

# Postgraduate Diploma Additive Manufacturing Processes





## Postgraduate Diploma Additive Manufacturing Processes

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

Website: [www.techtute.com/us/design/postgraduate-diploma/postgraduate-diploma-additive-manufacturing-processes](http://www.techtute.com/us/design/postgraduate-diploma/postgraduate-diploma-additive-manufacturing-processes)

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# 01

# Introduction to the Program

Additive Manufacturing has revolutionized multiple industrial sectors, enabling the production of complex parts with unprecedented efficiency. According to a new report by the International Monetary Fund, 3D printing has reached a value of \$18 billion in recent years and is expected to continue growing. For this reason, designers require a deep understanding of Additive Manufacturing technologies and processes to ensure the creation of customized, functional, and optimized products. In this context, TECH has developed an innovative, 100% online university program focused on the most advanced Additive Manufacturing processes.



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*Through this completely online  
Postgraduate Diploma, you will create  
highly innovative design projects  
through Additive Manufacturing”*

The production of customized components, material optimization, and waste reduction have made 3D printing technology a fundamental pillar of modern industry. In fact, its impact extends to sectors such as Healthcare, Aeronautics, and Automotive, where the ability to manufacture parts with complex geometries and high precision is redefining production processes. However, experts face the challenge of integrating these advances into product creation, adapting their creative processes to take advantage of the opportunities offered by Additive Manufacturing.

To help you overcome this challenge, TECH presents a revolutionary Postgraduate Diploma in Additive Manufacturing Processes. The teaching materials will delve into the principles and applications of 3D printing, addressing key aspects such as the use of programming languages such as GCODE. They will also delve into the advantages of this type of manufacturing compared to subtractive processes, highlighting its impact on reducing material waste and design flexibility. This will provide a comprehensive perspective that allows for an understanding of the fundamental differences between the two approaches and their applicability in different industrial environments.

In terms of methodology, the university program is delivered in a convenient, completely online format. TECH also uses its ground-breaking Relearning method, which ensures that students assimilate essential concepts in a progressive and natural way. All designers need is an electronic device with Internet access to immerse themselves in the Virtual Campus. There, they will enjoy a wide range of multimedia support resources such as explanatory videos, specialized readings, and real case studies in simulated learning environments.

This **Postgraduate Diploma in Additive Manufacturing Processes** 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 Additive Manufacturing Processes
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where the self-assessment process can be carried out to improve learning
- ♦ Its special emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*You will select the most appropriate Additive Manufacturing technologies according to design requirements, considering factors such as materials, complexity, time, and cost"*

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*You will optimize parts for manufacturing using 3D printing, applying criteria such as weight reduction, improved strength, and maximized efficiency”*

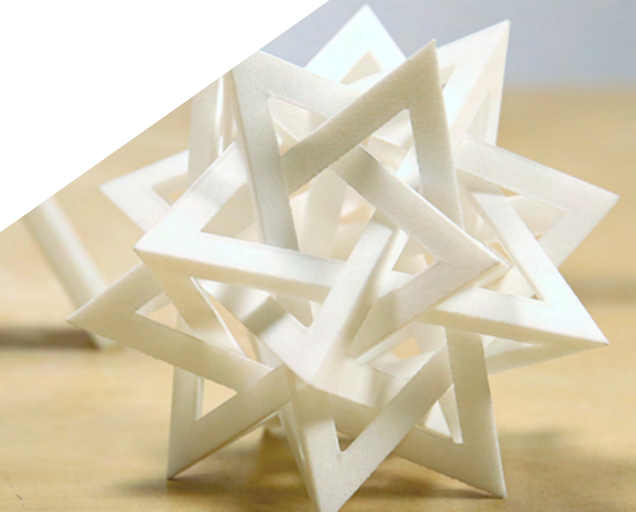
The teaching staff includes professionals from the field of Additive Manufacturing Processes, who bring their work experience to this program, as well as renowned specialists from leading companies and prestigious universities.

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 delve into the post-processing management of pieces, applying finishing techniques that improve their quality and durability.*

*You will delve into the latest trends in business management, being able to design effective strategies to make decisions in complex and unstable contexts.*





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

This university program will delve into Additive Manufacturing Processes, covering everything from the principles of CAD modeling to the optimization of techniques for efficient component production. It will also explore Prototype Manufacturing, a key skill for validating designs, reducing development times, and minimizing costs. In addition, product creation will be analyzed as a fundamental strategy in customization. Through this knowledge, students will strengthen their ability to develop parts with high-quality standards, driving innovation and improving competitiveness in various production environments.





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*You will analyze the principles of CAD modeling in depth to increase the precision and aesthetics of components”*



## Module 1. Additive Manufacturing

- 1.1. Additive Manufacturing, Origins and Development of Processes and Materials
  - 1.1.1. Origins of Technology
  - 1.1.2. Development of Processes and Materials
  - 1.1.3. Expansion to Different Industries
- 1.2. Evolution of Additive Manufacturing Technologies
  - 1.2.1. Recent Technological Innovations
  - 1.2.2. Comparison of the Main Technologies
  - 1.2.3. Impact of Digitalization on the Industry
- 1.3. Software Technologies Involved in Additive Manufacturing
  - 1.3.1. Principles of CAD Modeling
  - 1.3.2. Importance of the STL Format in Printing
  - 1.3.3. Function of GCODE in Print Execution
- 1.4. Advantages and Limitations of Additive Manufacturing
  - 1.4.1. Flexibility in Design and Production
  - 1.4.2. Limitations in Materials and Size
  - 1.4.3. Comparison with Traditional Manufacturing
- 1.5. Differences between Additive and Subtractive Processes. General Comparison of Costs and Production Times
  - 1.5.1. Comparison of Costs and Production Times
  - 1.5.2. Applications in Different Industries
  - 1.5.3. Environmental Impact of Both Processes
- 1.6. Impact of Additive Manufacturing on Today's Industry. Supply Chain Revolution
  - 1.6.1. Supply Chain Revolution
  - 1.6.2. Customization in Short Runs – (No Molds)
  - 1.6.3. Applications in Local Production



- 1.7. Main Applications of Additive Manufacturing – Prototype Manufacturing
  - 1.7.1. Prototype Manufacturing
  - 1.7.2. Production of Functional Parts
  - 1.7.3. Applications in Healthcare and Automotive
- 1.8. Case Studies of Additive Manufacturing
  - 1.8.1. Implementation in the Aerospace Industry (External Cases)
  - 1.8.2. Use in the Manufacture of Medical Devices
  - 1.8.3. Innovative Projects in Construcccion
- 1.9. The Democratization of Additive Manufacturing – The Maker Phenomenon
  - 1.9.1. Creation of Customized Products
  - 1.9.2. Global Access to 3D Printing Technology
  - 1.9.3. Makerspaces Movements and Their Impact
- 1.10. Future Trends in Additive Manufacturing
  - 1.10.1. Manufacturing Automation
  - 1.10.2. New Advanced Materials
  - 1.10.3. Growth of the Personal Printer Market

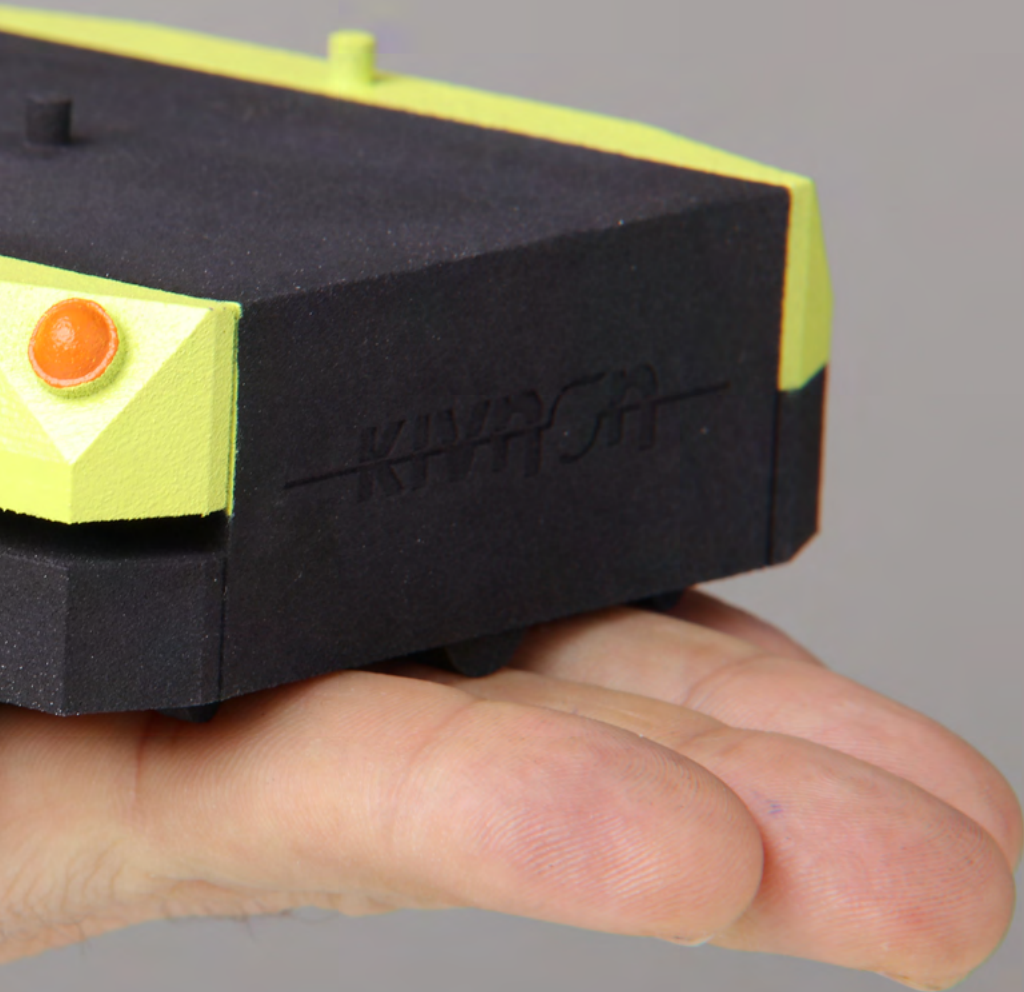
## Module 2. Additive Manufacturing Technologies and Processes

- 2.1. Classification of Additive Technologies
  - 2.1.1. Current Main Technologies by Parts
  - 2.1.2. Emerging Technologies in 3D Printing
  - 2.1.3. Classification by Materials Used
- 2.2. FDM – Fused Deposition Modeling – Operation and Applications
  - 2.2.1. Operation of the Extrusion Process
  - 2.2.2. Applications and Precision in Parts
  - 2.2.3. Limitations of the FDM Process
- 2.3. SLA – Stereolithography – Functioning, Characteristics, and Applications
  - 2.3.1. How It Works
  - 2.3.2. Applications and Precision in Parts
  - 2.3.3. SLA Limitations
- 2.4. SLS – Selective Laser Sintering – Operation and Applications
  - 2.4.1. How It Works
  - 2.4.2. Applications and Resolution
  - 2.4.3. SLS Limitations
- 2.5. MJF – MultiJet Fusion. Technology and Applications
  - 2.5.1. Multi-Agent Injection Technology
  - 2.5.2. Sectors Using MJF (Aerospace, Automotive)
  - 2.5.3. Comparison with Other Technologies
- 2.6. SLM – DLMS and Additive Manufacturing in Metal, Operation, Processes, and Applications
  - 2.6.1. Additive Technology for Metals
  - 2.6.2. Applications in High-Demand Industries
  - 2.6.3. Optimization of Metal Use in Manufacturing
- 2.7. Material Jetting: Polyjet, Applications and Layer-by-Layer Material Deposition Process. Detailed and Multicolor Prototype Applications
  - 2.7.1. Layer-by-Layer Material Deposition Process
  - 2.7.2. Detailed and Multicolor Prototype Applications
  - 2.7.3. Limitations in Mechanical Strength
- 2.8. Binder Jetting. Projection of Binders onto Metal Powder
  - 2.8.1. Projection of Binders onto Metal Powder
  - 2.8.2. Industrial Applications in Metal Parts
  - 2.8.3. Comparison with Laser Sintering
- 2.9. Advantages of Additive Manufacturing over Traditional Methods
  - 2.9.1. Flexibility in Creation of Complex Geometries
  - 2.9.2. Reduction in Material Waste
  - 2.9.3. Mass Product Customization
- 2.10. Comparison of Technologies Based on Cost, Quality, and Time
  - 2.10.1. Cost Evaluation by Technology
  - 2.10.2. Analysis of Production Times for Each Process
  - 2.10.3. Final Quality of the Parts Produced

### Module 3. 3D Printers: Types and Selection

- 3.1. Types of FDM 3D Printers (Cartesian, Delta, Polar)
  - 3.1.1. Features of Cartesian Printers
  - 3.1.2. Advantages and Disadvantages of Delta Printers
  - 3.1.3. Specific Applications of Polar Printers
- 3.2. FDM Printers: Operation and Maintenance
  - 3.2.1. Basic Operation of the FDM Process
  - 3.2.2. Preventive and Corrective Maintenance
  - 3.2.3. Parameter Adjustment to Improve Quality
- 3.3. SLA and DLP Printers: Characteristics and Use
  - 3.3.1. Differences between SLA and DLP
  - 3.3.2. Industrial Uses and High-Precision Applications
  - 3.3.3. Specific Maintenance and Care
- 3.4. SLS Printers: Selection and Configuration
  - 3.4.1. Selection of SLS Printers according to Application
  - 3.4.2. Parameter Configuration for High-Strength Parts
  - 3.4.3. Maintenance Requirements for SLS Printers
- 3.5. MultiJet Fusion Printers: How to Choose the Right One
  - 3.5.1. Factors to Consider When Choosing MJF
  - 3.5.2. Comparison of MJF with Other Technologies
  - 3.5.3. Recommended Applications for MJF
- 3.6. Key Factors in Selecting a 3D Printer
  - 3.6.1. Budget and Operating Costs – Examples
  - 3.6.2. Size and Complexity of Parts. Volumes and Speeds
  - 3.6.3. Compatibility with Materials
- 3.7. Printer Comparison: Cost, Speed, and Quality
  - 3.7.1. Assessment of Acquisition and Maintenance Costs
  - 3.7.2. Comparison of Printing Speeds in Different Technologies
  - 3.7.3. Part Quality According to the Selected Printer





- 3.8. Large-Format 3D Printers: Applications and Limitations
  - 3.8.1. Advantages of Large-Format Printers for Large Parts
  - 3.8.2. Limitations in Printing Accuracy and Time
  - 3.8.3. Specific Industrial Applications
- 3.9. Hybrid Solutions: Additive and Subtractive in the Same Equipment
  - 3.9.1. Integration of 3D Printing with CNC Milling
  - 3.9.2. Advantages of Hybrid Processes for Mold Manufacturing
  - 3.9.3. Limitations of Hybrid Technology in Mass Production
- 3.10. New Trends in 3D Printers
  - 3.10.1. Recent Advances in Multimaterial Printing
  - 3.10.2. Ceramic Printing
  - 3.10.3. Networked 3D Printers and Automation

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*Practical exercises based on real cases, interactive summaries, and detailed videos created by the teachers themselves will completely enliven your learning experience”*



04

# Teaching Objectives

This rigorous Postgraduate Diploma will provide designers with advanced strategic skills to optimize Additive Manufacturing Processes in various industrial environments. Graduates will optimize their ability to design, assess, and implement innovative solutions that improve production efficiency and quality. Students will also gain a multidisciplinary approach based on analytical thinking that will enable them to solve technical challenges. As a result, they will be able to offer creative, functional, and aesthetic solutions in a wide range of sectors.





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*You will master the latest Additive Manufacturing techniques to create customized solutions and significantly improve resource management”*



## General Objectives

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- ♦ 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

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### Module 1. Additive Manufacturing

- ♦ Master Additive Manufacturing technologies to solve specific problems that can be solved with these technologies
- ♦ Analyze the 3D parts to select the best technology, taking into account key factors such as cost, resistance, and quantities

### Module 2. Additive Manufacturing Technologies and Processes

- ♦ Differentiate technologies by their applications
- ♦ Compare production times and understand post-processing

### Module 3. 3D Printers: Types and Selection

- ♦ Develop skills to select the most suitable 3D printer according to project requirements
- ♦ Promote the exploration and adaptation of emerging technologies in 3D Printing, driving continuous improvement and efficiency in production processes



*You will develop skills to perform a comparative analysis between different 3D printing technologies, assessing their advantages and limitations based on project requirements"*



# 05 Career Opportunities

This Postgraduate Diploma will provide professionals with the most sophisticated tools to perform in positions such as prototype designer, 3D modeling specialist, or production coordinator in Additive Manufacturing environments. It will also provide access to opportunities in industrial design studios, innovation laboratories, and companies dedicated to advanced manufacturing. Thanks to these skills, it will be possible to optimize processes, develop customized products, and apply innovative strategies that respond to market demands. This will broaden career prospects in a sector where creativity and technology converge to transform production.



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*You will specialize as a Production Manager in Additive Manufacturing environments, acquiring the key skills to lead cutting-edge processes with precision and efficiency”*



### Graduate Profile

Graduates will have a comprehensive understanding of Additive Manufacturing, mastering everything from digital design to the production of optimized parts. Their ability to manage workflows, select appropriate materials, and apply sustainability criteria will position them as leaders in their field. In fact, they will be prepared to integrate emerging technologies, improve efficiency in production processes, and adapt to constant advances in the industry. With these skills, you will be able to lead innovative projects, drive the development of customized solutions, and contribute to the evolution of manufacturing in different professional environments.

*You will advise companies on the adoption of Additive Manufacturing processes to increase their efficiency in the production chain.*

- ♦ **Innovation and Creativity:** Competence in generating original solutions in design and production through Additive Manufacturing, exploring new applications and optimizing processes for different industries
- ♦ **Strategic Decision-Making:** Skill in interpreting technical information, assessing performance metrics, and selecting the most efficient manufacturing strategies, ensuring optimal results in every project
- ♦ **Change Management and Continuous Improvement:** Ability to adapt to new methodologies and emerging technological tools, implementing constant improvements in production processes and promoting professional development
- ♦ **Ethics and Sustainability in Manufacturing:** Ability to establish environmental and social responsibility criteria in the use of materials and technologies, promoting sustainable practices in Additive Manufacturing



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

- 1. Industrial Designer in Additive Manufacturing:** Leads the creation of products optimized for 3D printing, applying CAD modeling principles and material selection to improve performance and functionality.
- 2. Production Coordinator in Additive Manufacturing Environments:** Responsible for planning and supervising digital manufacturing processes, ensuring quality, production times, and efficiency in resource management.
- 3. Prototype Development Expert:** Focuses on designing, manufacturing, and evaluating functional prototypes using 3D printing, facilitating product validation prior to mass production.
- 4. Digital Manufacturing Technologies Researcher:** Dedicated to the study and development of new processes, materials, and applications in Additive Manufacturing to improve innovation in the industry.
- 5. Additive Manufacturing Innovation Manager:** Their work consists of implementing advanced technological solutions in the industry, promoting the adoption of efficient and sustainable methodologies in manufacturing.
- 6. Additive Manufacturing Consultant:** Provides specialized advice to institutions on the integration of 3D printing in different industries, optimizing processes and ensuring the technical and economic viability of projects.
- 7. Custom Product Designer:** Responsible for developing solutions tailored to user needs through Digital Manufacturing, applying knowledge of modeling, materials, and ergonomics.
- 8. Quality Supervisor in Additive Manufacturing:** Focused on evaluating the accuracy, strength, and finish of 3D-printed parts, ensuring compliance with quality standards and current regulations.
- 9. Post-Processing Technician for Printed Parts:** Manages the treatment and finishing of parts manufactured using 3D printing, improving their appearance, strength, and final functionality.



*You will work as a 3D Printing Materials Specialist and ensure high-quality aesthetic parts"*



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.

“*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.

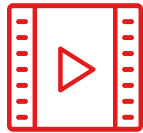
The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

*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.

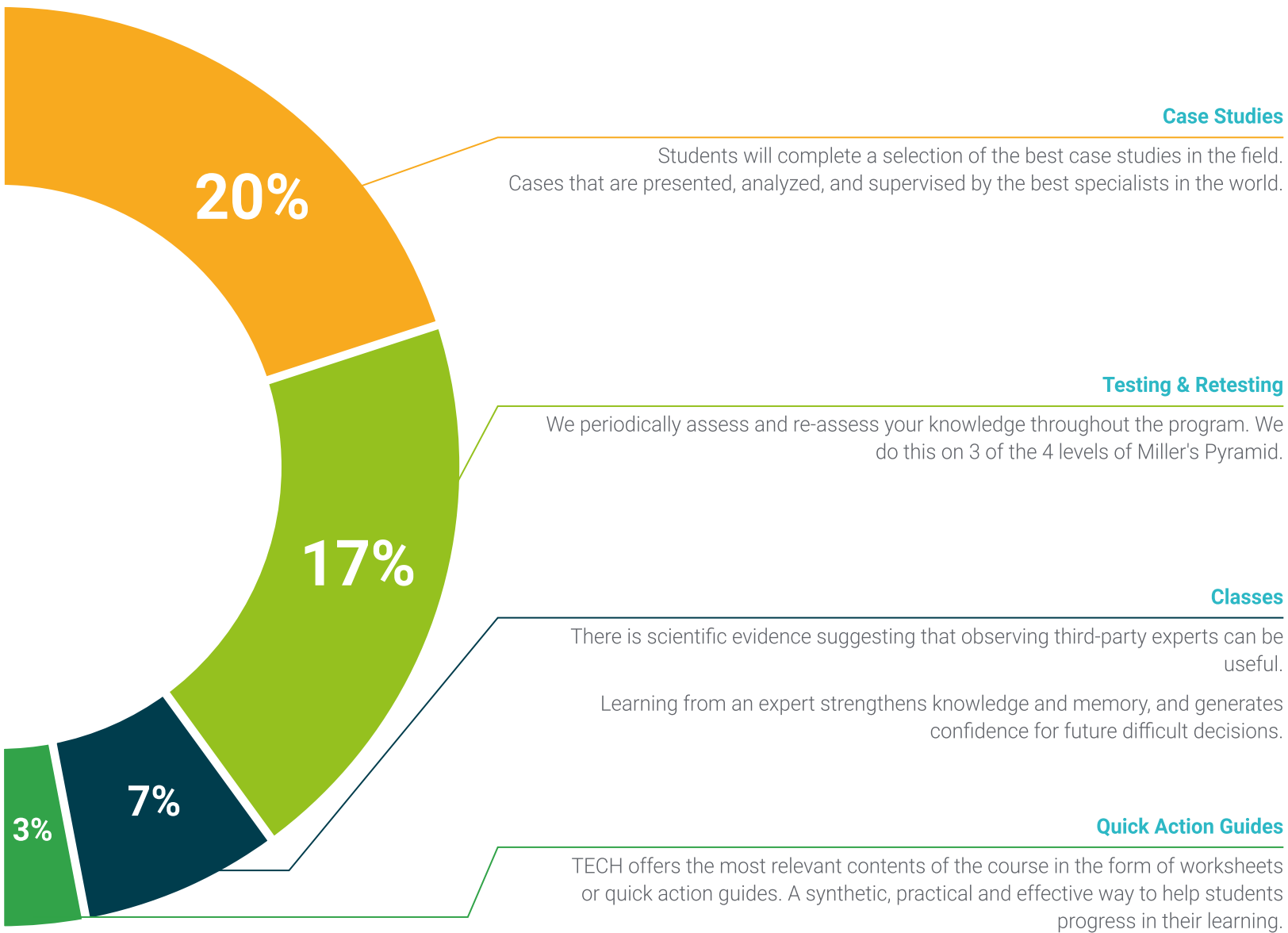
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### 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

To develop this Postgraduate Diploma, TECH has brought together leading specialists in Design Applied to Additive Manufacturing. These professionals have created high-quality teaching materials aligned with current market trends and demands. Through a practical and innovation-oriented approach, an immersive experience is provided that enhances key skills in the design of customized products and functional prototypes. Graduates will be able to expand their job opportunities in sectors where creativity and precision in the development of new solutions are highly valued.





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*An experienced teaching team specializing in Additive Manufacturing will guide you throughout the university program and answer any questions you may have”*



## 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. Bafaluy Ojea, Sergi

- ♦ Senior Researcher in Additive Manufacturing and 3D Printing in Digital Industry
- ♦ Process Engineer at Gestamp Hardtech AB
- ♦ Materials Engineer at ABB
- ♦ Industrial Doctorate in HP Printing and Computing Solutions
- ♦ Degree in Chemical and Materials Engineering from the Polytechnic University of Catalonia and the European School of Engineers

### 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



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