

# Professional Master's Degree Digital Teaching and Learning





## Professional Master's Degree Digital Teaching and Learning

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

Website: [www.techtute.com/us/education/professional-master-degree/master-digital-teaching-learning](http://www.techtute.com/us/education/professional-master-degree/master-digital-teaching-learning)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Skills

---

*p. 14*

04

Course Management

---

*p. 18*

05

Structure and Content

---

*p. 22*

06

Methodology

---

*p. 34*

07

Certificate

---

*p. 42*

# 01

# Introduction

Technology has opened up avenues of work and development of maximum interest for education, impossible to ignore for teachers who wish to remain competitive. Updating in this field becomes essential, in the face of a naturally digitalized student body, which integrates the use of technology in its study in an organic way. This program is a complete compendium of theoretical and practical learning that will bring you up to date in this field. Learning that will also allow you to access new niche opportunities in virtual teaching, which is clearly here to stay.





“

*A complete and fully up-to-date program that will allow you to acquire or update your digital skills in the field of teaching with the highest quality of online teaching"*

This Professional Master's Degree offers a practical and complete vision of the scope of the application of digital teaching, starting with the most basic tools and going through the development of digital teaching skills.

An advance over the eminently theoretical programs, focused on teaching work in physical classrooms, which do not address in depth the use of technology in the educational context, without forgetting the role of teaching innovation.

This vision allows a better understanding of the functioning of the appropriate technology at different educational levels so that the professional can have different options for its application in his or her job according to his or her interest.

This Professional Master's Degree is oriented towards the studies required to specialize in Digital Teaching and Learning for those who want to enter the world of teaching, all offered from a practical perspective with emphasis on the most innovative aspects in this regard.

Students of the Professional Master's Degree will have access to knowledge about teaching at both the theoretical and applied level, so that it will be useful for their present or future performance, thus offering a qualitative advantage over other professionals in the sector.

It also facilitates the incorporation to the labor market or the promotion in it, with an extensive theoretical and practical knowledge that will improve their skills in their daily work.

This **Professional Master's Degree in Digital Teaching and Learning** contains the most complete and up-to-date educational program on the market. The most important features include:

- ♦ Development of more than 75 case studies presented by experts in Digital Teaching and Learning
- ♦ 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
- ♦ News on Digital Teaching and Learning
- ♦ It contains practical exercises where the process of self-evaluation can be carried out to improve learning
- ♦ An algorithm-based interactive learning system for decision-making in the situations students are posited
- ♦ With special emphasis on evidence-based methodologies in Digital Teaching and Learning
- ♦ All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Availability of the contents from any fixed or portable device with an internet connection



*A highly skilled program that will give you the mental and practical tools you need to keep up with the changing educational landscape"*

“

*Focused on the acquisition of real practical skills, this Professional Master's Degree is supported by the most developed educational technology of e-learning"*

It includes in its teaching staff professionals belonging to the field of Digital Teaching and Learning, who pour into this program the experience of their work, in addition to recognized specialists belonging to reference 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 an immersive program to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different practice situations that arise throughout the program. For this purpose, professionals will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of Digital Teaching and Learning with extensive teaching experience.

*Through a high-quality video learning system, you will be able to learn in an immersive way, with a much greater impact.*

*A high-quality Professional Master's Degree created to boost your competitiveness and efficiency in this sector.*



# 02

# Objectives

The Professional Master's Degree in Digital Teaching and Learning aims to provide teaching professionals with the most comprehensive and up-to-date knowledge in the field of teaching supported by new technologies. A complete development process that will allow you to include its numerous advantages in your way of working.





“

*Acquire the most comprehensive knowledge in Digital Teaching and Learning and make your work benefit from the infinite possibilities and advantages of its application in teaching"*



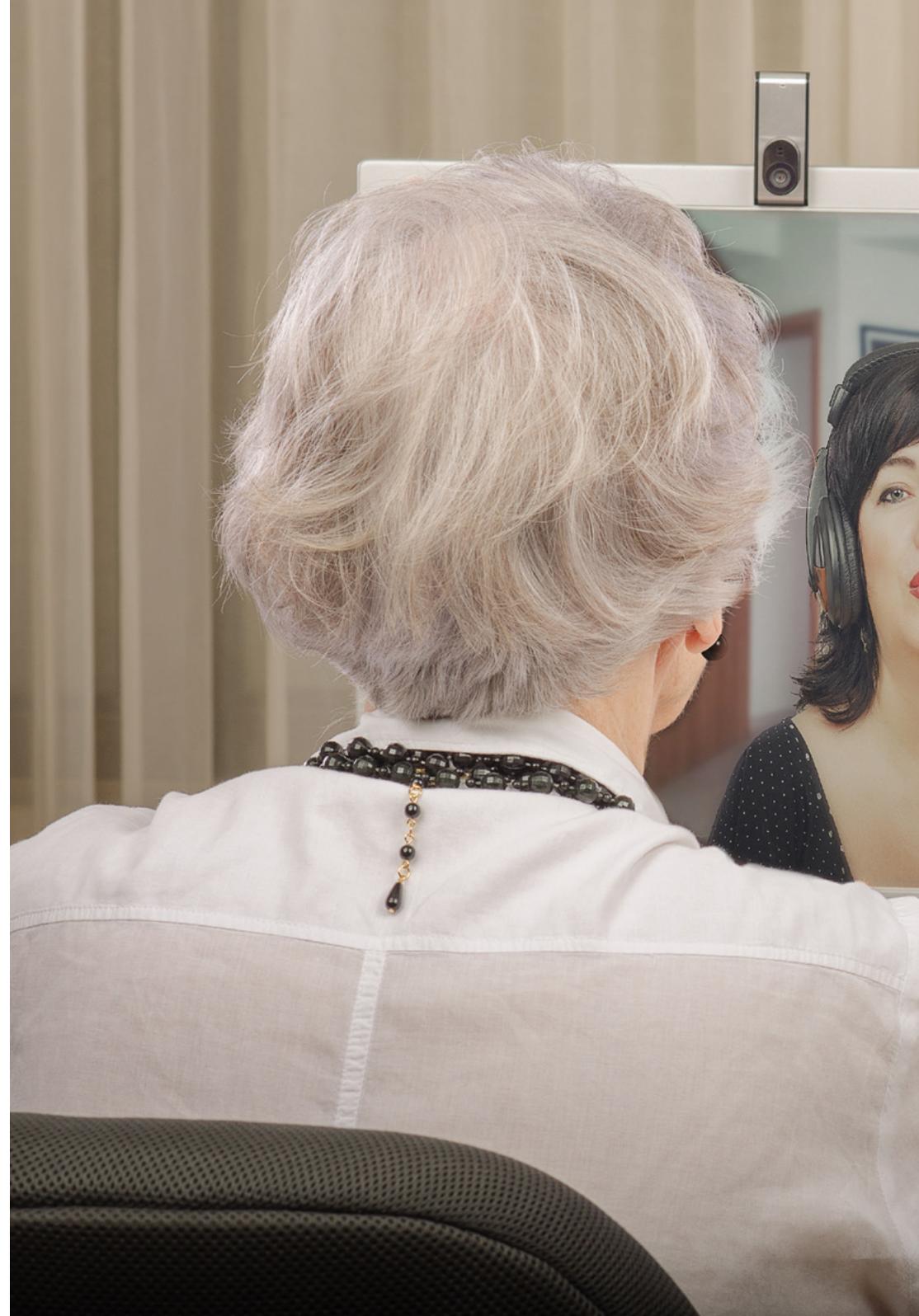
## General Objectives

---

- ♦ Introduce students to the world of teaching, from a global perspective in order to prepare them for their future employment
- ♦ Know the new tools and technologies applied to teaching  
Explore digital competencies in depth
- ♦ Show the different options and ways the teacher can work in their post
- ♦ Promote the acquisition of communication and knowledge transmission skills and abilities
- ♦ Encourage continuing education of students and interest in teaching innovation



*A stimulating and effective process that will lead you to the fulfillment of all your professional growth objectives in this field"*





## Specific Objectives

---

### Module 1. Digital Learning

- ♦ Differentiate between formal and informal learning
- ♦ Distinguish between implicit learning and non-formal learning
- ♦ Describe the processes of memory and attention in learning
- ♦ Determine the differences between active and passive learning
- ♦ Understand the role of the traditional school in learning
- ♦ Explain the use of technology in recreation among students
- ♦ Identify the use of educational technology by students
- ♦ Establish the defining characteristics of educational technology
- ♦ Describe the advantages and disadvantages of educational technology

### Module 2. Digital Teaching

- ♦ Explain the characteristics of the 4.0 School
- ♦ Differentiate between digital immigrant and digital native
- ♦ Explain the importance of digital competencies in teachers
- ♦ Discern the defining characteristics of distance learning
- ♦ Discover the advantages and disadvantages of distance learning over traditional education
- ♦ Explain the defining characteristics of Blended Learning
- ♦ Define the advantages and disadvantages of Blended Learning over traditional teaching
- ♦ Value the importance of virtual learning environments as channels of instruction inside and outside the classroom

### Module 3. Digital Identity and Digital Branding

- ♦ Classify the defining characteristics of e-learning
- ♦ Explain the advantages and disadvantages of e-learning over traditional teaching
- ♦ Describe the new trends in digital communication
- ♦ Define the new perspectives in teaching, training and labor within the digital framework

### Module 4. Social Networks and Blogs in Teaching

- ♦ Explain the evolution of Facebook, how to create and manage a profile, how to use Facebook as a search engine and its use as a teaching tool
- ♦ Explain the evolution of Twitter, how to create and manage a profile, how to use Twitter as a search engine and its use as a teaching tool
- ♦ Explain the evolution of LinkedIn, how to create and manage a profile, how to use the network as a search engine and its use as a teaching tool
- ♦ Explain the evolution of YouTube, how to create and manage a profile, how to use YouTube as a search engine and its use as a teaching tool
- ♦ Explain the evolution of Instagram, how to create and manage a profile, how to use Instagram as a search engine and its use as a teaching tool
- ♦ List the different digital formats for the creation of content in the different social networks
- ♦ Define the uses that social networks provide for teachers
- ♦ Explain how to manage a communication crisis in social networks
- ♦ Describe the different tricks that will help students to be more effective in social networks

### Module 5. Technological Innovation in Education

- ♦ Distinguish between mobile and Wi-Fi networks
- ♦ Classify mobile devices: tablets and smartphones
- ♦ Discover the spread of the use of tablets in the classroom.
- ♦ Learn about the electronic whiteboard
- ♦ Understand the management of the computerized student body
- ♦ Explain online classes and tutoring

### Module 6. Gamification as an Active Methodology

- ♦ Set Sleep Texting
- ♦ Discover Nomophobia
- ♦ Identify F.O.M.O.
- ♦ Understand technology dependence
- ♦ Learn about the new illnesses associated with technologies

### Module 7. What Is the Flipped Classroom Model?

- ♦ Know the main Apps to develop a Flipped Classroom and gamification strategies, as well as to value these emerging methodologies as learning motivators
- ♦ Define the principles of the Flipped Classroom
- ♦ Describe the importance of the new role of the teacher in the classroom
- ♦ Explain the role of students and families within the Flipped Classroom model
- ♦ Discover the benefits of the Flipped Classroom with the diversities of the classroom
- ♦ Identify the differences between traditional teaching and the Flipped Classroom
- ♦ Test the link between the flipped classroom model and Bloom's taxonomy





### **Module 8. The Apple Environment in Education**

- ◆ Recognize all critical factors specific to the Apple environment in the development of our implementation model
- ◆ Identify and estimate the pedagogical possibilities of Apple's proprietary Apps for the management, creation of content and evaluation

### **Module 9. Google GSuite for Education**

- ◆ Describe and learn about the tools provided by this platform
- ◆ Visualize live classes
- ◆ Interact through chats between teachers and students to solve problems and doubts

### **Module 10. Center Management Platform, Alexia**

- ◆ Know the different types of management platforms
- ◆ Learn the common characteristics offered by center management platforms
- ◆ Identify technological difficulties in adults
- ◆ Introduction to technology assessment tools of technological implementation
- ◆ Identify the costs and benefits of technological implementation

# 03 Skills

After passing the evaluations of the Professional Master's Degree in Digital Teaching and Learning, the professional will have acquired the necessary professional skills to include in their teaching work the different possibilities that new technologies bring to teaching and learning, with the use of the different tools proposed in this complete Professional Master's Degree.



“

*With this program you will be able to master new methodologies and strategies in Digital Teaching and Learning and apply them effectively to your teaching work"*



## General Skills

---

- ♦ Understand Digital Teaching and Learning knowledge that provides an opportunity for entry or professional development in this area
- ♦ Apply the knowledge acquired in a practical way, with a good theoretical basis, in order to solve any problem arising in the work environment, adapting to new challenges related to their area of study
- ♦ Integrate the knowledge acquired in the Professional Master's Degree with the previous ones, as well as to reflect on the implications of the professional practice, applying personal values to them, in order to improve the quality of the service provided
- ♦ Transmit the theoretical and practical knowledge acquired, as well as develop the capacity for criticism and reasoning, before a specialized and non-specialized public, in a clear and unambiguous manner
- ♦ Develop self-learning skills that will allow for continuous specialization to deliver the best performance on the job



*A decisive step in your specialization that you can't afford to miss"*





## Specific Skills

---

- ♦ Classify the characteristics of direct versus indirect learning
- ♦ Apply the different tools for content creation, social media management and social media analytics
- ♦ Explain how social networks arose and what changes they have brought about in the teaching field
- ♦ Explain meta-cognition and meta-intelligence in learning
- ♦ Explain the difference between a professional teaching network and a personal one, as well as the different elements to follow in each of them
- ♦ Use Apple's programming language and appreciate the growing importance of this kind of digital literacy
- ♦ Apply basic techniques for analyzing the data provided by social networks to make decisions about the content to be disseminated
- ♦ Practice digital conversation and the elements that define it
- ♦ Explain the basic rules in social networks for an adequate and effective use of profiles
- ♦ Apply the techno-pedagogical criteria for the choice of different devices as management, teaching and learning tools
- ♦ Identify the key elements and tools in the analysis prior to the implementation of technology in the classroom
- ♦ Know how to apply the guidelines that should guide the design of the implementation model

# 04

# Course Management

The program includes in its teaching staff reference specialists in Digital Teaching and Learning, who pour into this program the experience of their work. Additionally, other recognized specialists participate in its design and preparation, which means that the program is developed in an interdisciplinary manner.





“

*Learn from education professionals how to incorporate the support of new technologies in your teaching work and learn how to boost the development and motivation of your students”*

## International Guest Director

Dr. Stephanie Doscher is an internationally renowned **educational leader**, recognized for her influence in the field of **global learning and comprehensive internationalization**. As **Director of the Office of Collaborative Online International Learning (COIL)** at Florida International University (FIU), she has forged a pioneering path in creating inclusive and accessible educational strategies for all students.

With a focus on leadership and organizational change, Dr. Doscher is recognized for her ability to facilitate meaningful transformations in educational settings. In addition, her emphasis on connection, collaboration, communication, and continuous improvement underscores her commitment to **educational excellence and her vision of accessible global learning** for all students.

Doscher's research interests encompass teaching and assessment strategies for **global learning**, as well as the intersection between **global learning, comprehensive internationalization, social innovation, and inclusive excellence**. Her recent work focuses on the relationship between **diversity and knowledge production** through the **online COIL exchange**.

In fact, she has a prolific academic output, with multiple articles in renowned journals such as the Journal of International Students, EAIE Forum, and the International Association of Universities' Handbook of Internationalisation of Higher Education. She has also participated in presentations at various international conferences and workshops, enriching the academic dialogue on **global education**.

Likewise, her contributions as **co-author** of works such as "The Guide to COIL Online Exchange" and "Making Global Learning Universal: Promoting Inclusion and Success for All Students", have consolidated her position as a leading expert in the **global education field**. Both manuals have served to engage university students in collaborative global learning problem solving. Not to mention her prominent role as host of the podcast "Making Global Learning Universal".



## Dr. Doscher, Stephanie

---

- Director del Servicio de Cuidados Paliativos - Hospital New York Presbyterian
- Especialista en Cuidados Paliativos en el Massachusetts General Hospital
- Profesor de Medicina en Harvard Medical School
- Graduado en Química por la Universidad de Boston
- Profesor asociado del Departamento de Medicina de la Universidad de Columbia

“

*Thanks to TECH you will be able to learn with the best professionals in the world”*

## Management



### Mr. Gris Ramos, Alejandro

- ◆ Technical Engineer in Computer Management
- ◆ Master's Degree in E-Commerce and specialist in the latest technologies applied to teaching, Digital Marketing, web application development and Internet business
- ◆ Director of Positrace, web development and digital marketing agency
- ◆ Director of Club de Talentos
- ◆ Computer Engineer UNED
- ◆ Master's Degree in Digital Teaching and Learning TECH Education



## Professors

### Mr. Albiol Martín, Antonio

- ♦ Master's Degree in Education and Information and Communication Technologies from the UOC
- ♦ Master' s Degree in Literary Studies
- ♦ Graduate in Philosophy and Literature
- ♦ Head of CuriosiTIC: JABY School's ICT Integration Program in the classroom

### Mr. Azorín López, Miguel Ángel

- ♦ Teacher specialized in Physical Education
- ♦ Expert in the Flipped Classroom (Level I Flipped Learning and level I Trainer Flipped Learning, TOP-100 Flipped Learning Worldwide Teachers)

### Mr. Cabezuelo Doblaré, Álvaro

- ♦ Psychologist expert in Digital Identity and Master' s Degree in Communication, Digital Marketing and Social Networks
- ♦ Teacher of Digital Identity, Social Media Manager in a Communication Agency and a Teacher in Aula Salud

### D. De la Serna, Juan Moisés

- ♦ PhD in Psychology and Professional Master's Degree in Neurosciences and Behavioral Biology
- ♦ Author of the Cátedra Abierta de Psicología y Neurociencias and scientific disseminator

05

# Structure and Content

The syllabus is an advanced selection of content that includes the most interesting digital tools for the teaching field, structured in a dynamic way to maintain interest and provide the student with an experience of professional and personal growth of the highest quality.



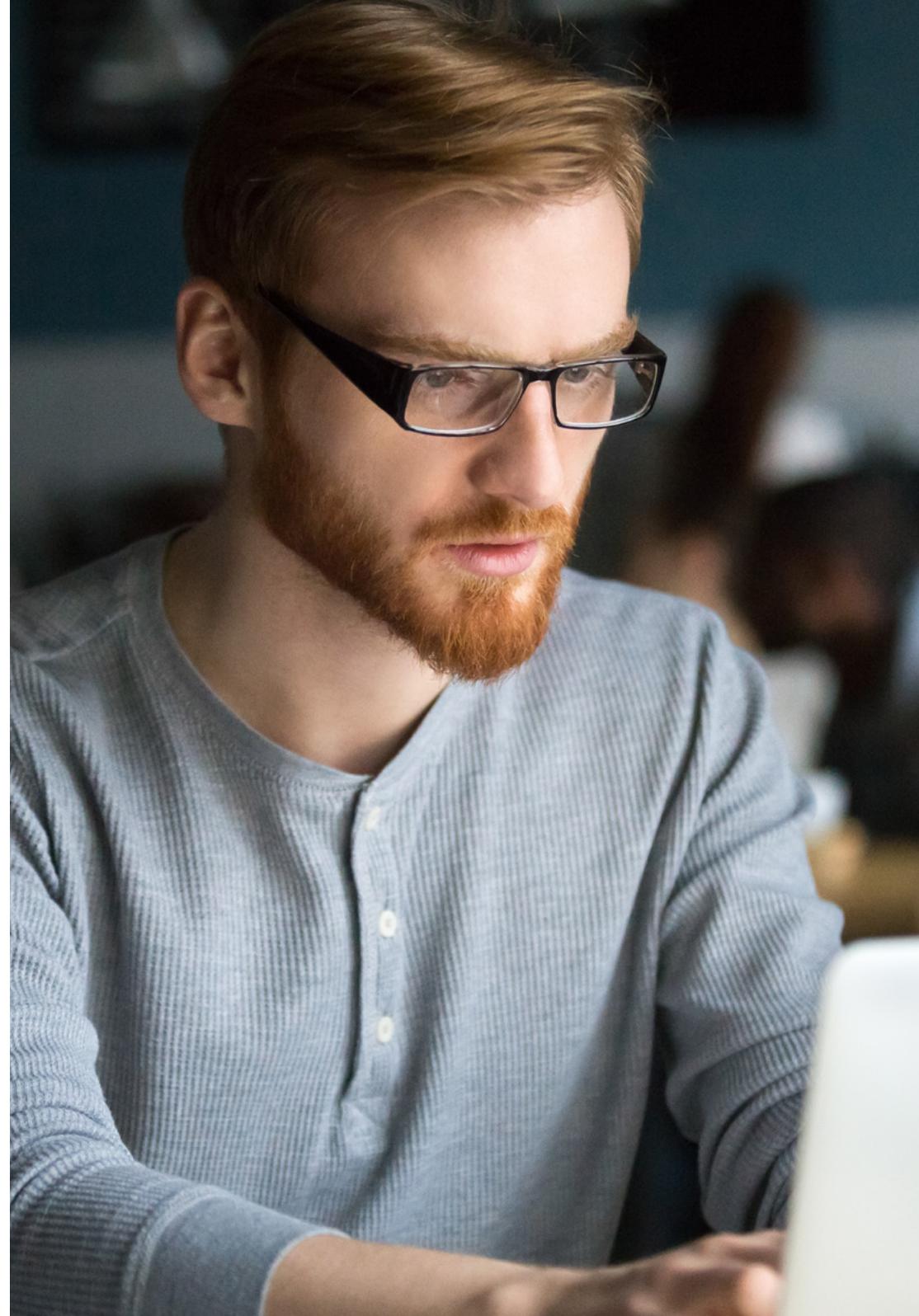


“

*A syllabus created to become a process of growth of personal and professional skills in the digital environment, which will mark a before and after in your ability in this field"*

## Module 1. Digital Learning

- 1.1. The Definition of Learning
  - 1.1.1. Formal Learning vs. Informal
    - 1.1.1.1. The Characteristics of Formal Learning
    - 1.1.1.2. The Characteristics of Informal Learning
  - 1.1.2. Implicit Learning vs. No formal
    - 1.1.2.1. The Characteristics of Implicit Learning
    - 1.1.2.2. The Characteristics of Non-Formal Learning
- 1.2. The Psychological Processes Involved in Learning
  - 1.2.1. Memory Vs. Attention
    - 1.2.1.1. Memory in Learning
    - 1.2.1.2. Attention in Learning
  - 1.2.2. Meta-Cognition Vs. Intelligence
    - 1.2.2.1. Meta-Cognition in Learning
    - 1.2.2.2. Intelligence and Learning
- 1.3. Types of Learning
  - 1.3.1. Direct Learning vs. Indirect
    - 1.3.1.1. The Characteristics of Direct Learning
    - 1.3.1.2. The Characteristics of Indirect Learning
  - 1.3.2. Active Learning vs. Liabilities
    - 1.3.2.1. The Characteristics of Active Learning
    - 1.3.2.2. The Characteristics of Passive Learning
- 1.4. Context in Learning
  - 1.4.1. The Traditional School
    - 1.4.1.1. Family and Education
    - 1.4.1.2. School and Education
  - 1.4.2. School 4.0
    - 1.4.2.1. Characteristics of School 2.0
    - 1.4.2.2. Characteristics of School 4.0
- 1.5. Teachers' Technological Skills
  - 1.5.1. Digital Migrant vs. Digital Native
    - 1.5.1.1. Characteristics of the Digital Immigrant
    - 1.5.1.2. Characteristics of the Digital Native



- 1.5.2. Digital Competencies in Teachers
  - 1.5.2.1. Office Software in Education
  - 1.5.2.2. Management of Digital Elements
- 1.6. Students' Technological Skills
  - 1.6.1. Recreational Technology
    - 1.6.1.1. Educational Games
    - 1.6.1.2. Gamification
  - 1.6.2. Educational Technology
    - 1.6.2.1. The Internet in Schools
    - 1.6.2.2. Other Technological Devices in the Classroom
- 1.7. Traditional Teaching with Educational Technology
  - 1.7.1. Defining Characteristics of Educational Technology
    - 1.7.1.1. Technological Advances in the Classroom
    - 1.7.1.2. Technological Provision in the Classroom
  - 1.7.2. Advantages and Disadvantages of Educational Technology
    - 1.7.2.1. Advantages of Educational Technology
    - 1.7.2.2. Disadvantages of Educational Technology
- 1.8. Distance Learning
  - 1.8.1. Defining Characteristics
    - 1.8.1.1. The Challenge of Distance Learning
    - 1.8.1.2. Characteristics of Distance Learners
  - 1.8.2. Advantages and Disadvantages over Traditional Teaching
    - 1.8.2.1. Advantages of Distance Learning
    - 1.8.2.2. Disadvantages of Distance Learning
- 1.9. Blended Learning
  - 1.9.1. Defining Characteristics
    - 1.9.1.1. Educational Technological Inclusion
    - 1.9.1.2. Blended Learning User Characteristics
  - 1.9.2. Advantages and Disadvantages over Traditional Teaching
    - 1.9.2.1. Advantages of Blended Learning
    - 1.9.2.2. Disadvantages of Blended Learning

- 1.10. E-Learning
  - 1.10.1. Defining Characteristics
    - 1.10.1.1. New Challenges in the Virtualization of Education
    - 1.10.1.2. New E-Learning Institutions
  - 1.10.2. Advantages and Disadvantages over Traditional Teaching
    - 1.10.2.1. Advantages of E-Learning
    - 1.10.2.2. Disadvantages of E-Learning

## Module 2. Digital Teaching

- 2.1. Technology in Education
  - 2.1.1. History and Evolution of Technology
  - 2.1.2. New Challenges
- 2.2. Internet in Schools
  - 2.2.1. Internet Use in Schools
  - 2.2.2. The Impact of the Internet on Education
- 2.3. Devices for Teachers and Students
  - 2.3.1. Devices in the Classroom
  - 2.3.2. The Electronic Whiteboard
  - 2.3.3. Devices for Students
  - 2.3.4. Tablets
- 2.4. Online Tutoring
  - 2.4.1. Advantages and Disadvantages
  - 2.4.2. Implementation
- 2.5. Creativity in Schools
- 2.6. Parents and Teachers as Digital Migrants
  - 2.6.1. Technology Training for Adults
  - 2.6.2. How to Overcome the Technology Barrier
- 2.7. Responsible Use of New Technologies
  - 2.7.1. Privacy
  - 2.7.2. Cyber Crimes at School

- 2.8. Addictions and Pathologies
  - 2.8.1. Definition of Technology Addiction
  - 2.8.2. How to Avoid Addiction?
  - 2.8.3. How to Overcome Addiction?
  - 2.8.4. New Pathologies Produced by Technology
- 2.9. Cyberbullying
  - 2.9.1. Definition of Cyberbullying
  - 2.9.2. How to Avoid Cyberbullying?
  - 2.9.3. How to Act in Cases of Cyberbullying?
- 2.10. Technology in Education

### Module 3. Digital Identity and Digital Branding

- 3.1. Digital Identity
  - 3.1.1. Definition of Digital Identity
  - 3.1.2. Managing Digital Identity in Education
  - 3.1.3. Areas of Application of Digital Identity
- 3.2. Blogs
  - 3.2.1. Introduction to Blogging in Teaching
  - 3.2.2. Blogs and Digital Identity
- 3.3. Roles in Digital Identity
  - 3.3.1. Digital Identity of the Student Body
  - 3.3.2. Digital Identity of Teachers
- 3.4. Branding
  - 3.4.1. What Is Digital Branding?
  - 3.4.2. How to Work on Digital Branding?
- 3.5. How to Position Yourself in Digital Teaching?
  - 3.5.1. Successful Cases of Teaching Branding
  - 3.5.2. Typical Uses
- 3.6. Online Reputation
  - 3.6.1. Online Reputation vs. Physical Reputation
  - 3.6.2. Online Reputation in Teaching
  - 3.6.3. Online Reputation Crisis Management

- 3.7. Digital Communication
  - 3.7.1. Personal Communication and Digital Identity
  - 3.7.2. Corporate Communication and Digital Identity
- 3.8. Communication Tools
  - 3.8.1. Teacher Communication Tools
  - 3.8.2. Teacher Communication Protocols
- 3.9. Evaluation with ICT
- 3.10. Material Management Resources

### Module 4. Social Networks and Blogs in Teaching

- 4.1. Social Networks
  - 4.1.1. Origin and Evolution
  - 4.1.2. Social Networks for Teachers
  - 4.1.3. Strategy, Analytics and Content
- 4.2. Facebook.
  - 4.2.1. The Origin and Evolution of Facebook
  - 4.2.2. Facebook Pages for Teacher Outreach
  - 4.2.3. Groups
  - 4.2.4. Facebook Search and Database
  - 4.2.5. Tools
- 4.3. Twitter
  - 4.3.1. The Origin and Evolution of Twitter. Twitter Profile for Teacher Outreach
  - 4.3.2. Twitter Search and Database
  - 4.3.3. Tools
- 4.4. LinkedIn
  - 4.4.1. The Origin and Evolution of LinkedIn
  - 4.4.2. LinkedIn Teaching Profile
  - 4.4.3. LinkedIn Groups
  - 4.4.4. LinkedIn Search and Database
  - 4.4.5. Tools
- 4.5. YouTube
  - 4.5.1. The Origins and Evolution of YouTube
  - 4.5.2. YouTube Channel for Teacher Outreach

- 4.6. Instagram
  - 4.6.1. The Origin and Evolution of Instagram
  - 4.6.2. Instagram Profile for Teacher Outreach
- 4.7. Multimedia Contents
  - 4.7.1. Photography
  - 4.7.2. Infographics
  - 4.7.3. Videos
  - 4.7.4. Live Videos
- 4.8. Blogging and Social Media Management
  - 4.8.1. Basic Rules for Social Media Management
  - 4.8.2. Uses in Teaching
  - 4.8.3. Content Creation Tools
  - 4.8.4. Social Media Management Tools
  - 4.8.5. Social Networking Tips
- 4.9. Analytical Tools
  - 4.9.1. What do we Analyze?
  - 4.9.2. Google Analytics
- 4.10. Communication and Reputation
  - 4.10.1. Source Management
  - 4.10.2. Communication Protocols
  - 4.10.3. Crisis Management

## Module 5. Technological Innovation in Education

- 5.1. Advantages and Disadvantages of the Use of Technology in Education
  - 5.1.1. Technology as a Means of Education
  - 5.1.2. Advantages of Use
  - 5.1.3. Inconveniences and Addictions
- 5.2. Educational Neurotechnology
  - 5.2.1. Neuroscience
  - 5.2.2. Neurotechnology

- 5.3. Programming in Education
  - 5.3.1. Benefits of Programming in Education
  - 5.3.2. Scratch Platform
  - 5.3.3. Confection of the First Hello World
  - 5.3.4. Commands, Parameters and Events
  - 5.3.5. Export of Projects
- 5.4. Introduction to the Flipped Classroom
  - 5.4.1. On What is it Based?
  - 5.4.2. Examples of Use
  - 5.4.3. Video Recording
  - 5.4.4. YouTube
- 5.5. Introduction to Gamification
  - 5.5.1. What is Gamification?
  - 5.5.2. Success Stories
- 5.6. Introduction to Robotics
  - 5.6.1. The Importance of Robotics in Education
  - 5.6.2. Arduino (Hardware)
  - 5.6.3. Arduino (Programming Language)
- 5.7. Introduction to Augmented Reality
  - 5.7.1. What is AR?
  - 5.7.2. What are the Benefits in Education?
- 5.8. How to Develop your own AR Applications?
  - 5.8.1. Vuforia
  - 5.8.2. Unity
  - 5.8.3. Examples of use
- 5.9. Samsung Virtual School Suitcase
  - 5.9.1. Immersive Learning
  - 5.9.2. The Backpack of the Future
- 5.10. Tips and Examples of Use in the Classroom
  - 5.10.1. Combining Innovation Tools in the Classroom
  - 5.10.2. Real Examples

## Module 6. Gamification as an Active Methodology

- 6.1. History, Definition and Concepts
  - 6.1.1. History and Context
  - 6.1.2. Definition
  - 6.1.3. Initial Concepts
- 6.2. Components
  - 6.2.1. Classification
  - 6.2.2. Insignias and Diplomas
  - 6.2.3. Collectibles
  - 6.2.4. Currency of Exchange
  - 6.2.5. Keys
  - 6.2.6. Awards
- 6.3. Mechanisms
  - 6.3.1. Structural Gamifications
  - 6.3.2. Content Gamifications
- 6.4. Digital tools
  - 6.4.1. Management Tools
  - 6.4.2. Productivity Tools
    - 6.4.2.1. Insignias
    - 6.4.2.2. Letters
    - 6.4.2.3. Others
- 6.5. Gamification and Serious Games
  - 6.5.1. Play in the Classroom
  - 6.5.2. Typology of Games
- 6.6. Commercial Games Catalog
  - 6.6.1. Games to Develop Skills
  - 6.6.2. Games to Develop Content
- 6.7. Video Games and Apps
  - 6.7.1. Games to Develop Skills
  - 6.7.2. Games to Develop Content



- 6.8. Gamification Design
  - 6.8.1. Approach, Objectives
  - 6.8.2. Integration into the Curriculum
  - 6.8.3. History
  - 6.8.4. Aesthetics
  - 6.8.5. Assessment
- 6.9. Game Design
  - 6.9.1. Approach, Objectives
  - 6.9.2. Integration into the Curriculum
  - 6.9.3. History
  - 6.9.4. Aesthetics
  - 6.9.5. Assessment
- 6.10. Case Studies
  - 6.10.1. From Gamification
  - 6.10.2. From Ludification

## Module 7. What Is the Flipped Classroom Model?

- 7.1. The Flipped Classroom Model
  - 7.1.1. Concept
  - 7.1.2. History
  - 7.1.3. What Is It and How Does It Work?
- 7.2. The New Role of the Teacher in the Flipped Classroom Model
  - 7.2.1. The New Role of the Teacher
  - 7.2.2. Classroom Work
- 7.3. The Role of Students in the Flipped Classroom Model
  - 7.3.1. New Student Learning
  - 7.3.2. Homework in Class, Lessons at Home
- 7.4. Involvement of Families in the Flipped Classroom Model
  - 7.4.1. Family Participation
  - 7.4.2. Communication with Parents
- 7.5. Differences between the Traditional Model and the Flipped Classroom Model
  - 7.5.1. Traditional Classroom vs Flipped Classroom
  - 7.5.2. Working Hours

- 7.6. Personalization of Education
  - 7.6.1. What is Personalized Learning?
  - 7.6.2. How to Personalize Learning?
  - 7.6.3. Examples of Learning Personalization
- 7.7. Attention to Diversity in the Flipped Classroom Model
  - 7.7.1. What is Attention to Diversity?
  - 7.7.2. How Does the FC Model Help us to Put Attention to Diversity into Practice?
- 7.8. Benefits of the Flipped Classroom Model
  - 7.8.1. Flexibility of Students in their Learning
  - 7.8.2. Advance Content
  - 7.8.3. Learning Environment around the Student Body
  - 7.8.4. Collaboration among Students
  - 7.8.5. Extra Time Outside the Classroom
  - 7.8.6. More Time for Personalized Attention to Students
- 7.9. The Relationship of Bloom's Taxonomy to the Flipped Classroom Model
  - 7.9.1. What is a Taxonomy?
  - 7.9.2. History
  - 7.9.3. Levels and Examples
  - 7.9.4. Table of Verbs

## Module 8. The Apple Environment in Education

- 8.1. Mobile Devices in Education
  - 8.1.1. M-Learning
  - 8.1.2. A Problematic Decision
- 8.2. Why Choose an iPad for the Classroom?
  - 8.2.1. Technopedagogical Criteria
  - 8.2.2. Other Considerations
  - 8.2.3. Typical Objections
- 8.3. What does My Center Need?
  - 8.3.1. Educational Philosophy
  - 8.3.2. Socioeconomic Criteria
  - 8.3.3. Priorities

- 8.4. Designing our Own Model
  - 8.4.1. "He Who Reads Much and Walks Much, Sees Much and Knows Much."
  - 8.4.2. Fundamental Decisions
    - 8.4.2.1. Trolleys or 1:1 Ratio?
    - 8.4.2.2. What Concrete Model Have We Chosen?
    - 8.4.2.3. IDP or Television? Neither of the Two?
- 8.5. Apple's Educational Ecosystem
  - 8.5.1. The DEP
  - 8.5.2. Device Management Systems
  - 8.5.3. What are Managed Apple IDs?
  - 8.5.4. Apple School Manager
- 8.6. Other Critical Development Factors
  - 8.6.1. Technical: Connectivity
  - 8.6.2. Human: The Educational Community
  - 8.6.3. Organizational
- 8.7. The Classroom in the Teacher's Hands
  - 8.7.1. Teaching Management: Classroom and iDoceo
  - 8.7.2. iTunes U as a Virtual Learning Environment
- 8.8. The Map to Discover Treasures
  - 8.8.1. Apple's Office Suite
    - 8.8.1.1. Pages
    - 8.8.1.2. Keynote
    - 8.8.1.3. Numbers
  - 8.8.2. Multimedia Production Apps
    - 8.8.2.1. iMovie
    - 8.8.2.2. Garage Band
    - 8.8.2.3. Clips
- 8.9. Apple and Emerging Methodologies
  - 8.9.1. Flipped Classroom: Explain Everything and EdPuzzle
  - 8.9.2. Gamification: Kahoot, Socrative and Plickers
- 8.10. Everyone Can Program
  - 8.10.1. Swift Playgrounds
  - 8.10.2. Robotics with LEGO



**Module 9. Google GSuite for Education**

- 9.1. The Google Classroom
  - 9.1.1. History of Google
  - 9.1.2. Who Is Google Today?
  - 9.1.3. The Importance of Partnering with Google
  - 9.1.4. Catalogue of Google Apps
- 9.2. Google and Education
  - 9.2.1. Implication of Google in Education
  - 9.2.2. Application Procedures at Your Center
  - 9.2.3. Versions and Types of Technical Support
  - 9.2.4. First Steps with the Management Console GSuite
  - 9.2.5. Users and Groups
- 9.3. Google GSuite Advanced Use.
  - 9.3.1. Profiles
  - 9.3.2. Reports
  - 9.3.3. Role of Administrator
  - 9.3.4. Device Administration
  - 9.3.5. Security
  - 9.3.6. Domains
  - 9.3.7. Data Migration
  - 9.3.8. Groups and Mailing Lists
- 9.4. Tools for Information Search in the Classroom
  - 9.4.1. Google Search
  - 9.4.2. Advanced Information Search
  - 9.4.3. Integration of the Search Engine
  - 9.4.4. Google Chrome
  - 9.4.5. Google News
  - 9.4.6. Google Maps
  - 9.4.7. YouTube
- 9.5. Google Tools for Communication in the Classroom
  - 9.5.1. Introduction to Google Classroom
  - 9.5.2. Instructions for Teachers
  - 9.5.3. Instructions for Students

- 9.6. Google Classroom: Advanced Uses and Additional Components
  - 9.6.1. Advanced Uses of Google Classroom
  - 9.6.2. Flubaroo
  - 9.6.3. FormLimiter
  - 9.6.4. Autocrat
  - 9.6.5. Doctopus
- 9.7. Tools for Organizing Information
  - 9.7.1. First Steps in Google Drive
  - 9.7.2. File and Folder Organization
  - 9.7.3. Share Files
  - 9.7.4. Storage
- 9.8. Tools for Cooperative Working with Google
  - 9.8.1. Calendar
  - 9.8.2. Google Sheets
  - 9.8.3. Google Docs
  - 9.8.4. Google Presentations
  - 9.8.5. Google Forms
- 9.9. Tools for Classroom Publication
  - 9.9.1. Google+
  - 9.9.2. Blogger
  - 9.9.3. Google Sites
- 9.10. Google Chromebook
  - 9.10.1. Use of the Device
  - 9.10.2. Pricing and Features

## Module 10. ICT as a Management and Planning Tool

- 10.1. ICT Tools in the Center
  - 10.1.1. Disruptive Factors in ICTs
  - 10.1.2. ICT Objectives
  - 10.1.3. Good Practice in the Use of ICTs
  - 10.1.4. Criteria for Choosing Tools
  - 10.1.6. Security

- 10.2. Communication.
  - 10.2.1. Communication Plan
  - 10.2.2. Instant Messaging Managers
  - 10.2.3. Video Conferences
  - 10.2.4. Remote Device Access
  - 10.2.5. School Management Platforms
  - 10.2.6. Other Means
- 10.3. E-mail
  - 10.3.1. E-mail Management
  - 10.3.2. Replying and Forwarding
  - 10.3.3. Signatures
  - 10.3.4. Classifying and Tagging Emails
  - 10.3.5. Rules
  - 10.3.6. Email Lists
  - 10.3.7. Aliases
  - 10.3.8. Advanced Tools
- 10.4. Document Generation
  - 10.4.1. Word Processors
  - 10.4.2. Spreadsheets
  - 10.4.3. Forms.
  - 10.4.4. Corporate Image Templates
- 10.5. Task Management Tools
  - 10.5.1. Inventory Management
  - 10.5.2. Lists
  - 10.5.3. Tasks
  - 10.5.4. Notices
  - 10.5.5. Approaches to Use
- 10.6. Schedules
  - 10.6.1. Digital Calendars
  - 10.6.2. Events
  - 10.6.3. Appointments and Meetings
  - 10.6.4. Invitations and Attendance Confirmation
  - 10.6.5. Links to Other Tools



- 10.7. Social Networks
  - 10.7.1. Social Networks and the Center
  - 10.7.2. LinkedIn
  - 10.7.3. Twitter
  - 10.7.4. Facebook.
  - 10.7.5. Instagram
- 10.8. Introduction and Parameter Setting of Alexia Classrooms
  - 10.8.1. What Is Alexia?
  - 10.8.2. Applying and Registering the Center on the Platform
  - 10.8.3. First Steps with Alexia
  - 10.8.4. Alexia Technical Support
  - 10.8.5. Center Configuration
- 10.9. Licensing and Administrative Management on Alexia
  - 10.9.1. Access Permission
  - 10.9.2. Roles
  - 10.9.3. Billing
  - 10.9.4. Sales
  - 10.9.5. Formative Cycles
  - 10.9.6. Extracurricular Activities and Other Services
- 10.10. Alexia Teacher Training
  - 10.10.1. Areas (Subjects)
  - 10.10.2. Assessing
  - 10.10.3. Taking Attendance
  - 10.10.4. Agenda/Calendar
  - 10.10.5. Communication.
  - 10.10.6. Interviews
  - 10.10.7. Sections
  - 10.10.8. Students
  - 10.10.9. Birthdays
  - 10.10.10. Links
  - 10.10.11. Mobile APP
  - 10.10.12. Utilities

06

# Methodology

This training program offers 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.





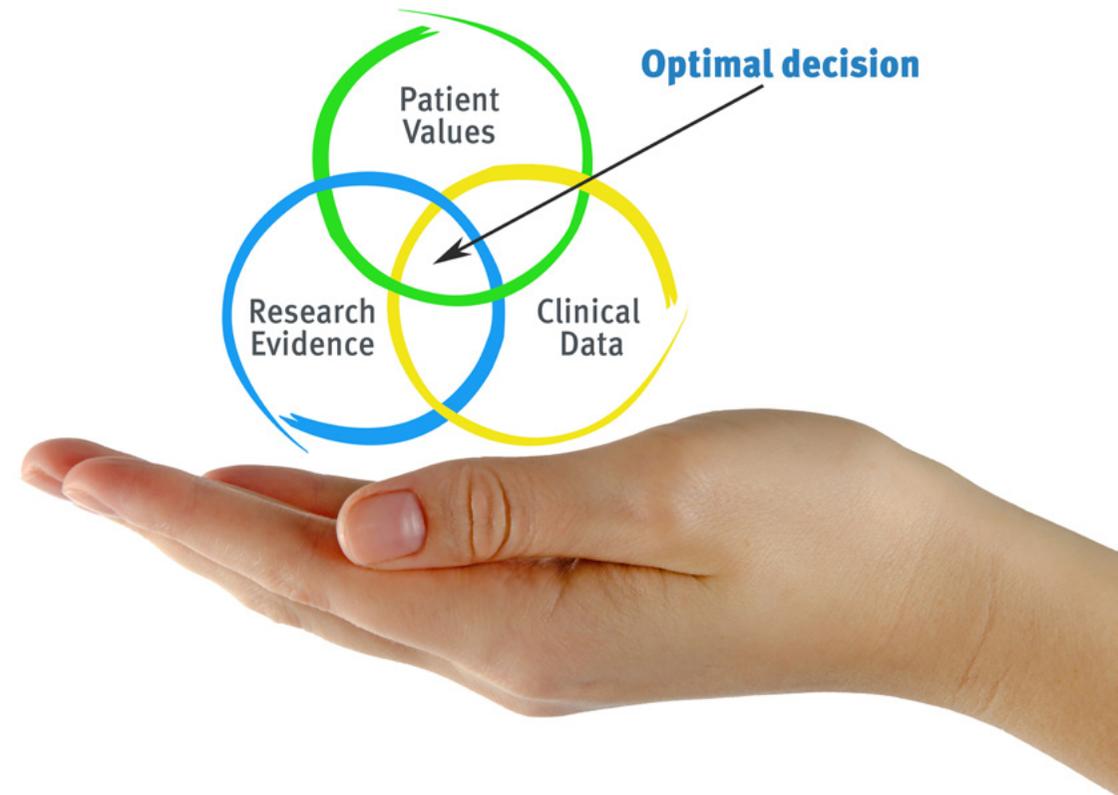
“

*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"*

## At TECH Education School we use the Case Method

In a given situation, what should a professional do? Throughout the program students will be presented with multiple simulated cases based on real situations, where they will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method.

*With TECH, educators can experience a learning methodology that is shaking the foundations of traditional universities around the world.*



*It is a technique that develops critical skills and prepares educators to make decisions, defend their arguments, and contrast opinions.*

“

*Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method”*

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

1. Educators who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process is solidly focused on practical skills that allow educators to better integrate the knowledge into daily practice.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life teaching.
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.



## Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

Our University is the first in the world to combine case studies with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analyzing cases.



*Educators will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.*

At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology we have trained more than 85,000 educators with unprecedented success in all specialties. 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 specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.*

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.

The overall score obtained by our learning system is 8.01, according to the highest international standards.



This program offers the best educational material, prepared with professionals in mind:



#### Study Material

All teaching material is produced by the specialist educators who teach the course, specifically for the course, so that the teaching content is really 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.



#### Educational Techniques and Procedures on Video

TECH introduces students to the latest techniques, with the latest educational advances, and to the forefront of Education. All this, first-hand, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### Interactive Summaries

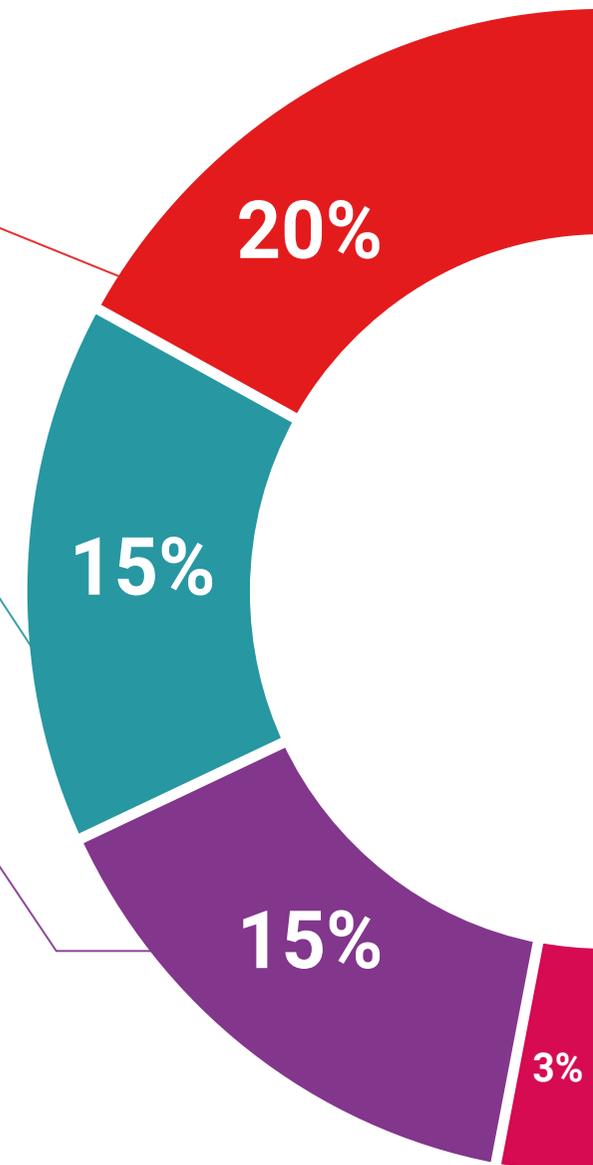
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

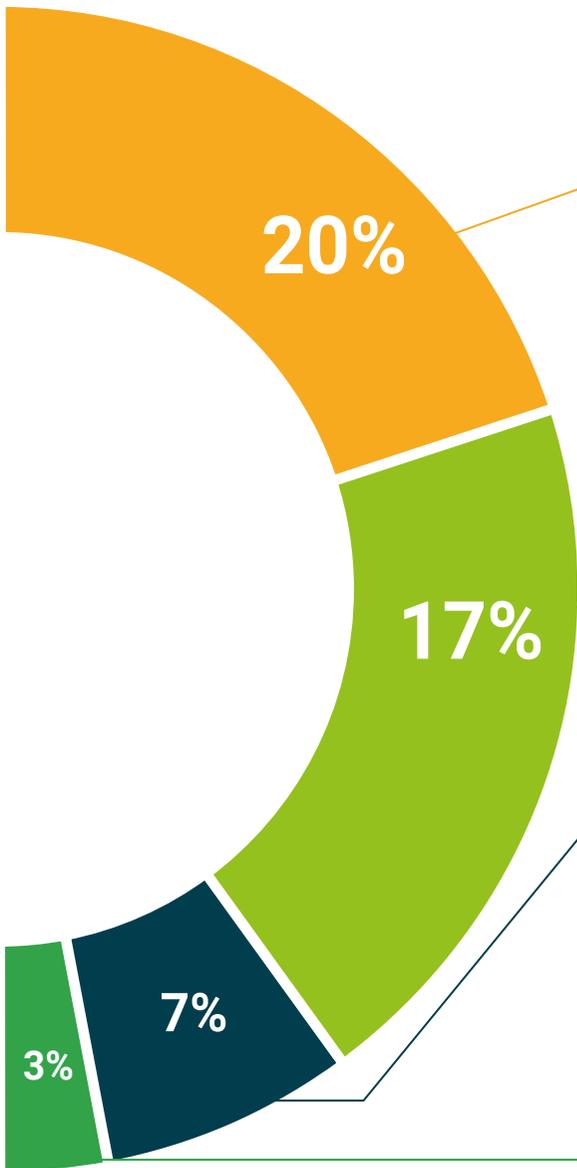
This exclusive multimedia content presentation training Exclusive system was awarded by Microsoft as a "European Success Story".



#### 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.





#### Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### 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 your goals.



#### 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.



#### Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.



07

# Certificate

The Professional Master's Degree Digital Teaching and Learning guarantees students, in addition to the most rigorous and up-to-date education, access to a Professional Master's Degree 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 **Professional Master's Degree diploma in Digital Teaching and Learning** 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: **Professional Master's Degree in Digital Teaching and Learning**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**



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

future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

personalized service innovation

knowledge present quality

online training

development language

virtual classroom



## Professional Master's Degree

### Digital Teaching and Learning

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

# Professional Master's Degree Digital Teaching and Learning

