

Postgraduate Diploma Advanced Design and Modeling for 3D Printing



Postgraduate Diploma Advanced Design and Modeling for 3D Printing

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

Website: www.techtitude.com/us/design/postgraduate-diploma/postgraduate-diploma-advanced-design-modeling-3d-printing

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01

Introduction to the Program

Advanced Modeling for 3D Printing has transformed the way parts are designed and produced, enabling more efficient and customized structures. According to a report by the European Environment Agency, Additive Manufacturing has reduced material waste by up to 50% compared to traditional methods, promoting more sustainable production. In this context, TECH offers a university program focused on the most modern techniques in Advanced Design and Modeling for 3D Printing, which will facilitate access to specialized knowledge through a 100% online methodology. As a result, professionals will master the most advanced tools to successfully respond to the demands of this constantly evolving industry.



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You will master the most cutting-edge techniques in Advanced Design and Modeling for 3D Printing thanks to this completely online Postgraduate Diploma”

The development of new technologies has transformed the way objects are designed and produced, optimizing materials and reducing Manufacturing times. In fact, Advanced Modeling for 3D Printing has become a fundamental pillar in the creation of complex structures, allowing for greater precision and versatility in multiple applications. As such, its ability to generate functional prototypes and customized components has driven its adoption in sectors seeking constant innovation.

In this context, TECH has created a pioneering Postgraduate Diploma in Advanced Design and Modeling for 3D Printing. The syllabus will provide students with a comprehensive approach ranging from the use of advanced tools for specialized 3D software to the optimization of Design for Additive Manufacturing. This will facilitate the creation of viable, high-precision structures, ensuring their success in printing. In addition, it will address post-processing techniques such as cutting, sanding, and polishing, which are essential for improving the aesthetics and functionality of manufactured parts, expanding their applications and mechanical strength.

On the other hand, TECH's revolutionary Relearning methodology will provide dynamic training that enhances knowledge retention through the strategic repetition of key concepts. In this way, graduates will not have to invest long hours in study or resort to traditional techniques such as memorization. All they will need is an electronic device with an Internet connection to access the Virtual Campus. There they will enjoy access to a variety of multimedia support resources such as explanatory videos, specialized readings, and interactive summaries.

This **Postgraduate Diploma in Advanced Design and Modeling for 3D Printing** 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 Advanced Design and Modeling for 3D Printing
- ♦ 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
- ♦ Special emphasis on innovative methodologies in design practice
- ♦ 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



Want to master advanced tools for 3D Modeling? This university qualification will provide you with the knowledge you need to optimize designs and create highly creative solutions"

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The characteristic Relearning system of this Postgraduate Diploma will allow you to learn at your own pace without depending on external teaching conditions. What are you waiting for to enroll?”

Its teaching staff includes professionals from the field of Advanced Design and Modeling for 3D Printing, who bring their work experience to this program, as well as renowned specialists from leading companies 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 an immersive learning experience designed to prepare for real-life situations.

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

You will strengthen your mastery of post-processing techniques such as cutting, sanding, and polishing to optimize both the quality and finish of printed parts.

You will optimize the application of geometric considerations in 3D printing, improving the precision and functionality of each design.



02

Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it relies on an enormous faculty of more than 6,000 professors of the highest international renown.



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*Study at the world's largest online university
and guarantee your professional success.
The future starts at TECH”*

The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

Forbes

The best online university in the world

The most complete
syllabus

The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

TOP
international faculty



The most effective methodology

A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.

World's No.1

The World's largest online university

The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.



Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.



The top-rated university by its students

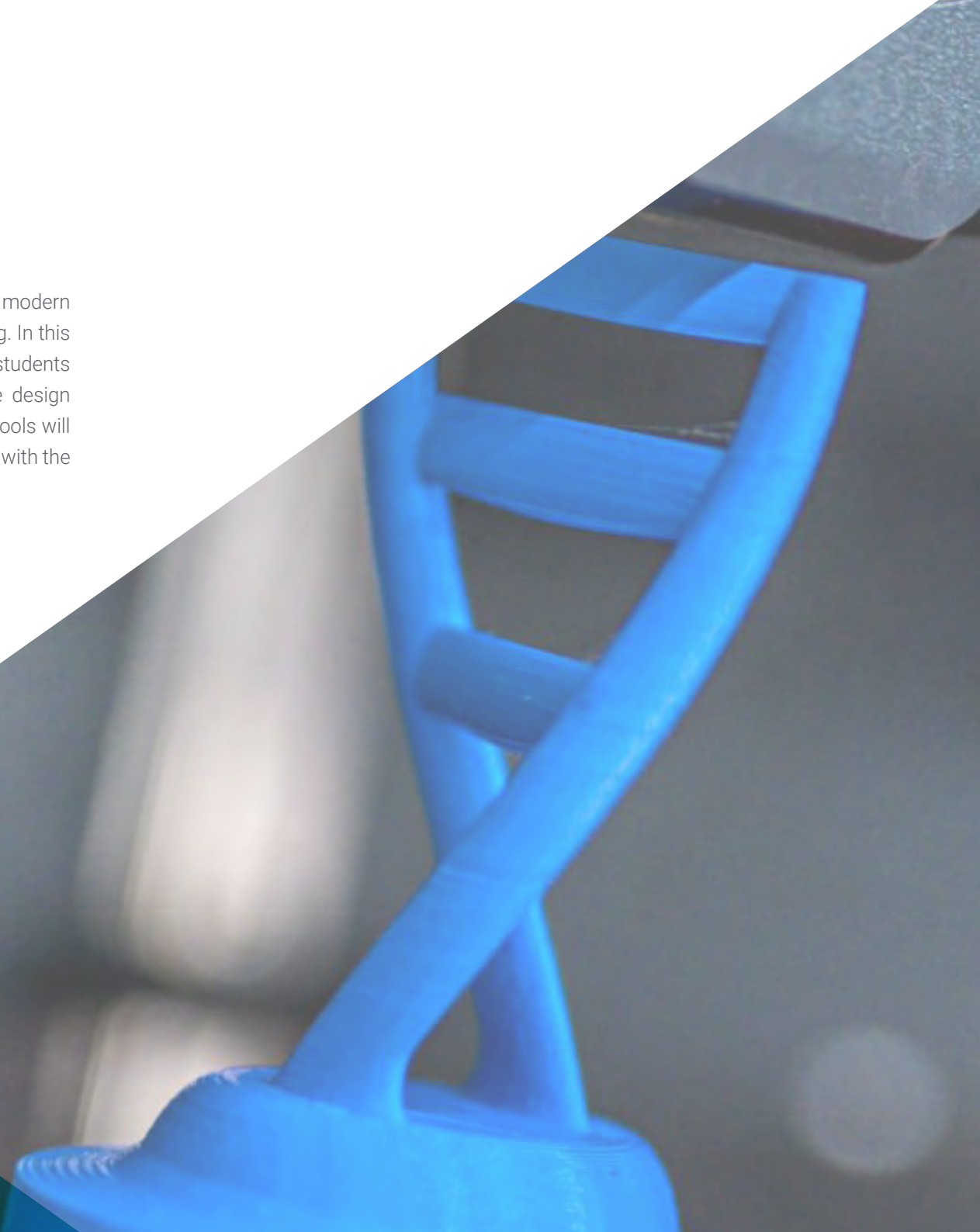
Students have positioned TECH as the world's top-rated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.



03

Syllabus

The teaching materials for this Postgraduate Diploma will cover the use of modern tools to ensure precision and quality in every piece produced using 3D printing. In this regard, the analysis of visual and tactile inspection techniques will enable students to optimize the detection of imperfections, facilitating adjustments to the design before final production. Likewise, the use of 3D measurement and scanning tools will contribute to dimensional verification, ensuring the fidelity of the digital model with the physical object.

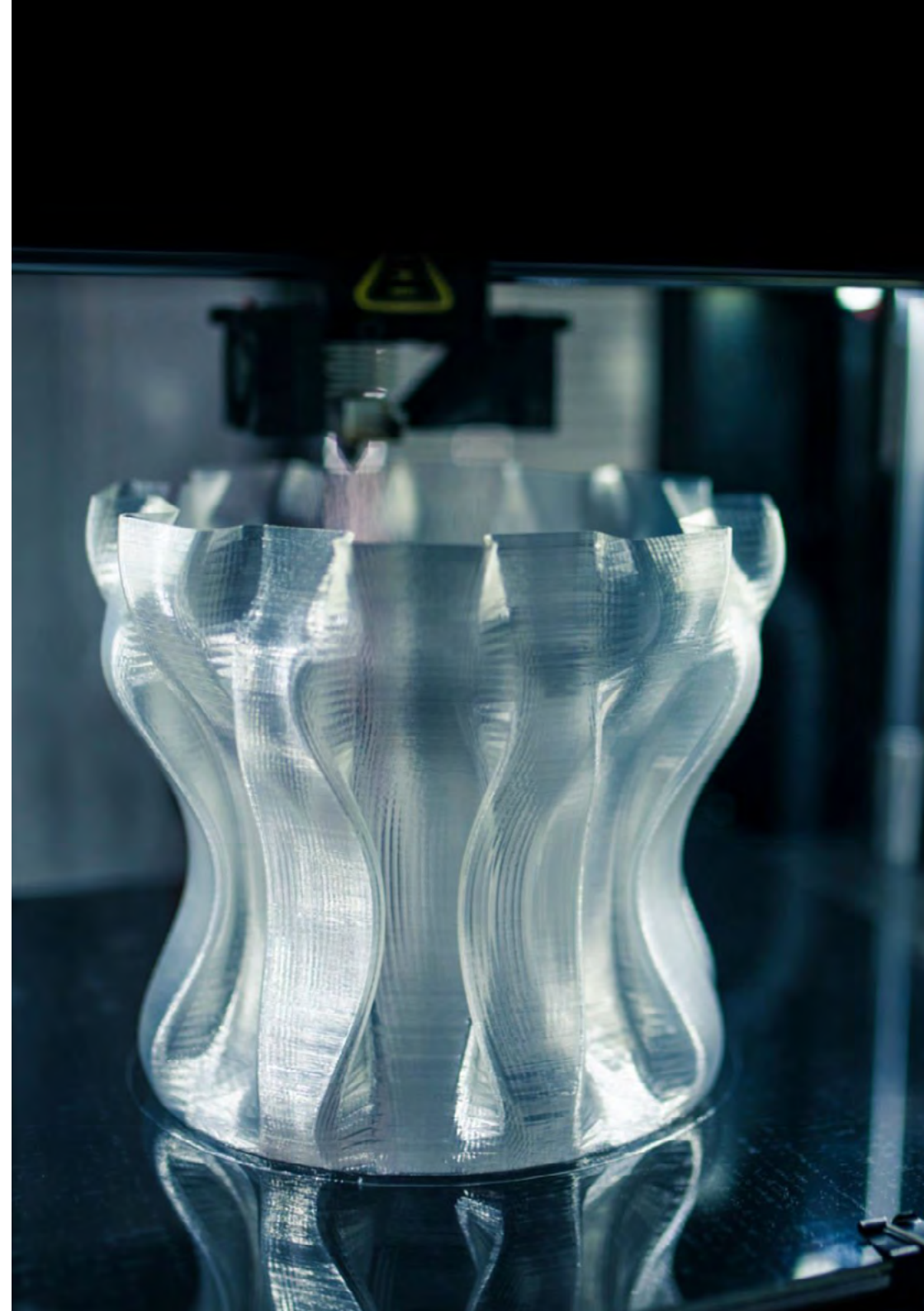


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You will address the particularities of 3D Scanning to ensure accuracy in the digitalization and verification of printed parts”

Module 1. Modeling and File Preparation for 3D Printing

- 1.1. CAD Software: Tools for 3D Modeling
 - 1.1.1. Main CAD Programs for 3D Design
 - 1.1.2. Creating Parametric Models
 - 1.1.3. Model Editing and Correction Tools
- 1.2. From CAD Design to STL File
 - 1.2.1. File Export Process in STL Format
 - 1.2.2. Considerations Regarding File Resolution and Size
 - 1.2.3. Optimizing the Model to Avoid Printing Errors
- 1.3. Adjusting Parameters in the STL File: Resolution and Tolerance
 - 1.3.1. Using Slicing Software to Generate GCODE
 - 1.3.2. Adjusting Parameters (Speed, Temperature, Layers)
 - 1.3.3. Correcting Common Problems in Slicing
- 1.4. Slicing Software: GCODE Preparation
 - 1.4.1. Using Slicing Software to Generate GCODE
 - 1.4.2. Adjusting Parameters (Speed, Temperature, Layers)
 - 1.4.3. Correcting Common Problems in Slicing
- 1.5. Design Optimization for Additive Manufacturing
 - 1.5.1. Design to Improve Printing Efficiency
 - 1.5.2. Avoiding Unnecessary Support Structures
 - 1.5.3. Adapting Design to Technology Capabilities
- 1.6. Strategies for Reducing Support Use
 - 1.6.1. Design Focused on Minimizing Supports
 - 1.6.2. Use of Favorable Angles and Geometries
 - 1.6.3. Technologies That Eliminate the Need for Supports
- 1.7. Techniques for Improving Surface Finish
 - 1.7.1. Optimization of Print Settings
 - 1.7.2. Post-Processing Methods for Improving Surfaces
 - 1.7.3. Use of Thinner Layers to Improve Quality



- 1.8. Parametric Modeling and Generative Design
 - 1.8.1. Advantages of Parametric Modeling in 3D Printing
 - 1.8.2. Use of Generative Design for Part Optimization
 - 1.8.3. Advanced Generative Design Tools
- 1.9. Integration of 3D Scanning into the Workflow
 - 1.9.1. Use of 3D Scanners for Model Capture
 - 1.9.2. Processing and Cleaning of Scanned Files
 - 1.9.3. Integration of Scanned Models into CAD Software

Module 2. Design for Additive Manufacturing

- 2.1. Design Focused on Optimizing Weight and Strength
 - 2.1.1. Use of Lattice Structures to Reduce Weight
 - 2.1.2. Topological Optimization to Improve Strength
 - 2.1.3. Application of Simulations in Design
- 2.2. Geometric Considerations in 3D Printing
 - 2.2.1. Complex Geometries Feasible in 3D Printing
 - 2.2.2. Orientation and Support Considerations
 - 2.2.3. Avoiding Sharp Angles in Overhangs
- 2.3. Designing Functional Parts vs. Aesthetic Parts
 - 2.3.1. Differences Between Functional and Decorative Design
 - 2.3.2. Materials and Finishes for Functional Parts
 - 2.3.3. Priorities in Geometry Selection
- 2.4. Reduction of Part and Assembly Count through Additive Manufacturing
 - 2.4.1. Consolidation of Complex Assemblies into a Single Part
 - 2.4.2. Advantages of Reducing Components for Production
 - 2.4.3. Design Considerations for Minimizing Assembly
- 2.5. Generation of Internal Structures and Lattice/Infill
 - 2.5.1. Design of Internal Lattice Structures
 - 2.5.2. Optimization to Reduce Material and Weight
 - 2.5.3. Applications in Lightweight and Strong Parts

- 2.6. Application of Generative Design in Complex Projects
 - 2.6.1. Use of Software to Generate Optimized Designs
 - 2.6.2. Considerations in Parameter Selection
 - 2.6.3. Success Stories in Applied Generative Design
- 2.7. Considerations for Cantilevered Parts and Supports
 - 2.7.1. Design Strategies to Avoid Cantilevers
 - 2.7.2. Efficient Use of Supports to Reduce Post-Processing
 - 2.7.3. Technologies That minimize the Need for Supports
- 2.8. Rapid Prototyping and Proof of Concept
 - 2.8.1. Advantages of Rapid Prototyping in Product Development
 - 2.8.2. Iteration Process in Proof of Concept
 - 2.8.3. Time Optimization in Functional Prototyping
- 2.9. Limitations in Design for Additive Manufacturing
 - 2.9.1. Restrictions due to Part Size and Resolution
 - 2.9.2. Material and Precision Limitations
 - 2.9.3. Impact of Printing Speed on Design
- 2.10. Design Optimization in 3D Printing
 - 2.10.1. Design Strategies to Improve Manufacturing Efficiency
 - 2.10.2. Reducing Printing Times through Design Adjustments
 - 2.10.3. Advanced Optimization Techniques for Cost Reduction

Module 3. Additive Manufacturing Post-Processing and Surface Finishing

- 3.1. Post-Processing Techniques: Cutting, Sanding, Polishing
 - 3.1.1. Automated Methods for Improving Surface Finish
 - 3.1.2. Polishing Tools and Equipment for Printed Parts
 - 3.1.3. Comparison of Techniques According to Material Type
- 3.2. Surface Finishes: Painting, Varnishing, and Texturizing
 - 3.2.1. Application of Protective Coatings
 - 3.2.2. Texturing Techniques to Improve Appearance
 - 3.2.3. Use of Paint and Varnishes to Improve Aesthetic Finish

- 3.3. Heat Treatment and Hardening of Parts
 - 3.3.1. Annealing Processes to Improve Strength
 - 3.3.2. Applications of Heat Treatment in Printed Metals
 - 3.3.3. Key Factors for Successful Hardening
- 3.4. Post-Printing Assembly Techniques
 - 3.4.1. Methods for Joining 3D Printed Parts
 - 3.4.2. Use of Adhesives and Welding in Complex Parts
 - 3.4.3. Design for Assembly and Simplification of Assembly
- 3.5. Support Removal Methods
 - 3.5.1. Mechanical and Chemical Techniques for Removing Supports
 - 3.5.2. Design Optimization to Facilitate Removal
 - 3.5.3. Reducing the Impact of Supports in Post-Processing
- 3.6. Post-Processing for Metallic Materials
 - 3.6.1. Polishing and Sanding of 3D Printed Metal Parts
 - 3.6.2. Specific Treatments to Improve Mechanical Properties
 - 3.6.3. Comparison of Post-Processing Techniques for Different Metals
- 3.7. Use of Soluble Materials for Supports
 - 3.7.1. Advantages of Using Water-Soluble Supports
 - 3.7.2. Materials Compatible with Dual Extruder Printers
 - 3.7.3. Reducing Post-Processing Time with Soluble Supports
- 3.8. Automation of Post-Processing: Advanced Systems
 - 3.8.1. Automated Machines for Sanding and Polishing
 - 3.8.2. Ultrasonic Cleaning Systems for Dust and Residue Removal
 - 3.8.3. Use of Robots in Post-Processing of Large Parts
- 3.9. Quality Control in Printed Parts
 - 3.9.1. Visual and Tactile Inspection Techniques
 - 3.9.2. 3D Measurement and Scanning Tools for Accuracy Verification
 - 3.9.3. Test Methods for Validating Strength and Durability





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Thanks to the most complete and up-to-date syllabus, you will master the use of soluble materials for supports, optimizing the manufacturing process”

04

Teaching Objectives

This university program is designed to enhance specialized skills in three-dimensional design and modeling, with a focus on precision, optimization, and quality control at every stage of the process. Therefore, the integration of advanced techniques will allow experts to refine digital models, improve production efficiency, and ensure the structural fidelity of parts. In this way, graduates will acquire a strategic approach that will enable them to develop advanced solutions in highly specialized production environments.





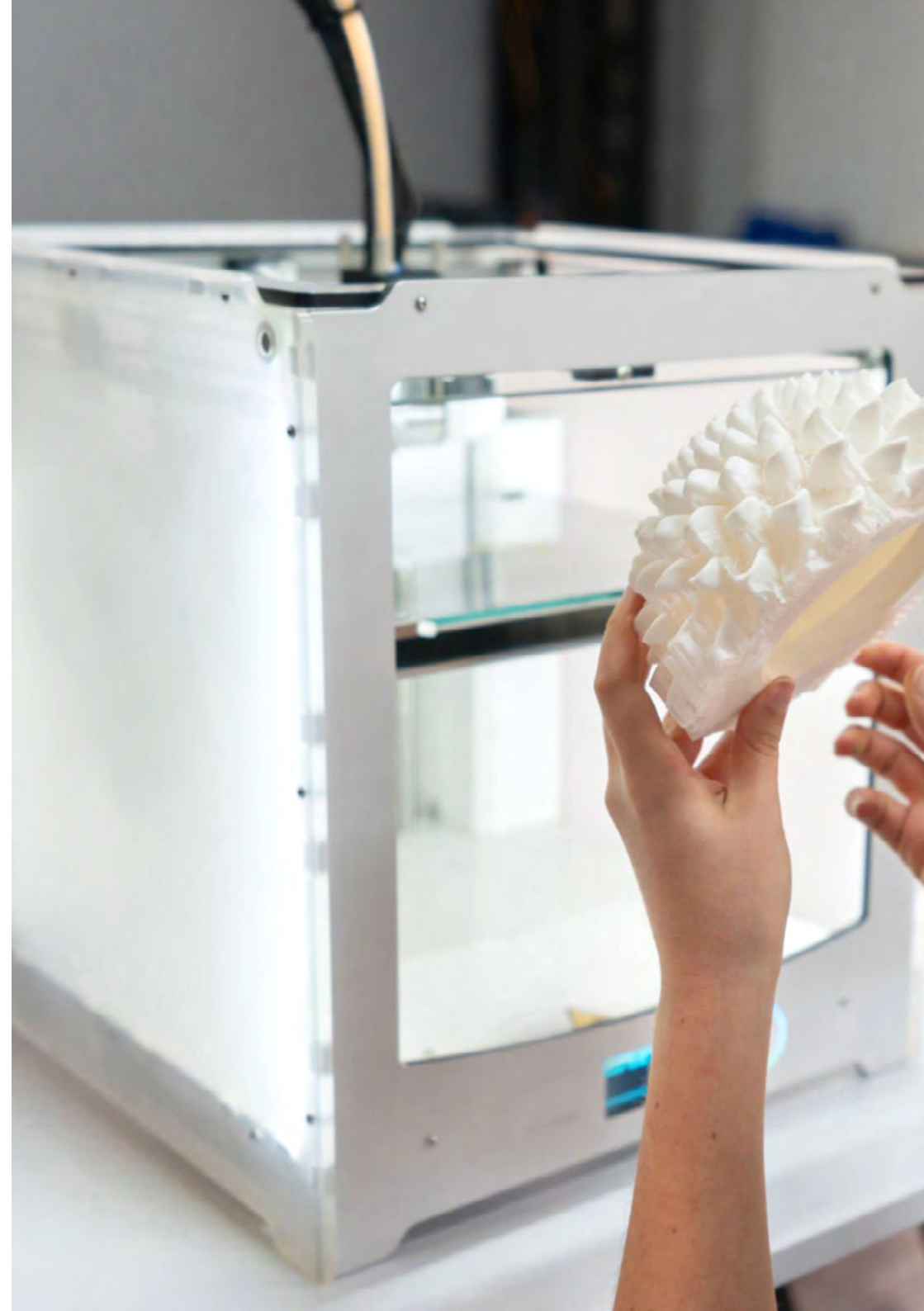
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You will gain a comprehensive understanding of the principles of additive manufacturing-oriented Design, enabling you to improve the functionality of goods”



General Objectives

- ♦ Understand the concepts of how Additive Manufacturing works
- ♦ Delve into the technologies specifically for the materials used
- ♦ Understand how each technology works and its application, whether by the function of the part or object or by its performance
- ♦ Use 3D surface modeling software
- ♦ Delve into the different types of 3D printers, understanding their operating principles
- ♦ Learn about topological design and optimization of parts for 3D printing
- ♦ Use the most advanced post-processing techniques to optimize 3D printing
- ♦ Visualize products for specific sectors such as automotive, aerospace, and architecture
- ♦ Encourage the identification of business opportunities in the field of Additive Manufacturing
- ♦ Develop project management skills, from conceptualization and design to manufacturing and post-processing of parts





Specific Objectives

Module 1. Modeling and File Preparation for 3D Printing

- ♦ Differentiate between software and its 3D modeling capabilities
- ♦ Transfer files from one software to another and export them in a format compatible with 3D printing

Module 2. Design for Additive Manufacturing

- ♦ Learn how to use CAD and simulation software, applying design methodologies that allow you to predict behavior during the printing process
- ♦ Identify and manage constraints such as overload angles, the need for supports, and the mechanical properties of materials

Module 3. Additive Manufacturing Post-Processing and Surface Finishing

- ♦ Address the best post-processing technique for each of the technologies and materials
- ♦ Develop skills to improve the quality, precision, and resistance of parts through polishing, heat treatment, painting, and other finishing techniques



You will identify advanced design methodologies to anticipate and optimize behaviors during the printing process"

05 Career Opportunities

This Postgraduate Diploma in Advanced Design and Modeling for 3D Printing will provide graduates with the tools they need to excel in highly specialized environments. They will also be highly qualified to take on strategic roles in the development, optimization, and quality control of three-dimensional models. In addition, their in-depth knowledge of innovative methodologies will enable them to solve complex challenges, driving precision and efficiency in every project. This will expand opportunities to access key positions in sectors that demand experts capable of leading digital transformation processes and guaranteeing high-level results.



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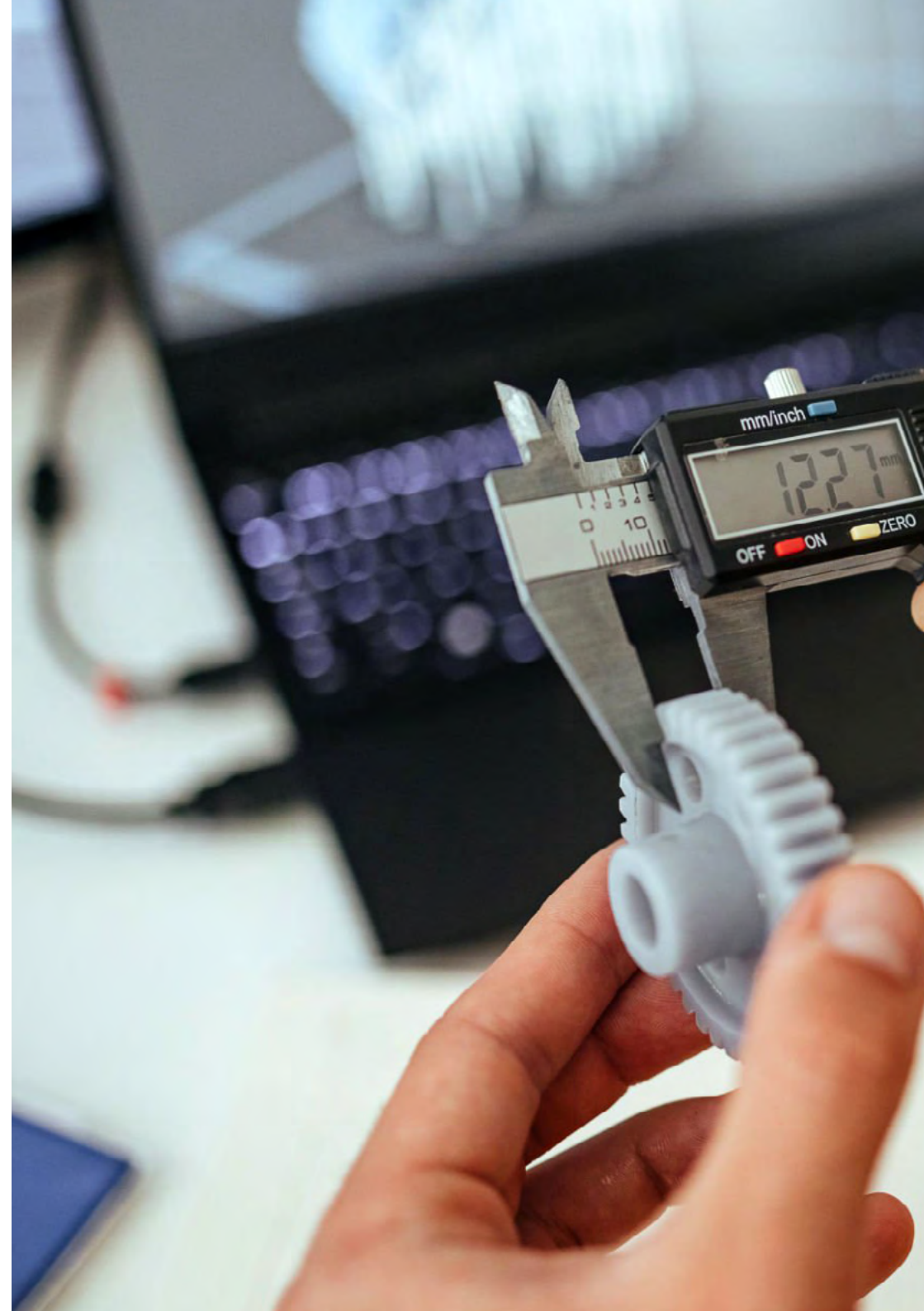
You will integrate advanced quality control techniques for three-dimensional models, ensuring compliance with the quality and safety standards required in each project”

Graduate Profile

Graduates will be equipped to tackle the challenges of three-dimensional Design and Modeling with an innovative approach. They will master the selection of materials according to project requirements, apply geometric optimization strategies, and use state-of-the-art techniques in 3D scanning and digitalization. In addition, they will have specialized criteria for assessing the viability of each model, ensuring its functionality and performance. With these skills, you will be able to lead processes in cutting-edge technological environments, driving efficiency and precision at every stage of product and prototype development.

You will have expert criteria for assessing the viability of each model, optimizing its design and ensuring the functionality of the prototype in various environments.

- ♦ **Critical Thinking and Problem-Solving:** Analyze designs, anticipate potential failures, and optimize three-dimensional models effectively
- ♦ **Adaptation to New Technologies:** Integrate emerging modeling, scanning, and digital manufacturing tools into different processes
- ♦ **Project Management:** Plan and coordinate each stage of 3D model development, ensuring deadlines are met and results are of high quality
- ♦ **Effective Technical Communication:** Ability to accurately convey design specifications to different departments and stakeholders, facilitating work in multidisciplinary teams



After completing the program, you will be able to use your knowledge and skills in the following positions:

1. **3D Model Designer:** Focuses on creating and optimizing digital models, ensuring their viability for additive manufacturing.
2. **Additive Manufacturing Specialist:** Supervises printing processes using different materials, ensuring precision and efficiency in production.
3. **Product Development Engineer:** Designs and improves functional parts using advanced modeling and quality control methodologies.
4. **Rapid Prototyping Technician:** Dedicated to the manufacture of physical prototypes to validate designs before mass production.
5. **3D Printing Quality Control Manager:** Their work focuses on creating three-dimensional models using inspection tools to ensure accuracy and functionality.
6. **3D Modeling Technology Consultant:** Advises companies on the integration of specialized software and hardware in digital manufacturing.
7. **Part Post-Processing Specialist:** Applies finishing techniques, such as sanding and polishing, to optimize the appearance and strength of printed models.
8. **Digital Manufacturing Researcher:** Develops studies on new materials, processes, and applications to improve the efficiency of additive manufacturing.
9. **Scanning and Reverse Engineering Expert:** Uses state-of-the-art 3D scanning tools to digitize existing parts and improve their reproduction.



You will design complex parts optimized for 3D printing, considering functional and technical requirements"

06

Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



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TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”

The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

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*At TECH you will NOT have live classes
(which you might not be able to attend)”*



The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

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TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want”

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.



A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule”

The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.



As such, the best educational materials, thoroughly prepared, will be available in this program:



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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



Interactive Summaries

We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

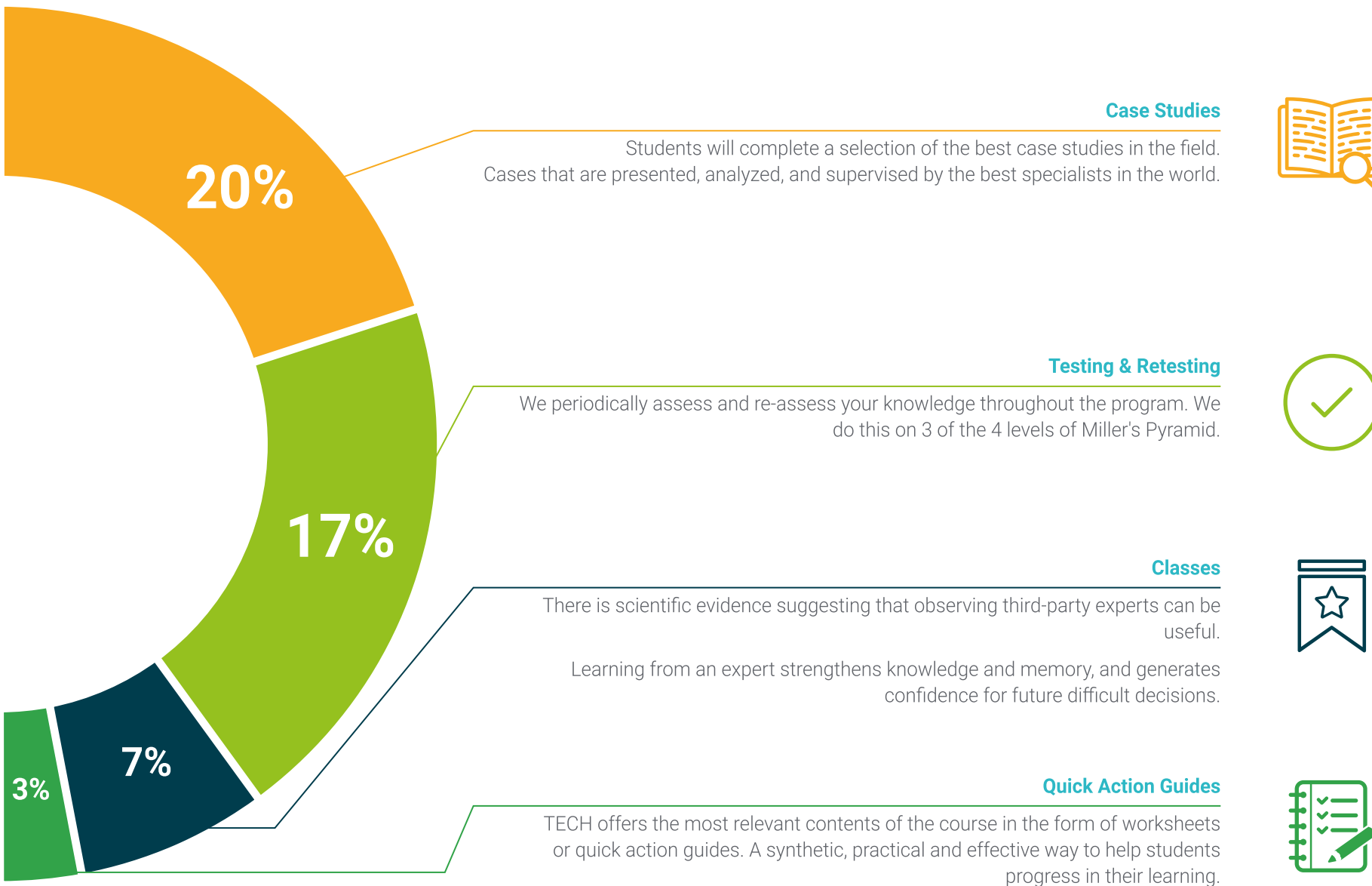
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





07

Teaching Staff

The Postgraduate Diploma in Advanced Design and Modeling for 3D Printing stands out for offering a comprehensive and up-to-date approach to three-dimensional design. To this end, it has a team of specialists who have developed high-level teaching resources in line with the most innovative trends in the sector. Thanks to this academic structure, rigorous training is guaranteed, allowing students to master everything from conceptualization to the optimization of digital models. As a result, students acquire the necessary skills to develop projects with high standards of precision and functionality, thereby strengthening their professional prospects in a highly competitive environment.



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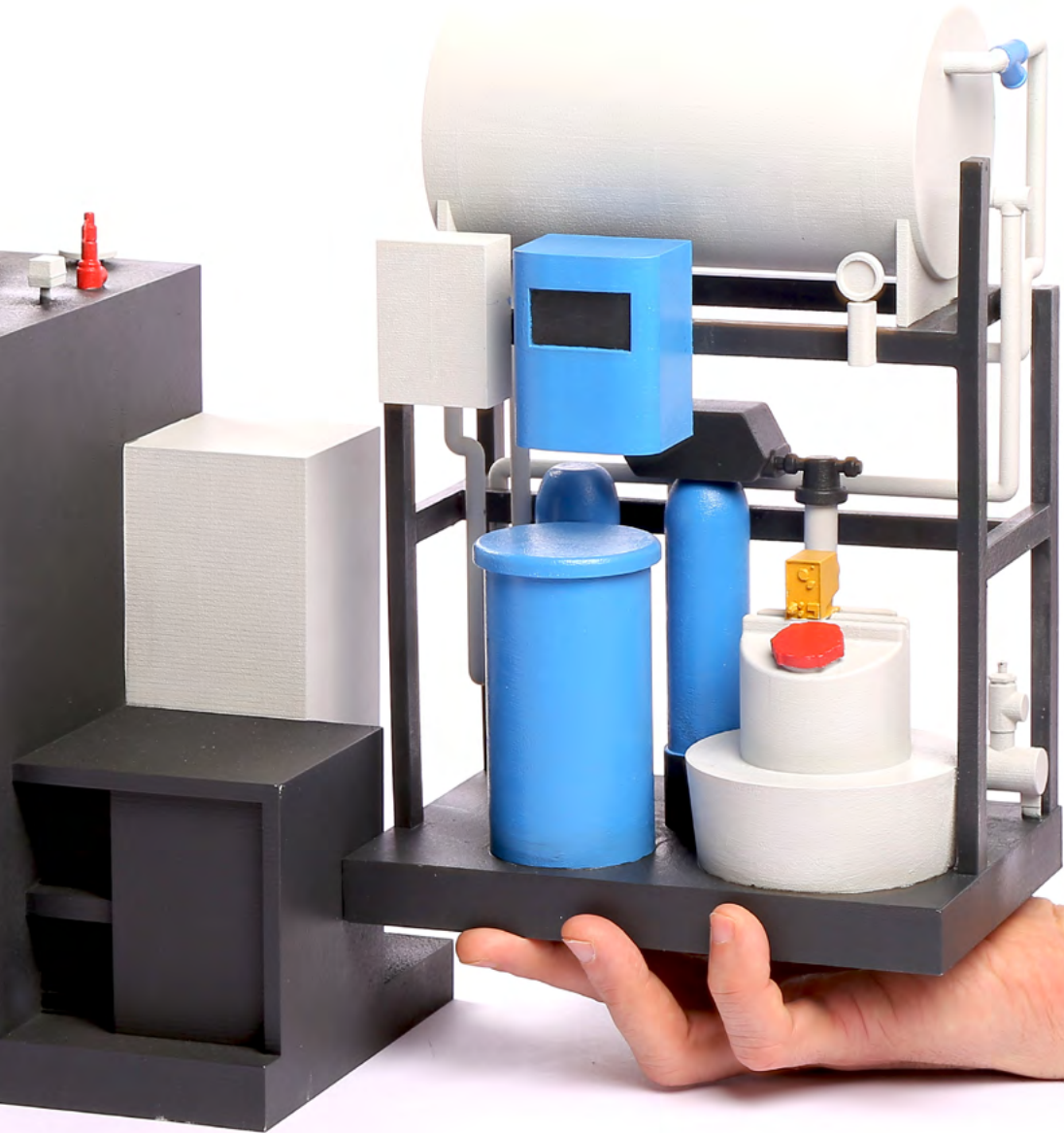
You will be advised at all times by the teaching team, made up of true leaders in Advanced Design and Modeling for 3D Printing”

Management



Mr. Parera Buxeres, Antoni

- CEO and Creative Director at Innou
- Project Manager and Industrial Designer at Play
- Master's Degree in Project Management and Efficient Project Management from the Polytechnic University of Catalonia
- Bachelor of Arts with a specialization in Design from the University of Southampton



Professors

Mr. Sánchez González, Antonio

- ♦ Director of AsorCAD Engineering
- ♦ Industrial Designer at Segui Desing
- ♦ Project Manager in R&D at Play
- ♦ Founder of Innou
- ♦ Master's Degree in Technical Management and Production
- ♦ Bachelor's Degree in Mechanical Engineering from the University of Southampton

Mr. Alonso Almirall, Óscar

- ♦ Head of Additive Manufacturing and 3D Printing at Industria Digital
- ♦ Mechanical Engineer at Leitat Technology Center
- ♦ Product Development Engineer at Mazel Ingenieros
- ♦ Bachelor's Degree in Industrial Engineering with a specialization in Mechanics from the Polytechnic University of Catalonia

Mr. Tutó Cabedo, Xavier

- ♦ Director of Engineering and Design at Industria Digital
- ♦ Founder of Kxdesigners
- ♦ Master's Degree in Design Research and Management from TFRAF at ISEC
- ♦ Bachelor's Degree in Design Engineering from ELISAVA University School



A unique, crucial and decisive learning experience to boost your professional development"

08 Certificate

This Postgraduate Diploma in Advanced Design and Modeling for 3D Printing guarantees students, in addition to the most rigorous and up-to-date education, access to a diploma for the 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 private qualification will allow you to obtain a diploma for the **Postgraduate Diploma in Advanced Design and Modeling for 3D Printing** 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.

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Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**





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Postgraduate Diploma Advanced Design and Modeling for 3D Printing

