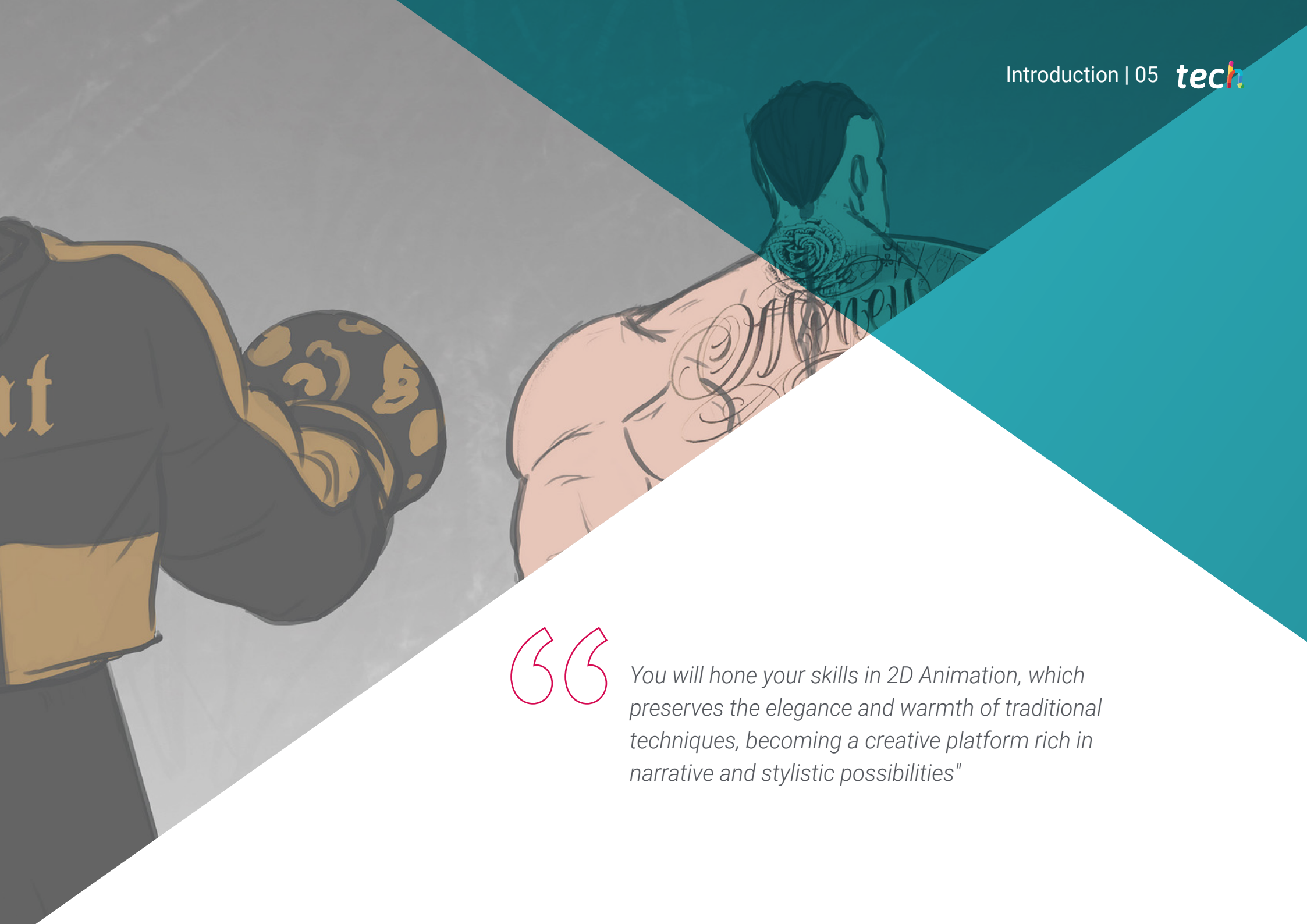
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01

Introduction

2D Animation has a timeless and charming visual style that provides developers with the ability to create worlds and characters that can resonate with the audience in a unique way. 2D Animation is especially effective at conveying emotions and detailed facial expressions, which contributes to a more immersive gaming experience. In addition, its lighter nature in computational resources allows for more efficient performance compared to 3D animation, essential for games on resource-constrained devices. The stylistic versatility of 2D Animation also allows designers to experiment with a variety of artistic styles, from pixel art to more elaborate animations. In this context, TECH has implemented this 100% online program, totally flexible, allowing the student to connect anytime and anywhere.





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You will hone your skills in 2D Animation, which preserves the elegance and warmth of traditional techniques, becoming a creative platform rich in narrative and stylistic possibilities"

2D Animation offers a wide range of benefits, not least because of its classic and timeless visual style, which allows for the creation of characters and environments, capturing the viewer's imagination in a charming way. In addition, its apparent simplicity facilitates complex storytelling in an accessible way, allowing for a deeper connection with the audience. The versatility of this format allows experimentation with visual and expressive styles, giving creators extraordinary freedom.

As a result, this Master's Degree in 2D Animation is created, which presents a comprehensive syllabus that will include modules designed to qualify designers in the facets of two-dimensional animation. Therefore, professionals will address the fundamentals of graphic design, understanding how the proper use of lines, shapes and colors contributes to the visual narrative in animation. In addition, they will delve into the basic principles that govern movement and expression in this format, creating convincing animated sequences.

Furthermore, the program will explore current technologies, providing knowledge of software and digital techniques essential for the creation of contemporary 2D animations. To this must be added a deep understanding of specific aspects, from character development to the application of advanced techniques.

Similarly, graduates will be prepared to plan animation projects effectively, considering aspects such as scripting and production design, and then focus on project execution, applying their knowledge in the creation of complete animations. Finally, students will be equipped with skills to perfect and promote their creations in the market, understanding the importance of marketing and commercialization in this industry.

As such, the educational program will offer a unique opportunity by presenting a fully online and flexible modality. This approach will give students an extended freedom to organize their study schedule, enabling them to reconcile their daily personal and professional responsibilities in a more efficient way.

This **Master's Degree 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 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



2D Animation is easily adaptable to various platforms, from television to social media, making it an effective tool for reaching audiences of all ages. Enroll now!"

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You will delve into the key concepts that govern movement in animation, such as anticipation, overload and action tracking, through the revolutionary Relearning methodology"

The program's teaching staff includes professionals from the industry 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 course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

You will combine artistic tradition with digital technologies, approaching animation projects from multiple creative perspectives.

You will refine and promote your creations in the market, understanding the importance of marketing and commercialization in the 2D Animation industry.



02 Objectives

The main objective of this program will be to provide designers with the advanced skills and knowledge necessary to excel in the creation and production of two-dimensional animation. Accordingly, this educational program will provide an in-depth understanding of the fundamental principles of animation, from the creation of characters and scenery to visual storytelling. In addition, graduates will acquire technical skills in specialized software, as well as creative skills to conceptualize and design stunning animations. Likewise, the Master's Degree will foster the ability of participants to explore different artistic and expressive styles within the field of 2D Animation.



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TECH's goal will be to qualify you as a highly skilled and creative professional, who can contribute significantly to the animation and entertainment industry"



General Objectives

- ♦ Master the visual language 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
- ♦ Encourage creativity and originality in the generation of concepts, characters and plots, promoting innovation and differentiation in animated projects
- ♦ Specialize in specific areas of animation, adapting skills to different styles and genres
- ♦ Master the pre-production phases to plan and conceptualize animated projects effectively
- ♦ Implement post-production techniques and marketing strategies to optimize the diffusion and impact of animated productions
- ♦ Analyze and assess one's own work and that of others, identifying areas for improvement and applying adjustments to optimize the final quality of animations





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 cinematographic and audiovisual language to enhance visual storytelling
- ♦ Acquire solid knowledge of production language, from planning to final delivery

Module 2. 2D Animation Principles

- ♦ 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 overlapping 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 the animation of basic motions
- ♦ 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

Module 4. Digital Tools

- ♦ Explore digital alternatives in the creation of storyboards, using advanced tools and software to optimize efficiency and quality
- ♦ Develop storyboards designed for animators, considering the narrative and visual structure to guide the animation process in a coherent manner
- ♦ Apply advanced techniques in animation, integrating planned visual elements into storyboards in a coherent and expressive manner

Module 5. Character Design and Animation

- ♦ Develop detailed model sheets, providing complete visual references to guide animation and ensure consistency in character rendering
- ♦ Develop skills in rendering facial expressions, exploring the variability of gestures and emotions to achieve visually compelling characters

Module 6. Vector Animation

- ♦ Use Adobe Animate with expertise, applying its tools and features to create 2D animations with efficiency and precision
- ♦ Deftly manage Toon Boom Harmony, taking advantage of its advanced features for creating and manipulating 2D animations
- ♦ Exploit Story Board Pro's capabilities in the pre-production phase, using its tools for detailed planning of animated sequences and creation of storyboards
- ♦ Use Moho effectively, exploring its specific features for the creation and manipulation of characters and animated elements
- ♦ Apply Blender's Grease Pencil in 2D animation, taking advantage of its tools for the creation and manipulation of strokes and visual elements

Module 7. Specialized Animation

- ♦ Explore and apply advanced specialized animation techniques, focusing on specific styles and genres to broaden creative versatility in animated projects
- ♦ Develop skills in the animation of fantastic creatures and beings, addressing aspects such as unique movements, behaviors, and distinctive visual features
- ♦ Develop skills in the animation of action sequences, ensuring fluidity, impact and coherence in the visual representation of fast and exciting movements
- ♦ Apply specific animation techniques for video games, adapting visual storytelling and character movements to the dynamics and constraints of interactive animation

Module 8. Pre-Production

- ♦ Master the creation of detailed graphic scripts and storyboards, applying narrative and visual principles to effectively plan animation sequencing
- ♦ Utilize previsualization animation techniques to assess the feasibility and visual impact of ideas prior to the full production phase
- ♦ Research and analyze relevant visual references, artistic styles and trends to inspire and enrich the pre-production process
- ♦ Efficiently integrate storyboarding with conceptual and visual elements, ensuring complete and detailed planning of animated sequences

Module 9. Production

- ♦ Monitor and adjust the visual quality of the animation, making revisions and corrections as necessary to ensure consistency and aesthetic impact
- ♦ Troubleshoot unexpected problems and challenges during production, adapting to changes and proposing creative solutions to ensure the success of the animated project
- ♦ Integrate emerging technologies and current trends in the production of 2D animation, keeping up to date with industry innovations

Module 10. Post-Production and Marketing

- ♦ Apply advanced post-production techniques to 2D animation, including video editing, color correction and visual effects
- ♦ Integrate sound, music and effects elements effectively in post-production, ensuring a complete and coherent audiovisual experience
- ♦ Develop specific marketing strategies for 2D animation, considering promotion and distribution on different platforms and markets
- ♦ Develop presentation and communication skills to effectively explain the creative decisions and concepts behind the animations
- ♦ Collaborate with specialized Marketing and Communications teams, ensuring coherence in the overall marketing strategy for animated projects



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You will hone your creative and technical skills, allowing you to gain an in-depth understanding of the principles of animation, from character and narrative creation to the implementation of visual effects"

03

Skills

This program in 2D Animation will provide professionals with a set of skills that will encompass both technical and creative aspects. On the technical side, designers will acquire advanced skills in the use of animation software, mastering character and set design techniques and developing the ability to create fluid and visually stunning animation sequences. From a creative perspective, graduates will understand the fundamental principles of animation, honing their ability to tell effective stories and refining their personal artistic style.





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This 100% online Master's Degree will provide you with a balanced combination of technical and creative skills to excel in the dynamic and demanding 2D Animation industry"



General Skills

- ♦ Develop advanced skills in traditional animation to achieve exceptional results
- ♦ Efficiently use relevant digital tools in the 2D animation process
- ♦ Design and animate characters effectively, considering their personality and narrative context
- ♦ Apply vector animation techniques to achieve fluid and expressive movements
- ♦ Lead and manage the production of 2D animations, coordinating teams and resources in an efficient way
- ♦ Develop skills in time management and organization, ensuring efficiency in the execution of animated projects within established deadlines
- ♦ Apply problem-solving skills in complex situations during the creative process, adapting to unexpected challenges and proposing innovative solutions
- ♦ Apply marketing strategies specific to 2D animation, understanding the promotion and distribution of projects on different platforms and markets





Specific Skills

- ♦ Expertly use the Toon Boom Harmony interface for the efficient creation and manipulation of 2D animations
- ♦ Manipulate the Adobe Animate interface efficiently, taking advantage of its tools for animation creation and editing
- ♦ Effectively apply the principle of squash and stretch to create characters and objects with a sense of weight and elasticity
- ♦ Apply the linear animation technique (straight ahead) to explore the spontaneous and continuous creation of sequences, enhancing fluidity and naturalness in visual storytelling
- ♦ Perform accurate and meaningful character pose changes (breakdowns), ensuring consistency in character representation throughout the animation
- ♦ Apply acceleration, deceleration, and pacing techniques to achieve dynamic and emotionally resonant 2D animation
- ♦ Use exaggeration consciously and creatively, enhancing facial expressions, gestures, and movements to convey emotion in an impactful and memorable manner
- ♦ Master the technique of rotoscoping, using references and documentation effectively to enhance the authenticity and realism of specific movements
- ♦ Make high-quality voice recordings for subsequent lip-synchronization, ensuring an accurate match between dialogue and movements
- ♦ Master the use of Storyboard Pro as a fundamental tool in the creation of storyboards
- ♦ Use Roughboard effectively in the pre-production phase, creating quick and schematic sketches
- ♦ Develop advanced skills in character design
- ♦ Use acting tools in character animation, incorporating techniques that emphasize authenticity and emotionality
- ♦ Master bitmap and vector animation techniques, taking full advantage of the possibilities and specific characteristics of each type of image
- ♦ Master special effects animation, incorporating visual elements such as particles, lights and shadows to create visual and narrative impact in animated sequences

04

Course Management

Faculty members will be instrumental in the comprehensive training of graduates, providing a unique combination of practical experience and theoretical knowledge in two-dimensional animation. These instructors are highly qualified professionals with a distinguished background in the animation industry, allowing them to share valuable real-world perspectives and keep abreast of the latest industry trends and technologies. In addition to their technical skills, professors in this program will foster creativity and artistic expression, guiding students toward the development of a unique style.



-VALVES V



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The educational approach of the faculty integrates theory and practice, providing you with the necessary technical skills and a thorough understanding of the fundamental principles of 2D Animation”

Management



Dr. Larrauri, Julián

- 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
- Master's Degree in Executive Production of Films and Series by Audiovisual Business School
- Master's Degree in Communication and Advertising Management by ESIC
- Degree in Audiovisual Communication from Complutense University of Madrid
- Nominated as "Best Production Director" at the Goya Awards for "Mortadelo y Filemón contra Jimmy el Cachondo"

Professors

Ms. Marqueta Moreno, Patricia

- ♦ Production Coordinator at Giggiebug Entertainment
- ♦ Production Coordinator at Lighthouse Studios
- ♦ Production Assistant at Able and Baker
- ♦ Production Assistant at The SPA Studios
- ♦ Graduated from U-tad - University Center of Technology and Digital Art

Mr. Coronado Pozo, Jorge

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

Mr. Valle Casas, Carlos

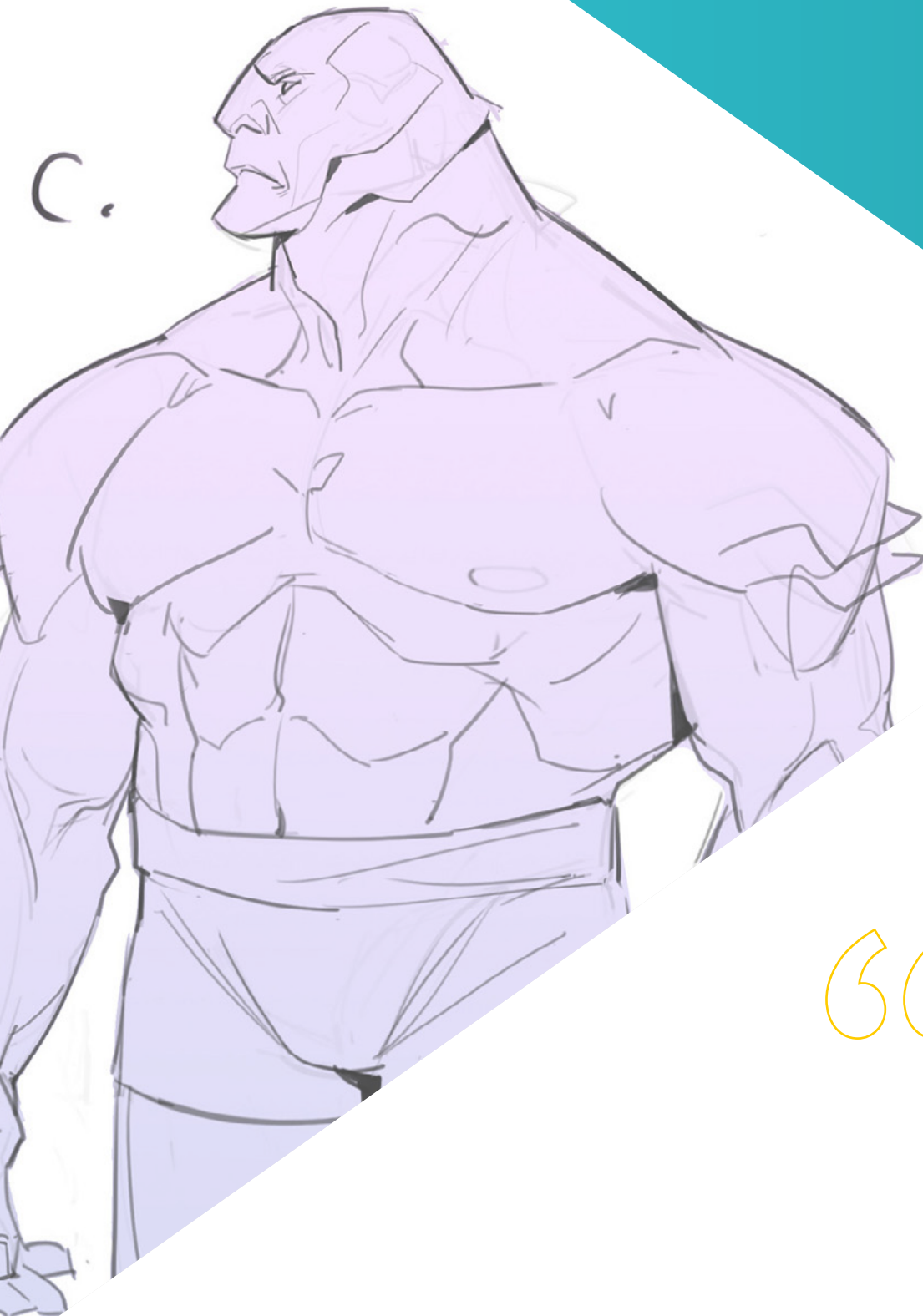
- ♦ Expert in Audiovisual Communication
- ♦ Specialist in Film and TV Editing and Post-production from the Séptima Ars School
- ♦ Graduate in Fine Arts from the University of Castilla La Mancha
- ♦ Production member of the animated feature film Robot Dreams produced by Arcadia Motion Pictures

05

Structure and Content

The Master's Degree in 2D Animation will cover a wide variety of content, designed to provide students with a deep and holistic understanding of two-dimensional animation. In addition, the program will include fundamental modules covering the theoretical and practical principles of animation, from character and scenario creation to visual storytelling. Advanced animation techniques will also be covered, as well as the use of specialized software to create and edit animated content. An expertly designed curriculum and quality content will be the key to your learning success"





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*An expertly crafted syllabus
and quality content will be the
key to your learning success”*

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, Storyboard and use of the Storybeats Application
 - 1.2.3. Script Structure and Terminology
- 1.3. Use of Toon Boom Harmony Interface
 - 1.3.1. Examination 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. Language of Color
- 1.5. Cinematographic and Audiovisual Language - Mise-en-scène
 - 1.5.1. Plans According to the Relation they Have 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 Aspects
 - 1.6.1. Montage and Editing
 - 1.6.2. Transitions and Rhythm
 - 1.6.3. Description of Shots and Sequences According to their 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 its Relation with the Production Area
 - 1.7.3. The Animator and its Relation with the Direction Area and Other Creative Areas
- 1.8. Adobe Animate Interface
 - 1.8.1. Exploration and Examination of the Working Area
 - 1.8.2. Timeline





- 1.9. Adobe 2D Traditional 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 Specific 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. 2D Animation Principles

- 2.1. Squash y Stretch
 - 2.1.1. Squash and Conservation of the Mass
 - 2.1.2. Stretch and Conservation of the Mass
 - 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 Solid Drawing
 - 2.3.3. Secondary Animation
- 2.4. Straight Ahead Animation
 - 2.4.1. Straight Ahead Animation
 - 2.4.2. Pose-To-Pose Animation
 - 2.4.3. Hybrid Animation
- 2.5. Character Pose Changes (Breakdowns)
 - 2.5.1. Direct Inbetweens and Inbetweens with Breakdowns
 - 2.5.2. Directional Changes
 - 2.5.3. Speed Changes
- 2.6. Complementary and Superimposed Action
 - 2.6.1. Complementary Action
 - 2.6.2. Combing
 - 2.6.3. Overlapping Action

- 2.7. Accelerations, Decelerations and Pace
 - 2.7.1. Deceleration
 - 2.7.2. Acceleration
 - 2.7.3. Acceleration Curves
- 2.8. Arcs
 - 2.8.1. Pivot and Axis of Rotation
 - 2.8.2. Movement Arcs
 - 2.8.3. Other Organic Movement Routes
- 2.9. Exaggeration
 - 2.9.1. Pose Exaggeration
 - 2.9.2. Rhythm Exaggeration
 - 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 Resistance

Module 3. Advanced Traditional Animation

- 3.1. Position Animation
 - 3.1.1. Silhouette
 - 3.1.2. Lines of Action
 - 3.1.3. Contraposes and Reversals
- 3.2. Lip Synchronization
 - 3.2.1. Mouth Movements
 - 3.2.2. Vocalization Inbetweens 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 of 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. Full Turns
 - 3.5.1. Of the Head
 - 3.5.2. Full and Object Turns
 - 3.5.3. Truncated Turns
- 3.6. Exaggerate and Calm Down
 - 3.6.1. Exaggerate
 - 3.6.2. Calm Down
 - 3.6.3. Bounces
- 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 Blurring
 - 3.8.1. Sweeps
 - 3.8.2. Multiples
 - 3.8.3. Blurring
- 3.9. Cleaning Traces and Assistance
 - 3.9.1. Assistance
 - 3.9.2. Inbetweening
 - 3.9.3. Cleaning of Traces
- 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

Module 4. Digital Tools

- 4.1. Miniatures
 - 4.1.1. Importance of the Storyboard as a Narrative and Production Tool
 - 4.1.2. Basic Storyboard and Previews
 - 4.1.3. Thumbnails and Initial Scripts
- 4.2. Voice Recording
 - 4.2.1. Voice Recording
 - 4.2.2. Dialog Editing
 - 4.2.3. Music and Sound Effects Editing

- 4.3. Preparation
 - 4.3.1. Format and Aspect Ratio
 - 4.3.2. Composition
 - 4.3.3. Safety Zones
- 4.4. Symbolology
 - 4.4.1. Standardized Symbolology
 - 4.4.2. Simulation of Camera Movements
 - 4.4.3. The Digital Storyboard
- 4.5. Using Storyboard Pro
 - 4.5.1. Interface
 - 4.5.2. Sound Line and Timeline
 - 4.5.3. Additional Tools
- 4.6. Digital Alternatives
 - 4.6.1. Photoshop Storyboard
 - 4.6.2. Adobe Animate Storyboard
 - 4.6.3. Storyboarding in After Effects
- 4.7. Storyboarding for Animators
 - 4.7.1. The Storyboard Artist
 - 4.7.2. Animation Keys in the Storyboard
 - 4.7.3. Working in Layers
- 4.8. Using Roughboard
 - 4.8.1. Graphic Exploration
 - 4.8.2. Rough Board Preparation
 - 4.8.3. Implementation
- 4.9. Graphic Script
 - 4.9.1. Composition
 - 4.9.2. Backgrounds
 - 4.9.3. Working with Characters
- 4.10. Animation
 - 4.10.1. Real-Time Editing
 - 4.10.2. Review
 - 4.10.3. Post-Production

Module 5. Character Design and Animation

- 5.1. Character Design
 - 5.1.1. Silhouette and Proportion
 - 5.1.2. Color, Style and Personality
- 5.2. Character Guide
 - 5.2.1. Character Analysis
 - 5.2.2. Consistency and Tolerance
 - 5.2.3. Writing and Structure of a Character Guide
- 5.3. Model Sheet
 - 5.3.1. Presenting it in Different Poses
 - 5.3.2. Expressions and Body Language Sheet
 - 5.3.3. Vocalization Sheet, Scale and Additional Sheet
- 5.4. Text Interpretation
 - 5.4.1. Text, Genre and Tone. The Information that We Can Obtain from it
 - 5.4.2. Subtext and Irony
 - 5.4.3. Narrative Function and Authorial Intention
- 5.5. Action Tools
 - 5.5.1. Formal and Experiential Action
 - 5.5.2. Character and Background Analysis
 - 5.5.3. External and Internal Stimuli
- 5.6. Pantomime and Body Language
 - 5.6.1. Body Language, Interactions
 - 5.6.2. Hand Gestures
 - 5.6.3. Rhythm, Minimal Movements and Scenic Task
- 5.7. Facial Expressions
 - 5.7.1. Study of the Facial Features and Facial Expressions
 - 5.7.2. The Eyes and their Expressive Properties
 - 5.7.3. References and Documentation
- 5.8. Animation of a Dialog
 - 5.8.1. The Voice Actor's Contribution
 - 5.8.2. Examination of a Recorded Dialog
 - 5.8.3. Exploiting the Pause

- 5.9. Self-Reference in Video
 - 5.9.1. Self-Reference
 - 5.9.2. Transcription and Reinterpretation
 - 5.9.3. Cleaning and Polishing
- 5.10. Character Animation
 - 5.10.1. Body Animation Workshop
 - 5.10.2. Addition of Facial Acting
 - 5.10.3. Addition of Vocal Synchronization

Module 6. Vector Animation

- 6.1. Bitmaps and Vectors
 - 6.1.1. Bitmap
 - 6.1.2. Vector Drawing
 - 6.1.3. Comparisons and Applications
- 6.2. Using Adobe Animate
 - 6.2.1. Symbols, Graphics and Movie Clip Tool
 - 6.2.2. Motion Interpolation and Semi-Three Dimensional Motion
 - 6.2.3. Shape Interpolation and Virtual Camera
- 6.3. Use of Toon Boom Harmony
 - 6.3.1. Libraries
 - 6.3.2. Bones and Deformers
 - 6.3.3. Auto Color
- 6.4. Preparing a Character for Adobe Animate
 - 6.4.1. Separation of Elements and Tracing
 - 6.4.2. Internal Key Tracing
 - 6.4.3. Character Building
- 6.5. Preparing a Character for Toon Boom Harmony
 - 6.5.1. Tracing
 - 6.5.2. Bones and Digital Control
 - 6.5.3. Adjustments
- 6.6. Lights and Shading in Toon Boom Harmony
 - 6.6.1. Setting Volumes
 - 6.6.2. Virtual Lights and Camera
 - 6.6.3. Shadow Casting



- 6.7. Using Story Board Pro
 - 6.7.1. Interface
 - 6.7.2. Timeline
 - 6.7.3. Digital Edition
- 6.8. Alternative Software
 - 6.8.1. Krita
 - 6.8.2. Animation Paper
 - 6.8.3. Open Toonz - Anime
- 6.9. Using Moho
 - 6.9.1. Exploration of Interface
 - 6.9.2. Smart Warp Tool
 - 6.9.3. Smart Bones and Pin Bones Tools
- 6.10. Using Blender's Grease Pencil
 - 6.10.1. Software Recognition
 - 6.10.2. Drivers and Additional Features
 - 6.10.3. Automated Lip Synchronization

Module 7. Specialized Animation

- 7.1. Walking Cycles of Non-Bipedal Beings
 - 7.1.1. Quadrupeds
 - 7.1.2. Other Non-Plantigrade Animals
 - 7.1.3. Alternative Locomotion Cycles
- 7.2. Additional Practical Movements
 - 7.2.1. Flight Cycles
 - 7.2.2. Ladders, Weight Lifting, Drops
 - 7.2.3. Bumping, Interactions, Dancing
- 7.3. Special Effects, Fluids
 - 7.3.1. Small Bodies of Water
 - 7.3.2. Large Bodies of Water
 - 7.3.3. Viscous Fluids

- 7.4. Special Effects, Fire and Smoke
 - 7.4.1. Fire
 - 7.4.2. Smoke
 - 7.4.3. Fires, Flares and Lava
- 7.5. Animation of Weather and Climate Phenomena
 - 7.5.1. Rain, Thunderstorms and Lightning
 - 7.5.2. Snow and Wind
 - 7.5.3. Refractions
- 7.6. Fantastic and Science-Fiction Special Effects Animation
 - 7.6.1. Magic Effects
 - 7.6.2. Emphatic Effects
 - 7.6.3. Science Fiction Effects
- 7.7. Hair and Cloth Animation
 - 7.7.1. Hair
 - 7.7.2. Cloth
 - 7.7.3. Paper, Ropes and Others
- 7.8. Explosions, Collapses and Breakages
 - 7.8.1. Collapses
 - 7.8.2. Explosions
 - 7.8.3. Breakages
- 7.9. Light Effects and Shadow Projection
 - 7.9.1. Shadows on the Figure
 - 7.9.2. Lighting Effects
 - 7.9.3. Shadow Casting and Digitally Automated Shadows
- 7.10. Image Transitions and Transformations
 - 7.10.1. Image Transitions
 - 7.10.2. Extreme Deformations
 - 7.10.3. Orbits

Module 8. Pre-Production

- 8.1. Animation Management
 - 8.1.1. Style and Vision
 - 8.1.2. Responsibilities, Proactivity, Willingness and Delegation
 - 8.1.3. Communication with Creative and Production Teams
- 8.2. Script Breakdown
 - 8.2.1. Planning Software
 - 8.2.2. Identification of Animation Resources (Assets)
 - 8.2.3. Creating a Script Breakdown
- 8.3. Online Production and Workflow
 - 8.3.1. Online Production
 - 8.3.2. Workflow
 - 8.3.3. Introduction to the Shotgun Software
- 8.4. Conceptual Art
 - 8.4.1. From Script to Concept Art
 - 8.4.2. Visual Style
 - 8.4.3. Working with the Director and References
- 8.5. Location Design
 - 8.5.1. Structure and Narrative Needs of a Location
 - 8.5.2. The Out-Of-Frame Location, Atmospheres and Color
 - 8.5.3. Concept Art and Location Design for Final Project
- 8.6. Props Design and Model Sheets
 - 8.6.1. Practical Needs of Props Design
 - 8.6.2. Vehicles and Practicables
 - 8.6.3. Props Design for Final Project
- 8.7. Color Script
 - 8.7.1. The Narrative Value of Color
 - 8.7.2. Color Keys
 - 8.7.3. Color Script for Final Project
- 8.8. Storyboard Interpretation
 - 8.8.1. Interpretation of Storyboard
 - 8.8.2. Layout Design
 - 8.8.3. Final Layout for Final Project

- 8.9. Recording of Final Voices
 - 8.9.1. Direction of Voice Actors
 - 8.9.2. Digital Audio Editing
 - 8.9.3. Voice Over Position for Final Project
- 8.10. Test Animation and Pilot
 - 8.10.1. Pencil Test
 - 8.10.2. Integration with Locations and Color
 - 8.10.3. Pilot Adjustments and Corrections

Module 9. Production

- 9.1. Using Rough Animation
 - 9.1.1. First Pass
 - 9.1.2. Masses, Arcs and Contacts
- 9.2. Motion Design
 - 9.2.1. Body Acting and Narrative Cues
 - 9.2.2. Facial Acting
 - 9.2.3. Breakdowns and Spacing
- 9.3. Key Poses
 - 9.3.1. Resolution of Key Poses
 - 9.3.2. Review of Masses
 - 9.3.3. Lip Sync Keys
- 9.4. Inbetweening
 - 9.4.1. Principles of Inbetweening
 - 9.4.2. Inbetweening of Arcs and Routes
 - 9.4.3. Digital Inbetweening
- 9.5. Cleaning of Traces and Assistance
 - 9.5.1. The Animation Assistant's Task
 - 9.5.2. The Line in Trace Cleaning
 - 9.5.3. Trace Cleaning and Digital Assistance
- 9.6. Digital Shading and Trace by Trace
 - 9.6.1. Shading, a Second Level of Animation
 - 9.6.2. Gradients, Halftones and Shadow Layers
 - 9.6.3. Automated Shading Workshop

- 9.7. Additional Animation
 - 9.7.1. Special Effects Animation
 - 9.7.2. Introduction to After Effects
 - 9.7.3. Digital Effects
- 9.8. Digital Compositing and Cameras
 - 9.8.1. Digital Composition
 - 9.8.2. Camera Animation
 - 9.8.3. Multiplane and 2.5D Camera
- 9.9. Rendering
 - 9.9.1. Industry Standards
 - 9.9.2. Delivery of Tests
 - 9.9.3. Final Deliveries
- 9.10. Title Design
 - 9.10.1. Introduction to Motion Graphics
 - 9.10.2. Title Design
 - 9.10.3. Practice of Input and Output Credits

Module 10. Post-Production and Marketing

- 10.1. Editing and Final Composition
 - 10.1.1. Assembly
 - 10.1.2. Transitions
 - 10.1.3. Motion Blocking
- 10.2. Sound Design
 - 10.2.1. Definition and Analysis of Examples
 - 10.2.2. Management of the Sound Designer
 - 10.2.3. Scores and Soundtrack
- 10.3. Sound Mixing
 - 10.3.1. Definition and Analysis of Examples
 - 10.3.2. Management in Sound Mixing
 - 10.3.3. Final Mix

- 10.4. Color Correction through DaVinci Resolve
 - 10.4.1. Introduction to DaVinci Resolve
 - 10.4.2. Color Balance
 - 10.4.3. Dynamic Range
- 10.5. Demo Reel
 - 10.5.1. Task Selection and Editing
 - 10.5.2. Sound Aspect
 - 10.5.3. Platforms and Promotion
- 10.6. Markets
 - 10.6.1. Advertising
 - 10.6.2. Self-Management of Social Networks
 - 10.6.3. Animation, Technical, Medical and Other Specialties
- 10.7. Self-Representation
 - 10.7.1. Negotiation
 - 10.7.2. Animation Tests and their Quotation
 - 10.7.3. Operational and Situation Questions
- 10.8. Project Financing
 - 10.8.1. Channels and Proposals Calls
 - 10.8.2. Folder Creation
 - 10.8.3. Mixed Financing
- 10.9. Private Financing
 - 10.9.1. Equity and Creative Partnerships
 - 10.9.2. Micro Sponsorship
 - 10.9.3. Treatment and Sales Strategy
- 10.10. Registration and Rights of the Artwork
 - 10.10.1. Registration of Artwork
 - 10.10.2. International Copyright Law
 - 10.10.3. International Royalties

06 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.



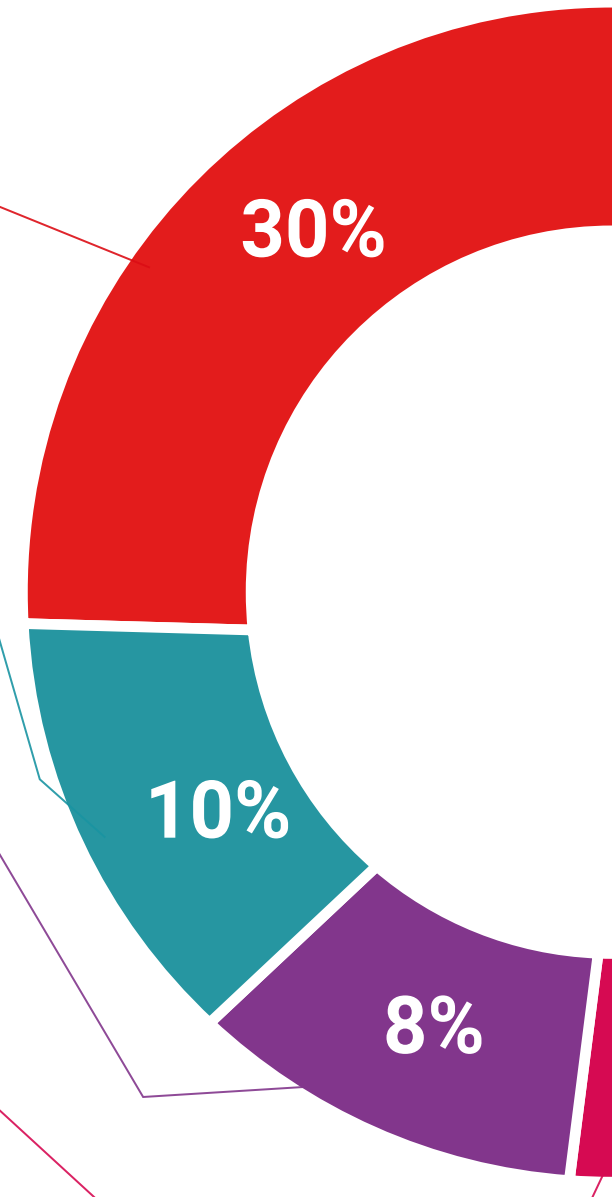
Practising Skills and Abilities

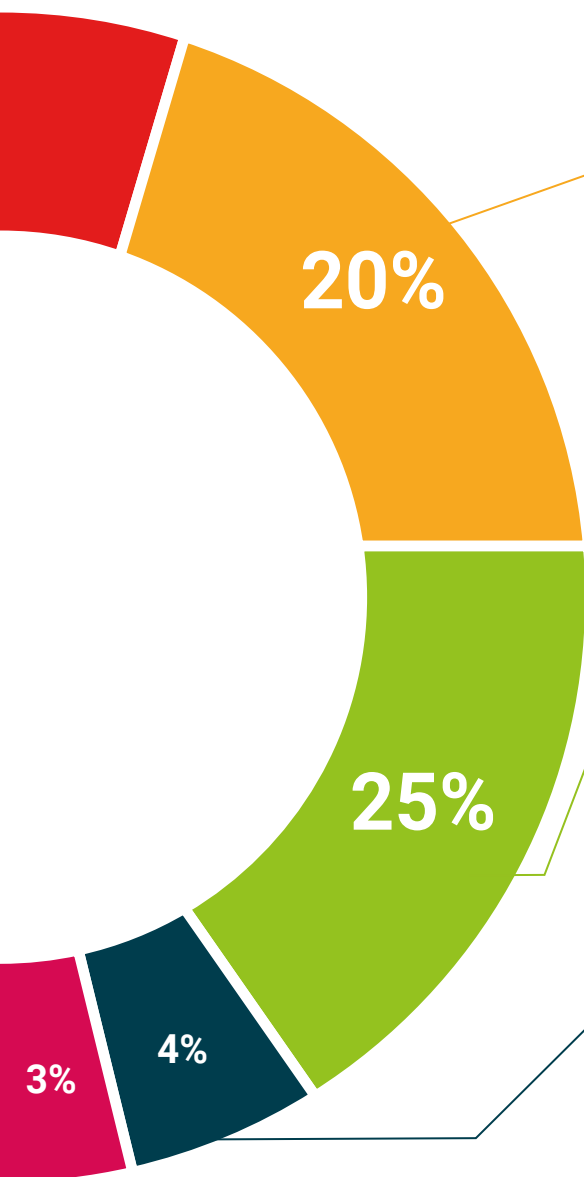
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization we live in.



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.



07 Certificate

The Master's Degree in 2D Animation guarantees students, in addition to the most rigorous and up-to-date education, access to a Master's Degree 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 **Master's Degree 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.

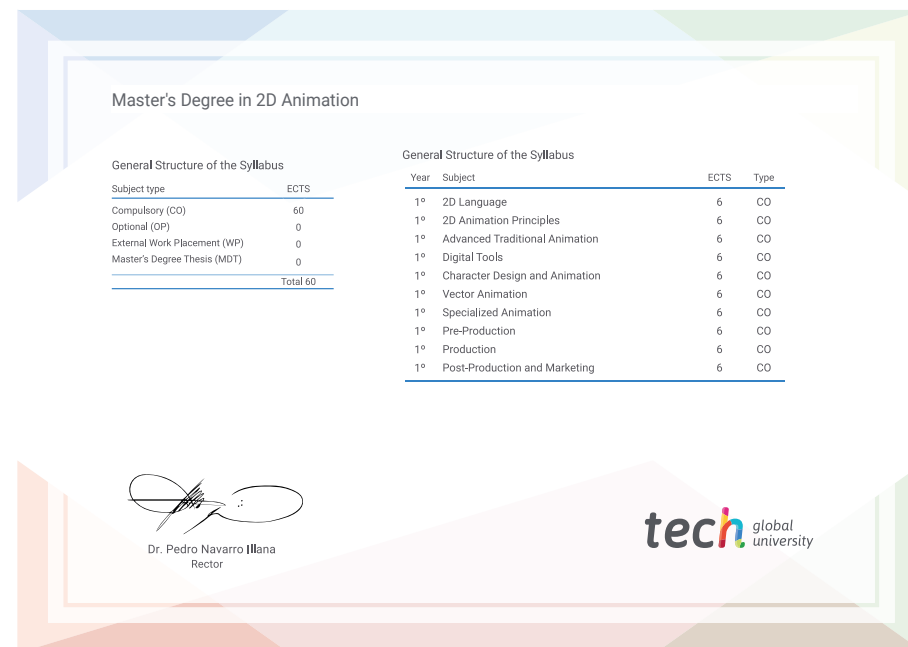
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Master's Degree in 2D Animation**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**





Master's Degree 2D Animation

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Master's Degree 2D Animation

